Draft Environmental Impact Report
SCH No. 2016061056
Public Review Draft

Roquet Ranch Specific Plan

City of Colton, California

Lead Agency
City of Colton
650 North La Cadena Drive
Colton, CA 92324

August 2, 2017

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Lead Agency
City of Colton
650 North La Cadena Drive
Colton, CA 92324

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Lead Agency Discretionary Permits
Development Application Process No. 001-228
Roquet Ranch Specific Plan
General Plan Amendment
Change of Zone
Tentative Tract Map No. 19983

August 2, 2017

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B: Air Quality Impact Analysis
C: Health Risk Assessment
D: Biological Resources Assessment
E: Greenhouse Gas Analysis
F1: Cultural Resources Assessment
F2: Paleontological Resource and Mitigation Monitoring Assessment
G: Geotechnical Input Report
H: Phase I Environmental Site Assessment
I1: Drainage Report
I2: Drainage Memo
J: Preliminary Water Quality Management Plan
K: Noise Impact Analysis
L: Traffic Impact Analysis
M: Water Supply Assessment
N: Tiering Checklist from City of Colton General Plan Update EIR
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ACRONYMS AND ABBREVIATIONS

Acronym	Definition
§	Section
AM	Ante Meridiem (between the hours of midnight and noon)
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
AB 1327	California Solid Waste Reuse and Recycling Act
AB 939	California Solid Waste Integrated Management Act
AB 1881	California Assembly Bill 1881, California Water Conservation Act of 2006
ACMs	Asbestos Containing Materials
ADT	Average Daily Traffic
AF	Acre Feet
AFY	Acre Feet per Year
AIA	Airport Influence Area
ALUCP	Airport Land Use Compatibility Plan
AMSL	Above Mean Sea Level
APS	Alternative Planning Strategy
APN	Assessor Parcel Number
AQMP	Air Quality Management Plan
ASTM	American Society of Testing and Materials
AST	Aboveground Storage Tank
BAAQMD	Bay Area Air Quality Management District
BAU	Business as Usual
BMPs	Best Management Practices
c.y.	Cubic Yards
C-1	Neighborhood Commercial Zone (zoning designation)
C-2	General Commercial Zone (zoning designation)
C-2/D	General Commercial—Downtown Overlay Zone (zoning designation)
C_2F_6	Hexafluoroethane
C_2H_6	Ethane
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod™	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen Code	California Green Building Standards Code
Caltrans	California Department of Transportation
Calveno	California Vehicle Noise

Acronym	Definition
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBSC	California Building Standards Code
CCR	California Code of Regulations
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEPA	California Environmental Protection Agency
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFCs	Chlorofluorocarbons
CF_4	Tetraflouromethane
CF_3CH_2F	HFC-134a
CFD	Colton Fire Department
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CGS	California Geologic Survey
CH_4	Methane
CH_3CHF_2	HFC-152a
CHCCSP	Colton's Hub City Centre Specific Plan (Land Use Designation)
CHF_3	HFC-23
CHHSL	California Human Health Screening Level
CIWMB	California Integrated Waste Management Board
CJUSD	Colton Joint Unified School District
CLCA	California Land Conservation Act
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
COHb	carboxyhemoglobin
COG	Council of Governments
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
COHb	carboxyhemoglobin
CPD	Colton Police Department
CPUC	California Public Utilities Commission
CSDP	Comprehensive Storm Drain Plan
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWRF	Colton Wastewater Reclamation Facility

Acronym	Definition
dB	Decibel
dBA	A-weighted Decibels
DAP	Development Application Process
DIF	Development Impact Fee
DPM	Diesel Particulate Matter
DSFF	Delhi Sands Flower-loving Fly
DTSC	Department of Toxic Substances Control
d.u./ac	dwelling units per acre
DWR	Department of Water Resources
E+P	Existing plus Project Conditions
EDR	Environmental Data Resources
EIR	Environmental Impact Report
EMFAC	Emission Factor Model
EPA	Environmental Protection Agency
EPS	Emission Performance Standard
et seq.	*et sequentia*, meaning "and the following"
F	Fahrenheit
FAR	floor area ratio
FCD	Flood Control District
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Map
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
FY	Fiscal Year
GC	General Commercial (Land Use Designation)
GCC	Global Climate Change
GHG	Greenhouse Gas
GIS	Geographic Information System
Gg	Gigagram
GPA	General Plan Amendment
GVWR	Gross Vehicle Weight Rating
GWP	Global Warming Potential
H_2O	Water Vapor

Acronym	Definition
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HCS+	Highway Capacity Software Plus
HD	High Density Residential (Land Use Designation)
HFCs	Hydrofluorocarbons
HI	Heavy Industrial (Land Use Designation)
HIST	Historical Underground Storage Tanks
HMBEP	Hazardous Materials Business Emergency Plan
HOV	High-occupancy Vehicle
Hp	Horsepower
HPLV	High Pressure Low Volume
HRS	Hazard Ranking System
HSAA	Carpenter-Presley-Tanner Hazardous Substance Account Act
HVAC	Heating, Ventilation, and Air Conditioning
HWCL	California Hazardous Waste Control Law
I	Interstate
i.e.	that is
IBC	International Building Code
in/sec	Inches per second
IP	Industrial Park (Land Use Designation)
IPCC	Intergovernmental Panel on Climate Change
IRWMP	Integrated Regional Water Management Plan
IS	Initial Study
ITE	Institute of Transportation Engineers
JPA	Joint Powers Authority
kBTU	kilo-British Thermal Units
kWh	kilowatt-hour
LBP	Lead-based paint
LCA	Life-cycle analysis
LD	Low Density Residential (Land Use Designation)
Leq	equivalent continuous sound level
LI	Light Industrial (zoning and land use designation)
L_{max}	Maximum level measured over the time interval
L_{min}	Maximum level measures over the time interval
LOS	Level of Service
LSTs	Localized Significance Thresholds
LU	Land Use

Acronym	Definition
M-U/D	Mixed-Use—Downtown Zone (zoning designation)
M-U/N	Mixed-Use—Neighborhood Zone (zoning designation)
M-1	Light Industrial Zone (zoning designation)
M-2	Heavy Industrial Zone (zoning designation)
MATES	Multiple Air Toxics Exposure Study
MBTA	Migratory Bird Treaty Act
MD	Medium Density Residential (Land Use Designation)
MDP	master drainage plan
MGD	million gallons per day
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
Mph	Miles per hour
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MT	metric ton
MU-DC	Mixed Use-Downtown (Land Use Designation)
MU-N	Mixed Use-Neighborhood (Land Use Designation)
MUTCD	Manual on Uniform Traffic Control Devices
MWD	Metropolitan Water District
N_2	Nitrogen
N_2O	Nitrous Oxide
n.d.	no date
NAHC	Native American Heritage Commission
NAAQS	National Ambient Air Quality Standards
NC	Neighborhood Commercial (Land Use Designation)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NIOSH	National Institute for Occupational Safety and Health
No.	Number
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
n.p.	No page
NPL	National Priorities List
O-S/R	Open Space Recreational (zoning designation)

Acronym	Definition
O-S/Res	Open Space Resources (zoning designation)
O_2	Oxygen
O_3	Ozone
OS-R	Open Space-Recreation (Land Use Designation)
OS-RS	Open Space-Resources (Land Use Designation)
PA	Planning Area
Pb	Lead
PCEs	Passenger Car Equivalents
PeMS	Caltrans' Performance Measurement System
PF	Public/Institution (Land Use Designation)
PFCs	Perfluorocarbons
P-I	Public/Institution Zone (zoning designation)
p.m.	Post Meridiem (between the hours of noon and midnight)
PM	Particulate Matter
$PM_{2.5}$	Fine Particulate Matter (2.5 microns or smaller)
PM_{10}	Fine Particulate Matter (10 microns or smaller)
ppb	parts per billion
ppm	parts per million
pp.	pages
ppt	parts per trillion
PPV	Peak particle velocity
R-U	Railroad/Utility/ROW Zone (zoning designation)
R-1	Low Density Residential Zone (zoning designation)
R-2	Medium Density Residential Zone (zoning designation)
R-3	Multiple-Family Residential Zone (zoning designation)
R-4	Multiple Family Residential Zone (zoning designation)
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RCSP	Reche Canyon Specific Plan (Land Use Designation)
RCTC	Riverside County Transportation Commission
RECLAIM	Regional Clean Air Incentives Market
REL	Reference Exposure Level
REMEL	Reference Mean Emission Level
RivTAM	Riverside County Transportation Analysis Model
RIX	rapid infiltration-extraction
RMP	Resource Management Plan
RMS	Root-mean-square
R-O	Residential Overlay (zoning designation)
ROGs	Reactive Organic Gasses
RPZ	Runway Protection Zone

Acronym	Definition
RR	Railroad/Utility Corridor (Land Use Designation)
RSLs	Regional Screening Levels
RTA	Riverside Transit Authority
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SA	Site Assessment
SANBAG	San Bernardino Associated Governments
SARA	Superfund Act and Reauthorization Act
SARWQCB	Santa Ana Regional Water Quality Control Board
SAWPA	Santa Ana Watershed Project Authority
SF/s.f.	square foot or square feet
SB	Senate Bill
SB 375	California Senate Bill 375, Sustainable Communities and Climate Protection Act of 2008
SBCDA	San Bernardino County Department of Agriculture
SBCFCD	San Bernardino County Flood Control District
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Management District
SCH	California State Clearinghouse (Office of Planning and Research)
SCS	Sustainable Communities Strategy
SDA	Sensitive Development Area Overlay Zone (zoning designation)
SDWA	Safe Drinking Water Act
SF_6	Sulfur Hexafluoride
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SO_4	Sulfates
SO_X	Sulfur Oxides
SP	Specific Plan Zone (zoning designation)
SPA	Specific Plan Amendment
SR	State Route
SRA	Source Receptor Area
SSLs	Soil Screening Levels
SWEEPS	Statewide Environmental Evaluation and Planning System
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Regional Control Board
TAC	Toxic Air Contaminants

Acronym	Definition
TIA	Traffic Impact Analysis
TPM	Tentative Parcel Map
TTM	Tentative Tract Map
TSF	Thousand Square Feet
UBC	Uniform Building Code
UNFCCC	United Nations' Framework Convention on Climate Change
URBEMIS	URBan EMISsions
U.S.	United States
USCB	United States Census Bureau
USEPA	United States Environmental Protection Agency
USDA	U.S. Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Society
UST	Underground Storage Tanks
UTRs	Utility tractors
UWMP	Urban Water Management Plan
V-L	Very-Low Density Residential Zone (zoning designation)
VdB	Velocity and decibels (vibration unit of measure)
VLDR	Very Low Density Residential
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
WFA	Water Facilities Authority
WMWD	Western Municipal Water District
WQMP	Water Quality Management Plan
WSA	Water Supply Assessment
WTP	Water Treatment Plan

S.0 EXECUTIVE SUMMARY

S.1 INTRODUCTION

The California Environmental Quality Act (CEQA), Public Resources Code §21000, et seq. requires that before a public agency makes a decision to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about the project's potential environmental impacts, give the public an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment.

This Draft Environmental Impact Report (DEIR), having California State Clearinghouse (SCH) No. 2016061056 was prepared in accordance with CEQA Guidelines Article 9, § 15120 to § 15132, to evaluate the potential environmental impacts associated with planning, constructing, and operating the proposed Roquet Ranch Specific Plan Project (hereafter, the "Project" or "proposed Project"). This EIR does not recommend approval, approval with modification, or denial of the proposed Project; rather, this EIR is a source of factual information regarding potential impacts that the Project may cause to the physical environment. The Draft EIR will be available for public review for a minimum period of 45 days.

After consideration of public comment, the City will prepare and publish responses to comments it received on the environmental effects of the proposed Project. The Final EIR will then be considered by the City of Colton Planning Commission prior to deciding to approve, approve with modification, or reject the proposed Project. The Colton City Council will consider certifying the Final EIR and adopting required findings in conjunction with Project approval. In the case that there are any adverse environmental impacts that cannot be mitigated to below a level of significance, the City of Colton must adopt a Statement of Overriding Considerations, stating why the City is taking action to approve the Project with or without modification despite its unavoidable impacts. In addition, the City must adopt a Mitigation, Monitoring, and Reporting Program (MMRP), which describes the process to ensure implementation of the mitigation measures identified in the Final EIR. The MMRP will ensure CEQA compliance during Project construction and operation.

This Executive Summary complies with CEQA Guidelines § 15123, "Summary." This EIR document includes a description of the proposed Project and evaluates the physical environmental effects that could result from Project implementation. The City of Colton determined that the scope of this EIR should cover 15 subject areas. The scope was determined through an Initial Study drafted for the proposed Project, and the consideration of public comment received by the City in response to this EIR's Notice of Preparation (NOP). The findings of the Initial Study determined that the Project would not result in any potential impacts to the environmental subject areas of (1) Agriculture and Forestry Resources and (2) Mineral Resources; accordingly, these environmental subject areas were screened out and are not evaluated in this EIR. The Initial Study, NOP, and written comments received by the City in response to the NOP, are attached to this EIR as *Technical Appendix A*. As determined by the City of Colton and in consideration of public comment on the NOP, the 15 environmental subject areas that could be reasonably and significantly affected by planning, constructing, and/or operating the proposed Project are analyzed herein, including:

- ❑ Aesthetics
- ❑ Air Quality
- ❑ Biological Resources
- ❑ Cultural Resources
- ❑ Geology and Soils
- ❑ Greenhouse Gas Emissions
- ❑ Hazards and Hazardous Materials
- ❑ Hydrology and Water Quality
- ❑ Land Use & Planning
- ❑ Noise
- ❑ Population and Housing
- ❑ Public Services
- ❑ Recreation
- ❑ Transportation/Traffic
- ❑ Utilities and Service Systems

Refer to EIR Section 4.0, *Environmental Analysis*, for a full account and analysis of the subject matters listed above. Subject areas for which were concluded that impacts would be clearly less than significant and that do not warrant detailed analysis in this EIR are addressed in EIR Section 5.0, *Other CEQA Considerations*.

For each of the 15 subject areas analyzed in detail in Section 4.0, this EIR describes: 1) the physical conditions that existed at the approximate time this EIR's NOP was filed with the California State Clearinghouse (June 24, 2016); 2) discloses the type and magnitude of potential environmental impacts resulting from Project planning, construction, and operation; and 3) if warranted, recommends feasible mitigation measures that would reduce or avoid significant adverse environmental impacts that the proposed Project may cause. A summary of the proposed Project's significant environmental impacts and the mitigation measures imposed by the City of Colton on the Project to lessen or avoid those impacts is included in this Executive Summary as Table S-1, *Mitigation Monitoring and Reporting Program*. The City of Colton applies mitigation measures which it determines 1) are feasible and practical for project applicants to implement, 2) are feasible and practical for the City of Colton to monitor and enforce, 3) are legal for the City to impose, 4) have an essential nexus to the Project's impacts, and 4) would result in a benefit to the physical environment. CEQA does not require the Lead Agency to analyze an exhaustive list of every imaginable mitigation measure, or measures that are duplicative of mandatory regulatory requirements.

This EIR also discusses alternatives to the proposed Project. Alternatives are described that would attain most of the Project's objectives while avoiding or substantially lessening the proposed Project's significant adverse environmental effects. A full discussion of Project alternatives is found in Section 6.0, *Alternatives.*

S.2 PROJECT SYNOPSIS

S.2.1 LOCATION AND REGIONAL SETTING

The approximately 336.2-acre Project site is located within the La Loma Hills, which is within the southwestern portion of the City of Colton in San Bernardino County, California. Figure 2-1, *Regional Map*, depicts the Project site's location within the regional vicinity, which shows the Project site is located north of the City of Riverside and the County of Riverside, as well as a portion of unincorporated Riverside County, northeast of the City of Jurupa Valley, southeast of the cities of Fontana and Rialto, and east of the City of Grand Terrace. Portions of unincorporated San Bernardino County are located to the north and west of the Project site. The Project site is located approximately 2.0 miles north of the intersection of State Route 60 (SR-60), SR-91, and Interstate 215 (I-215), approximately 11.3 miles east of I-15; approximately 2.3 miles south of I-10; and approximately 0.85 miles west of I-215. The nearest airport to the Project site is Flabob Airport, which is located approximately 4.0 miles southwest of the Project site. Box Springs Mountain Park

is located approximately 4.5 miles southeast of the Project site and Lake Perris is located approximately 14.5 miles southeast of the Project site. The San Bernardino National Forest is located approximately 12.5 miles north of the Project site. At the local level, the Project site is located approximately 0.1 mile north of Center Street, 0.25 mile south of Litton Avenue, 350 feet east of Old Pellissier Road, and west of La Cadena Drive (distance varies). At its closest point, the Project site is located approximately 1,000 feet from the Santa Ana River.

The prevailing planning document for the Project site and its surrounding area is the City of Colton General Plan. As depicted on Figure 2-4, *Existing General Plan Land Use Designations*, the City of Colton General Plan designates designated as Very Low Density Residential, Low Density Residential, Medium Density Residential, High Density Residential, Neighborhood Commercial, and Light Industrial (City of Colton, 2015a). The existing general plan land uses applicable to the Project site are discussed in further detail below:

1. "Very Low Density Residential": Applies to the majority of the Project site, and predominantly located in the northern portion of the site. Allows for 0.1-2 dwelling units per acre (d.u./ac);
2. "Low Density Residential": Applies to an area on the southeast portion of the Project site, and allows for 2.1-8 d.u./ac;
3. "Medium Density Residential": Applies to an area on the southern and central portions of the Project site, and allows for 8.1-16 d.u./ac;
4. "High Density Residential": Applies to a small area on the southern portion of the Project site, and allows for 16.1-22 d.u./ac; and
5. "Light Industrial": Applies to the southern tip of the Project site, and generally supports a variety of fabrication, manufacturing, assembly, distribution, warehouse uses, and commercial and office uses

As shown on Figure 2-4, *Existing General Plan Land Use Designations*, surrounding General Plan land use designations within the City of Colton include the following: Very Low Density Residential to the north; Very Low Density Residential, Low Density Residential, "Neighborhood Commercial," and Light Industrial to the east; Medium Density Residential, High Density Residential, and General Commercial to the south; and Very Low Density Residential, Light Industrial, and "Open Space-Resource" to the west (City of Colton, 2013a, Figure LU-6). To the south of the Project site, General Plan land use designations within the County of Riverside include "Medium Density Residential" and "Light Industrial" (RCIT, 2016). To the south of the Project site, General Plan land use designations within the City of Riverside include "Business/Office Park (B/OP)" (City of Riverside, 2007a). To the east of the Project site, General Plan land use designations within the City of Grand Terrace include "Low Density Residential" (City of Grand Terrace, 2010, Exhibit 2-2).

Refer to Section 2.0, *Environmental Setting*, of this EIR for more information related to the regional and local setting of the Project site.

S.2.2 PROJECT OBJECTIVES

The underlying purpose of the proposed Project is to develop a community of residential neighborhoods accompanied by recreational areas, open spaces, a 10.3-acre public school site, a 0.8-acre fire station site, a

3.0-acre recreational vehicle (RV) Parking Area, and a 1.2-acre neighborhood commercial center. The following is a list of specific objectives that the proposed Project intends to achieve.

A. To develop a master-planned community that is compatible with the surrounding areas.

B. To provide high-quality housing opportunities that are marketable and accessible within the City of Colton.

C. To preserve natural hillsides, natural habitats, and natural drainage courses within open space where feasible.

D. To provide a range of housing types and styles that appeal to a diversified range of households and income levels.

E. To cluster development areas in order to provide neighborhood parks with active and passive recreational amenities for residents of the Roquet Ranch community and the City of Colton as a whole.

F. To provide neighborhood-oriented retail services which generate sales tax revenue for the City of Colton.

G. To provide sites available to the Colton Unified School District (CUSD) and Colton Fire Department (CFD) for their potential use as an elementary school site and fire station site, respectively.

S.3 PROJECT SUMMARY DESCRIPTION

The proposed Project consists of applications for General Plan Amendment, Specific Plan, Change of Zone, and a Phased Tentative Tract Map No. 19983. Approval of these applications would allow for development of the Project site with up to 450 Low Density single-family detached residential units on 60.2 acres; 293 Medium Density residential units on 19.2 acres; 131 High-Density residential townhome units on 6.0 acres; 1.2 acres of Neighborhood Commercial use; a 10.3-acre school site; a 0.8-acre fire station site; a 3.0-acre RV Parking Area; 19.3 acres of recreational open space; 199.7 acres of open space as resource preservation; and 16.5 acres of roadways. Associated improvements to the property would include roadway improvements, utility infrastructure, landscaping, exterior lighting, and water quality basins. The Project also includes public rights-of-way dedications and construction of off-site utilities that would and connect to existing off-site utility lines. Additional discretionary and administrative actions that would be necessary to implement the proposed Project are listed in Table 3-6, *Matrix of Project Approvals/Permits*, in Section 3.0, *Project Description*. A summary of the discretionary approvals sought by the Project Applicant is provided below.

- The Roquet Ranch Specific proposes the development of the 336.2-acre Project site with 450 Low Density single-family detached residential units on 60.2 acres; 293 Medium Density residential units on 19.2 acres; 131 High-Density residential townhome units on 6.0 acres; 1.2 acres of Neighborhood Commercial use; a 10.3-acre school site; a 0.8-acre fire station site; a 3.0-acre RV Parking Area; 19.3

acres of recreational open space; 199.7 acres of open space as resource preservation; and 16.5 acres of roadways.

- The General Plan Amendment proposes to change the City of Colton General Plan land use designations for the 336.2-acre Project site from Very Low Density Residential, Low Density Residential, Medium Density Residential, High Density Residential, Neighborhood Commercial, and Light Industrial to "Specific Plan" to facilitate development of the Roquet Ranch Specific Plan. With approval of the GPA, the specific land use designations (Figure 3-1, *Existing and Proposed General Plan Land Use Designations*, in EIR Section 3.0, *Project Description*) proposed as part of the Roquet Ranch Specific Plan would apply to the entire Project site, and would include "Low Density Residential", "Medium Density Residential", "High Density Residential," "Neighborhood Commercial", "Public/Institution", "Open Space-Recreation", and "Open Space-Resource," and would apply to the entire 336.2-acre Project site.

- As shown on Figure 3-2, *Existing and Proposed Zoning Designations*, the Change of Zone proposes to change the zoning designations of the site from "Very Low Density Residential (VLDR)," "Medium Density Residential (R-2)," "Multiple-Family Residential (R-3/R-4)," "Light Industrial (M-1)," and "Neighborhood Commercial (C-1)" to "Specific Plan Zone (SP Zone)" to provide amended land use and development standards for the subject property and formalize planning area boundaries that reflect the proposed Roquet Ranch Specific Plan. The Roquet Ranch Specific Plan would establish the permitted uses and development standards for all Planning Areas located within the boundaries of the Roquet Ranch Specific Plan.

- As depicted in Figure 3-10, *Tentative Tract Map No. 19983*, Tentative Tract Map (TTM 19983) proposes to subdivide approximately 336.2 acres of the Project site into specific lot configurations within each Planning Area to allow for proposed development. The TTM would establish a subdivision of 434 residential lots and one (1) commercial lot. The remaining areas of TTM 19983 are proposed for 431 Medium Density Residential units, 131 High Density Residential units, a 10.3-acre school site, a 0.8-acre fire station site, a 3.0-acre RV Parking Area, open space, parks, trails, landscape, water quality retention basins, and roads. TTM No. 19983 also indicates 16.5 acres would consist of roadways. Table 3-3, *Total Land Use Summary in Tentative Tract Map No. 19983*, within EIR Section 3.0, *Project Description*, shows the breakdown of different land uses indicated by TTM 19983.

Refer to EIR Section 3.0, *Project Description*, for a detailed description of the proposed Project.

S.4 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

CEQA Guidelines § 15123(b)(2) requires that areas of controversy known to the Lead Agency (City of Colton) be identified in the Executive Summary. The Lead Agency has not identified any other issues of controversy associated with the proposed Project.

Regarding issues to be resolved, this EIR addresses the environmental issues that are known by the City, and identified during the Initial Study process. The EIR also addresses issues that were identified in the comment

letters that the City of Colton received on this EIR's NOP (refer to *Technical Appendix A*). Environmental topics raised in comments to the NOP are summarized in Table 1.1, *Summary of NOP Comments*, in Section 1.0, *Introduction*, of this EIR and include but are not limited to the topics of air quality, biological resources, cultural resources, land use/planning, hazards and hazardous materials, hydrology and water quality, public services, transportation/traffic, and utilities/service systems. A publicly noticed EIR Scoping Meeting was held at the Luque Community Center, located at 294 East O Street in Colton on July 14, 2016, which provided members of the general public an additional opportunity to comment on the scope and range of potential environmental concerns to be addressed in this EIR. Attendees of the EIR Scoping Meeting identified concerns related to this EIR, including the potential impacts associated with the Project's water demand, the potential impact the Project would have on emergency response times, and the adequacy of emergency fire access to the Project site.

Additionally, two Community Meetings were held to present the Roquet Ranch Specific Plan to interested members of the community and to receive their feedback on the Project. The first Community Meeting was held on March 3, 2015 at the Luque Community Center, located at 294 East O Street in Colton. The second Community Meeting was held on December 17, 2015 at Pinnacle Peak Restaurant located at 2533 South La Cadena Drive in Colton. During these two Community Meetings, EIR-related issues were identified by meeting attendees, which included the potential traffic impacts of the Project; the Project's potential impacts on police and fire response times; the potential impacts of the Project that are associated with its energy consumption; the potential for the Project's construction/grading impacts (i.e., debris, dust, and rodents/animals) to impact surrounding residences; and the Project's impacts to public facilities (i.e., schools).

S.5 PROJECT ALTERNATIVES

In compliance with CEQA Guidelines § 15126.6, an EIR must describe a range of reasonable alternatives to the Project or to the location of the Project. Each alternative must be able to feasibly attain most of the Project's objectives and avoid or substantially lessen the Project's significant effects on the environment. A detailed description of each alternative evaluated in this EIR, as well as an analysis of the potential environmental impacts associated with each alternative, is provided in EIR Section 6.0, *Alternatives*. Also described in Section 6.0 is a list of alternatives that were considered but rejected from further analysis.
The alternatives considered by this EIR include those listed below.

S.5.1 NO PROJECT / NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative considers no development/disturbance on the Project site beyond that which occurs under existing conditions. As such, the approximately 336.2-acre Project site would remain undeveloped (with the exception of the Roquet Paving Company facility that operates on the eastern portion of the Project site) and vacant (with no habitable structures) largely undeveloped hillside terrain containing natural vegetation with scattered dirt trails. As with under existing conditions, an SCE easement containing overhead electric power transmission line generally bisects the Project site, trending southeast in the northern portion of the Project site, while an additional transmission line occurs along the southern boundary of the Project site and exits the site at the eastern boundary. Under this Alternative, no improvements would be made to the Project site and none of the Project's roadway, utility, and other

infrastructure improvements would occur. This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the subject property in its existing condition.

The No Project/No Development Alternative would avoid or reduce all of the impacts of the proposed Project, with the exception of the issue area of Land Use and Planning. Under the No Project/No Development Alternative, impacts associated with Hazards and Hazardous Materials would only be slightly reduced as compared to the proposed Project. Whereas the proposed Project would be subject to mandatory compliance with the fuel modification requirements and building design requirements of the City of Colton Fire Department, as well as compliance with Section 701A of the California Building Code, which would reduce impacts to less than significant with respect to wildland fire hazards the No Project/No Development Alternative would not entail additional wildfire abatement activities than are presently undertaken. Therefore, the majority of the undeveloped portions of the site would retain the current classification as a "Very High Fire Hazard Severity Zone." Therefore, the severity of wildfire hazards at the site would likely be higher under the No Project/No Development Alternative when compared to the proposed Project. Additionally, the No Project/No Development Alternative would result in similar to slightly increased impacts in the area of Land Use and Planning as compared to the Project, because it would not develop the Project site in accordance with the land uses envisioned in the General Plan. The only Project objective that the No Project/No Development Alternative would successfully meet would be Objective C, which is intended to preserve natural hillsides, natural habitats, and natural drainage courses within open space, where feasible. None of the other Project objectives would be met under the No Project/No Development Alternative.

S.5.2 Off-Site Location Alternative

Based on the City of Colton's review of aerial photography and properties known to the City as being available for development within the City of Colton, the only other available undeveloped property of similar size (approximately 336.2 acres), that the Project Applicant has the reasonable possibility of controlling is the property that abuts the Project site to the west (hereinafter referred to as the "Off-site Location"). As shown in Figure 6-1, *Off-Site Location Alternative*, the Off-site Location is bound to the north by undeveloped/vacant land, to the east by undeveloped/vacant land (the Project site), to the south by Old Pellissier Road, and to the west by the Santa Ana River. The Off-site Location consists of approximately 227.6 acres (108.6 acres less than the Project site), and is currently owned by the City of Riverside. The Off-site Location Alternative (OLA) would develop the Off-site Location consistent with the land use types and development acreages proposed in the Roquet Ranch Specific Plan, with the exception of a reduction in the acreage of land designated as Open Space-Resource by 108.6 acres (the difference between the acreage of the Project site [336.2 acres] and the acreage of the Off-site Location [227.6 acres]). This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would avoid impacts to the Project site through developing the Project at an off-site location.

Implementation of the OLA would not avoid any of the Project's significant impacts to the environment, including impacts that would be significant and unavoidable. However, whereas the proposed Project would result in significant and unavoidable direct impacts to Aesthetics due to grading of the on-site hillsides, the OLA would result in a reduction of these impacts associated with degradation of the existing visual character

because it would avoid hillside grading. All potentially significant impacts would be mitigated to below a level of significance with the exception of the significant direct and cumulatively considerable impacts associated with air quality and transportation/traffic. Because the construction and operation of the OLA would largely be identical to that of the proposed Project, it would not avoid or substantially reduce the potential for significant impacts associated with air quality and transportation/traffic. In the case of hazards related to flooding, the OLA would increase impacts due to the greater susceptibility of the Off-site Location to flooding as compared to the Project site. The OLA may also result in greater impacts to biological resources (particularly riparian species and habitat) due to its closer proximity to the Santa Ana River floodplain.

In general, the OLA would meet each of the Project's objectives. However, the OLA would not meet Project Objective C (preserve natural hillsides, natural habitats, and natural drainage courses within open space, where feasible) as effectively as the proposed Project. Although the OLA would include the preservation of open space, the OLA does not directly preserve any natural hillsides, would not preserve as much natural habitat as the proposed Project, and would likely impact drainage courses to a greater extent than would the proposed Project through its development of a site that is closer in proximity to the Santa Ana River floodplain.

S.5.3 Reduced Footprint Alternative

The Reduced Footprint Alternative (RFA) considers a reduction in the overall development footprint of the proposed Project. The RFA avoids development of the areas of the Project site located to the north of Planning Area 2 and Planning Area 12, converting Planning Areas 1, 4, 5, and 14A, 14B, 15, and 17 to the Open Space-Resource designation (resulting in an increase in the acreage of land designated as Open Space-Resource by 51.5 acres [from 199.7 acres to 251.2 acres]), and combining them into Planning Areas 13A and 13C. In order to retain the quantity of residential dwelling units proposed by the Project (up to 1,050 dwelling units) the RFA would increase the densities of Planning Areas 2, 3, and 7 (shown as Planning Areas 1, 2, and 4 [respectively] on Figure 6-2, *Reduced Footprint Alternative*) from Low Density Residential to Medium Density Residential. The RFA would result in the reduction of residential development acreage by 25.9 acres (from 85.4 acres to 59.5 acres) and an increase in the overall residential target density from 10.2 dwelling units per acre (du/ac) to 14.7 du/ac. Additionally, the RFA would reduce the acreage of Open Space-Recreation within the Project by 17.4 acres (from 19.3 acres to 1.9 acres), and decrease the acreage dedicated to roadways by 5.2 acres (from 16.5 acres to 11.3 acres).

Implementation of the RFA would likely result in a reduction in the significant and unavoidable impacts associated with the proposed Project, including in the issue areas of aesthetics, air quality and transportation/traffic – though it would not reduce any of these impacts to a less than significant level. Indeed, given the overall smaller scale construction and operational activities and the higher residential density inherent to the RFA relative to the proposed Project, the RFA would either result in similar or reduced impacts in all of the issue areas discussed accept for the following issue areas where the RFA may result in an increase in impacts: Hazards and Hazardous Materials and Public Services.

In general, the RFA would meet each of the Project's objectives except for Objective B (to high-quality housing opportunities that are marketable and accessible within the City of Colton) and Objective D (to

provide a range of housing types and styles that appeal to a diversified range of households and income levels). The RFA would fail to achieve Project Objective B as effectively as the proposed Project because it increases residential density resulting in an increase in multi-family residential uses and thus would not provide the broad range of diverse housing types to the extent that the proposed Project would accomplish. The RFA would fail to accomplish Objective D as effectively as the proposed Project, because it proposes a 17.4-acre reduction in land dedicated to parks and recreational facilities compared to the 19.3 acres of parkland proposed by the Project and would not meet the City of Colton's parkland requirements on-site.

S.5.4 REDUCED DENSITY ALTERNATIVE

The Reduced Density Alternative (RDA) contemplates the development of a residential community that would have a development footprint that would be similar to the proposed Project, but would have a reduced overall residential density when compared to the proposed Project. Under the RDA, the development of the residential uses would occur within the same development footprint within the Project site as identified for the proposed Project. However, the RDA would convert Planning Areas 4, 6, and 9 from a Medium Density Residential land use designation to a Low Density Residential designation (8.0 du/ac), and would convert Planning Areas 8 and 10 from a High Density Residential land use designation to a Low Density Residential designation (8.0 du/ac) (refer to Figure 6-4, *Reduced Density Alternative*). The RDA would result in the development of up to 737 dwelling units within the Project site. The densities of the five Planning Areas designated by the proposed Project as Low Density Residential were not modified under the RDA. Under the RDA, should the school district or the fire department (respectively) elect not to construct facilities within Planning Areas 12 and 13, the Low Density Residential (8.0 du/ac) land use designation would be the alternate use for these Planning Areas rather than the Medium Density Residential land use designation. Accordingly, the RDA would reduce the number of dwelling units that would be constructed at the Project site by 313 residential units, which equates to an approximate 30% decrease in dwelling units when compared to the proposed Project. All other components of the Specific Plan under the RDA would remain unchanged compared to the proposed Project, including the neighborhood commercial retail, roadways, parks, open space, and utility facilities.

Compared to the proposed Project, the RDA would result in overall smaller scale construction and operational activities (based on the approximately 30% reduction in total dwelling units). As such, the RDA would likely result in a reduction in the significant and unavoidable impacts associated with the proposed Project in the issue areas of air quality and transportation/traffic. The RDA would result in similar to slightly reduced impacts in the issue area of Aesthetics, but would not avoid the significant and unavoidable direct impacts that the Project would cause pertaining to impacts to the existing visual character of the site and surrounding areas due to the grading of certain hillsides. Additionally, the RDA would reduce impacts in all of the issue areas accept for the following issue areas where the RDA may result in similar impacts: Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, and Land Use and Planning.

The RDA would not meet Objective B, which aims to provide high-quality housing opportunities that are marketable and accessible within the City of Colton or Objective D, which aims to provide a range of housing types and styles that appeal to a diversified range of households and income levels. The RDA would fail to achieve Project Objective B as effectively as the proposed Project because it would provide 313 fewer housing units and thus would not provide as much high-quality housing opportunities that are marketable

and accessible to City of Colton residents to the extent that the proposed Project would accomplish. The RDA would fail to achieve Project Objective D as effectively as the proposed Project because it would convert Planning Areas 4, 6, and 9 from a Medium Density Residential land use designation to a Low Density Residential designation, and would convert Planning Areas 8 and 10 from a High Density Residential land use designation to a Low Density Residential designation, and thus would not provide the same range of housing types of styles that appeal to a diversified range of households and income levels to the extent that the proposed Project would accomplish.

The RDA has been identified as the environmentally superior alternative pursuant to CEQA Guidelines § 15126.6, as it would result in some degree of reduction to the potential for impacts associated with 9 of the environmental topics without resulting in any increased impacts. However, the RDA would not reduce to a less-than-significant level any of the significant and unavoidable impacts of the Project.

S.6 SUMMARY OF IMPACTS, MITIGATION MEASURES AND CONCLUSIONS

S.6.1 EFFECTS FOUND NOT TO BE SIGNIFICANT

The scope of detailed analysis in this EIR includes 15 subject areas determined by the City of Colton through the consideration of public comments received by the City on this EIR's Initial Study and NOP. The Initial Study, NOP, and public comments received in response to the NOP, are attached to this EIR as *Technical Appendix A*. Subject areas for which the City concluded that impacts clearly would be less than significant and that no not warrant further analysis in this EIR include: (1) Agriculture and Forestry Resources, and (2) Mineral Resources. This EIR addresses those topics in EIR Subsection 5.0, *Other CEQA Considerations*.

S.6.2 IMPACTS OF THE PROPOSED PROJECT

Table S-1, *Mitigation Monitoring and Reporting Program*, provides a summary of the proposed Project's environmental impacts, as required by CEQA Guidelines §15123(a). Also presented are the mitigation measures imposed on the Project by the City of Colton to further avoid adverse environmental impacts or to reduce their level of significance. After the application of all feasible mitigation measures, the Project would result in the following significant and unavoidable environmental effects:

- **Aesthetics Threshold c): Significant and Unavoidable Direct Impact.** The Project would develop the site in compliance with the site planning, architecture, and landscaping themes presented in Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan, which would ensure compatibility and continuity of development within the Roquet Ranch community and with the surrounding environs. However, the existing hillside setting that characterizes the visual character of the Project site would be permanently altered by the Project during its operation through its proposed grading of some of certain on-site hillsides. Accordingly, the proposed Project would have direct significant impact on the visual character of the Project site. Because the Project's effects to visual character are Project-specific, they would not be cumulatively considerable. The Project's design has been developed to minimize Project-specific effects to visual character in a number of ways. It will place residential neighborhoods and community amenities in clusters design to preserve the vast majority of steep slopes and major ridgelines on the Project site. Proposed residences will not block the sightline of the ridge and their development will be concentrated on the flatter portions of the site to

avoid, as much as possible, grading of steep hillsides. Proposed local streets will climb within the graded pads of residences to minimize hillside disturbance, with development "stair-stepped' into existing grades to reflect the existing topography. Further, where feasible, and particularly along the edge of the grading that would be visible from off-site, the Project will use contour grading to blend the natural topography with the manufactures slopes in an effort to create a natural looking hillside. The City has determined that there are no further feasible mitigation measures for the City to impose that would reduce the Project's impacts to the visual quality of the site to levels that are less than significant. As such, the Project would result in significant and unavoidable direct impacts associated with its permanent alteration of the existing visual character or quality of the site.

- **Air Quality Thresholds b) and c): Significant and Unavoidable Direct and Cumulatively Considerable Impact.** Operation of the Project would result in emissions of NO_x that exceed the SCAQMD regional threshold. NO_x is a precursor for ozone (O_3), a pollutant for which the SCAB is in nonattainment under both federal and State criteria. Therefore, emissions of NO_x associated with long-term operation of the Project would be a significant and unavoidable impact, and is cumulatively considerable. In the event that short-term construction activity and long-term operational activities overlap, impacts would be significant and unavoidable direct and cumulatively considerable for emissions of VOCs, NO_x, and CO. This EIR recommends all feasible mitigation to reduce VOCs, NO_x, and CO emissions and no additional feasible mitigation is available to reduce emissions to below a level of significance. No other mitigation measures are available that are feasible for the Project Applicant to implement and for the City of Colton to enforce that have a proportional nexus to the Project's level of impact. A majority of the overlapping air emissions are from mobile sources (vehicle tailpipe exhaust) that are regulated by federal and State agencies and beyond the control of local governments. As such, it is concluded that when the Project's short-term construction and long-term operational activities overlap, VOCs, NO_x, and CO emissions would violate the SCAQMD air quality standards.

- **Transportation/Traffic Threshold a): Significant and Unavoidable Direct and Cumulatively Considerable Impact.** Although the Project Applicant would be required to make a fair share fee payment to the City of Colton for roadway improvements, the intersection improvements are not part of an established City of Colton fee program, so there is no assurance that the improvements will be implemented at their time of need. Additionally, some intersections are 1) located outside the geographic limits of the City of Colton; 2) funded by existing mitigation funding programs, for which a timetable for construction is not yet available; and/or 3) not included in any established mitigation funding program (meaning there is no mechanism available for development projects to contribute toward the construction of needed improvements). For this reason, the Project would retain significant and unavoidable direct and cumulatively considerable impacts to various intersections within the Project's study area during both Opening Year Cumulative (2020) and Horizon Year (2040) conditions (see EIR Subsection 4.14, *Transportation / Traffic*, for additional detail).

- **Transportation/Traffic Threshold b): Significant and Unavoidable Direct and Cumulatively Considerable Impact.** Under the Existing Plus Project scenario, the Project would have cumulatively considerable impacts on two freeway segments. Although the Project Applicant would

be required to make a fair share contribution payment to Caltrans in order to undertake improvements to I-215 (if Caltrans prepares a valid study), the City of Colton cannot assure the recommended improvements would be implemented and/or in place at the time of need. Accordingly, the Project would have a significant unavoidable direct impact to these two freeway segments under the Existing Plus Project scenario. Under the Opening Year Cumulative (2020) scenario and the Horizon Year (2040) scenario, the Project would result in cumulatively considerable impacts to I-215 freeway ramps and mainline segments. Caltrans does not have a funding mechanism in place to allow development projects to contribute fair-share payments to future improvements in order to off-set cumulatively considerable traffic impacts. Accordingly, the Project's contribution of traffic to previously identified, congested freeway facilities under the Opening Year Cumulative (2020) scenario and Horizon Year (2040) conditions would be considered unavoidable cumulatively considerable impacts. See EIR Subsection 4.14, *Transportation / Traffic* for additional detail.

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.1 Aesthetics					
Summary of Impacts					
Threshold a): The Project would not result in substantial adverse effects on scenic vistas or scenic resources. The Project site contains potential scenic vistas, including hills, a prominent ridgeline, and uninterrupted open spaces. Additionally, the Project site contains potential scenic resources, including rock outcroppings and a prominent ridgeline. The proposed design of the Project preserves the prominent ridgeline, concentrates development in the flatter portions of the Project site, and preserves most of the natural hillsides as "Open Space-Resources." Through these measures, the Project avoids substantial adverse effects to scenic vistas and resources at the site; therefore, impacts to scenic vistas and scenic resources would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b): The Project has no potential to damage scenic resources within a scenic highway corridor, because the property is not visible from a designated scenic highway corridor.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
Threshold c): The Project would develop the site in compliance with the site planning, architecture, and landscaping themes presented in Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan, which would ensure compatibility and continuity of development within the Roquet Ranch community and with the surrounding environs. However, the existing hillside setting that characterizes the visual character of the Project site would be permanently altered by the Project during its operation	No feasible Mitigation Measures exist.	N/A	N/A	N/A	Significant and Unavoidable Direct Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
through its proposed grading of some of certain on-site hillsides. Accordingly, the proposed Project would have direct significant impact on the visual character of the Project site. Because the Project's effects to visual character are Project-specific, they would not be cumulatively considerable. The Project's design has been developed to minimize Project-specific effects to visual character in a number of ways. It will place residential neighborhoods and community amenities in clusters design to preserve the vast majority of steep slopes and major ridgelines on the Project site. Proposed residences will not block the sightline of the ridge and their development will be concentrated on the flatter portions of the site to avoid, as much as possible, grading of steep hillsides. Proposed local streets will climb within the graded pads of residences to minimize hillside disturbance, with development "stair-stepped' into existing grades to reflect the existing topography. Further, where feasible, and particularly along the edge of the grading that would be visible from off-site, the Project will use contour grading to blend the natural topography with the manufactures slopes in an effort to create a natural looking hillside. The City has determined that there are no further feasible mitigation measures for the City to impose that would reduce the Project's impacts to the visual quality of the site to levels that are less than significant. As such, the Project would result in significant and unavoidable direct impacts associated with its permanent alteration of the existing visual character or quality of the site.					
Threshold d): The Project would not create substantial amounts of light or glare.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Compliance with the City of Colton Municipal Code § 18.42.090 and § 18.42.100 and the outdoor lighting standards defined in Section IV of the Roquet Ranch Specific Plan would ensure less-than-significant impacts associated with light and glare affecting day or nighttime views in the area.					
4.2 Air Quality					
Summary of Impacts					
Threshold a): Emissions of PM_{10} during the construction phase of the Project would exceed the applicable SCAQMD LST for PM_{10}; therefore, without mitigation, the Project would conflict with Consistency Criterion No. 1 of the SCAQMD's AQMP, which is the air quality plan applicable to the South Coast Air Basin within which the Project site is located.	MM 4.2-1 Prior to issuance of grading permits, the City of Colton Building Official or his/her designee shall ensure that grading plans include a note that specifies that that all construction equipment greater than 150 horsepower is California Air Resources Board (CARB) Tier 3 Certified or better. The Grading Contractor shall be responsible for ensuring compliance with this note throughout the duration of grading activities.	Project Applicant; Grading Contractor	City of Colton Building Division	Prior to the issuance of a Project-related grading permit	Less-than-Significant Impact
Thresholds b) and c): Without mitigation, Project-related construction emissions would exceed the daily criteria pollutant threshold established by the SCAQMD for emissions of NO_x. Additionally, long-term operation of the Project would result in emissions of VOCs and NO_x that exceed the SCAQMD regional thresholds for both pollutants absent mitigation. Both VOCs and NO_x are a precursor for ozone (O_3), a pollutant for which the SCAB is nonattainment under both federal and State criteria. Therefore, absent mitigation, the Project's short-term construction emissions of NO_x and long-term operational emission of NO_x and VOCs would cumulatively contribute a criteria pollutant for which the Project region is nonattainment (i.e., O_3). Because construction of the proposed Project	MM 4.2-1 (above)	Project Applicant; Grading Contractor	City of Colton Building Division	Prior to the issuance of a Project-related grading permit	Significant and Unavoidable Direct and Cumulatively Considerable Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
would occur in phases, there is a potential that operational and construction activities could overlap. If there is overlap, the Project would result in short-term VOC, NO_X, and CO emissions during the overlapping activities. As such, absent mitigation, Project-related air emissions would violate the SCAQMD air quality standards and contribute to the non-attainment of criteria pollutants, which is a significant direct and cumulatively considerable impact.					
Threshold d): Absent mitigation, Project-related construction emissions would exceed the SCAQMD LST for emissions of PM_{10}, which has the potential to expose sensitive receptors to a substantial pollutant concentration.	MM 4.2-1 (above)	Project Applicant; Grading Contractor	City of Colton Building Division	Prior to the issuance of a Project-related grading permit	Less-than-Significant Impact
Threshold e): The Project would not produce unusual or substantial construction-related odors that would be objectionable and affect a substantial number of people. Odors associated with the long-term operation of the Project would be minimal and less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
4.3 Biological Resources					
Summary of Impacts					
Threshold a): The Project would temporarily impact designated critical habitat for the southwestern willow flycatcher through trimming of vegetation along the Riverside Avenue bridge during construction activities. The temporary impacts to this critical habitat is considered a potentially significant direct and cumulatively considerable impact. The Project would also remove suitable habitat that has the potential to support the least Bell's vireo, which	MM 4.3-1 Prior to the issuance of a demolition permit or grading permit for the off-site improvements to the portion of the Riverside Avenue bridge over the Santa Ana River, the City of Colton Public Works Director or City Engineer (or their designee) and the Development Services Director shall ensure that plans include the following measures to address impacts to southwestern willow flycatcher: 1) Vegetation clearing and trimming within the off-site improvement areas that includes the Riverside Avenue bridge over the Santa Ana	Project Applicant	City of Colton Public Works Director, California Department of Fish and Wildlife (CDFW), and United States Fish and Wildlife Service (USFWS)	Prior to the issuance of a demolition or grading permit	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
would be considered a significant direct and cumulatively considerable impact. The proposed Project would impact 167.1 acres of critical habitat for the coastal California gnatcatcher within the Project site, and 15.6 acres of critical habitat for the coastal California gnatcatcher in the off-site improvement areas. Project-related impacts to critical habitat for the coastal California gnatcatcher are considered significant direct and cumulatively considerable. The Project would likely impact suitable habitat for burrowing owls within the off-site improvement areas, which is considered a significant direct and cumulatively considerable impact.	River shall be conducted outside of the breeding season for southwestern willow flycatcher (May 15 through August 31). 2) If vegetation clearing and trimming or work within the off-site improvement areas that include the Riverside Avenue bridge over the Santa Ana River must be conducted within the breeding season for southwestern willow flycatcher (May 15 through August 31), then focused surveys should be conducted in accordance with USGS guidelines in A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher (2010) to determine the presence/absence of southwestern willow flycatcher within the off-site study areas. If southwestern willow flycatcher are present, the following shall be required: a) A qualified biologist shall identify a 300-foot avoidance buffer from any occupied habitat if construction occurs during the breeding season. If work is required within 300-feet buffer during the breeding season, the biologist shall monitor all work to ensure no impacts occur to the southwestern willow flycatcher. Written documentation shall be prepared and submitted to USFWS and CDFW on completion of construction during the breeding season to outline any monitoring activities. b) Construction limits in and around any occupied southwestern willow flycatcher habitat shall be delineated with flags and/or fencing prior to the initiation of any grading or construction activities to clearly identify the limits of the habitat and/or the 300-foot avoidance buffer during the breeding season. c) Prior to construction, a worker awareness program should be developed and implemented to inform all workers on the project about listed species, sensitive				

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	habitats, and the importance of complying with avoidance and minimization measures. d) All construction work shall occur during daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours determined by the City of Colton. e) During any construction within or immediately adjacent to the 300-foot avoidance buffer, the construction contractors shall install properly operating and maintained mufflers on all construction equipment, fixed or mobile, to reduce construction equipment noise to the maximum extent possible. The mufflers shall be installed consistent with manufacturers' standards. The construction contractor shall also place all stationary construction equipment so that emitted noise is directed away from the occupied southwestern willow flycatcher habitat. f) The construction contractor shall stage equipment in areas that will create the greatest distance between construction-related noise sources and occupied habitat during all project construction occurring during the breeding season. g) If the monitoring biologist determines that noise from the construction activities may be affecting the normal expected breeding behavior of the birds, the construction supervisor shall be informed and work within no less than 300 feet of construction areas shall be ceased until appropriate measures as identified by the biologist are implemented. Such measures may include monitoring by a qualified acoustician to verify noise levels are below 60 dBA within the occupied southwestern willow				

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	flycatcher habitat. If the 60 dBA requirement is exceeded the acoustician shall make operational changes, utilize technology to reduce construction noise such as mufflers, and/or install a barrier to alleviate noise levels during the breeding season. Installation of noise barriers and any other corrective actions taken to mitigate noise during the construction period shall be communicated to the USFWS and CDFW. h) If after all corrective actions are implemented the monitoring biologists determines that the normal expected breeding behavior of the birds is being affected, work within no less than 300 feet shall be ceased and the USFWS and CDFW shall be contacted to determine the appropriate course of action. i) On- and/or off-site restoration and/or enhancement of southwestern willow flycatcher habitat at a ratio no less than 0.5:1 for temporary impacts is required. Off-site restoration and/or enhancement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program supporting southwestern willow flycatcher.				
	MM 4.3-2 Prior to the issuance of a demolition permit or grading permit for the portion of the off-site improvement areas that include the Riverside Avenue bridge over the Santa Ana River, the City of Colton Public Works Director or City Engineer (or their designee) and the Development Services Director shall ensure that plans include the following measures to address impacts to least Bell's vireo: 1) Vegetation clearing and trimming within the off-site improvement areas that include the Riverside Avenue bridge over the Santa Ana River shall be conducted outside of the breeding	Project Applicant; Qualified Biologist	City of Colton Building Division, USFWS, and CDFW.	Prior to the issuance of a demolition permit or grading permit	

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	season for least Bell's vireo (March 15 through July 31). 2) If vegetation trimming or work must be conducted within the breeding season for least Bell's vireo (March 15 through July 31), then focused surveys shall be conducted in accordance with USFWS's Least Bell's Vireo Survey Guidelines (2001) to determine the presence/absence of least Bell's vireo within the off-site improvement areas that include the Riverside Avenue bridge over the Santa Ana River. If least Bell's vireo are present, the following would be required: a) A qualified biologist shall identify a 300-foot avoidance buffer from any occupied habitat if construction occurs during the breeding season. If work is required within 300-feet during the breeding season, the biologist shall monitor all work to ensure no impacts occur to the least Bell's vireo. Written documentation shall be prepared and submitted to USFWS and CDFW on completion of construction during the breeding season to outline any monitoring activities. b) Construction limits in and around any occupied least Bell's vireo habitat shall be delineated with flags and/or fencing prior to the initiation of any grading or construction activities to clearly identify the limits of the habitat and/or the 300-foot avoidance buffer during the breeding season. c) Prior to construction, a worker awareness program should be developed and implemented to inform all workers on the project about listed species, sensitive habitats, and the importance of complying with avoidance and minimization measures. d) All construction work shall occur during daylight hours. The construction				

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours determined by the City of Colton. e) During any construction within or immediately adjacent to the 300-foot avoidance buffer, the construction contractors shall install properly operating and maintained mufflers on all construction equipment, fixed or mobile, to reduce construction equipment noise to the maximum extent possible. The mufflers shall be installed consistent with manufacturers' standards. The construction contractor shall also place all stationary construction equipment so that emitted noise is directed away from the occupied least Bell's vireo habitat. f) The construction contractor shall stage equipment in areas that will create the greatest distance between construction-related noise sources and occupied habitat during all project construction occurring during the breeding season. g) If the monitoring biologist determines that noise from the construction activities may be affecting the normal expected breeding behavior of the birds, the construction supervisor shall be informed and work within no less than 300 feet of construction areas shall be ceased until appropriate measures are implemented. This may include monitoring by a qualified acoustician to verify noise levels are below 60 dBA within the occupied least Bell's vireo habitat. If the 60 dBA requirement is exceeded the acoustician shall make operational changes, utilize technology to reduce construction noise such as mufflers, and/or install a barrier to alleviate noise levels during the breeding season. Installation of noise barriers and any other				

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	corrective actions taken to mitigate noise during the construction period shall be communicated to the USFWS and CDFW. h) If after all corrective actions are implemented the monitoring biologists determines that the normal expected breeding behavior of the birds is being affected, work within no less than 300 feet shall be ceased and the USFWS and CDFW shall be contacted to discuss the appropriate course of action. i) On- and/or off-site restoration and/or enhancement of least Bell's vireo habitat at a ratio no less than 0.5:1 for temporary impacts. Off-site restoration and/or enhancement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program supporting least Bell's vireo.				
	MM 4.3-3 Prior to the approval of a Final Map for the Project, the Project Applicant shall provide evidence to the Public Works Director or City Engineer or their designee and the Development Services Director that the following actions shall be implemented to mitigate potential impacts to coastal California gnatcatcher critical habitat: 1) For areas of the Project site located within designated critical habitat which would be avoided, a legal protection mechanism (such as a conservation easement, deed restriction, etc.) shall be implemented to ensure these areas are conserved for the benefit of the coastal California gnatcatcher and would not be developed or disturbed in the future. 2) An environmental awareness display, which shall include up to two informative kiosks, shall be installed in areas of the Project site that are located adjacent to the conserved open space. Additionally, the Homeowners Association shall distribute information brochures to individual	Project Applicant	City of Colton Public Works Director or City Engineer and the Development Services Director.	Prior to approval of a Final Map.	

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	homeowners upon purchase of a home to educate them about the sensitive biological resources within the conserved areas.				
	MM 4.3-4 Prior to issuance of any grading permits, the Project Applicant shall provide evidence to the Public Works Director or City Engineer or their designee and the Development Services Director that the following actions shall be implemented to address potential impacts to burrowing owl: 1) A pre-construction take avoidance survey for burrowing owls shall be conducted within the Project site and off-site study areas no less than 14 days prior to initiating ground disturbance activities. The survey shall be conducted in accordance with the guidelines in the 2012 CDFW Staff Report on Burrowing Owl Mitigation to determine the presence of burrowing owls and avoid potential direct take of burrowing owls if present. 2) In the case that the qualified biologist determines that burrowing owls are present during the focused survey, occupied burrows and habitat shall be avoided in accordance with the guidelines in the Staff Report on Burrowing Owl Mitigation published by CDFW dated March 7, 2012. Avoidance measures shall include, but are not limited to: avoiding direct or indirect destruction of burrows, implementing a worker awareness program, biological monitoring,	Project Applicant; Qualified Biologist	City of Colton Public Works Director or City Engineer and the Development Services Director; CDFW.	Prior to the issuance of a grading permit.	

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	establishing avoidance buffers, and flagging burrows for avoidance with visible markers. The Project Applicant shall retain a qualified biologist to supervise the implementation of the avoidance measures. If occupied burrows or habitat cannot be avoided, appropriate compensation measures shall be determined by the qualified biologist in accordance with the guidelines detailed in the 2012 CDFW staff report and subject to approval by CDFW. This includes a Burrowing Owl Exclusion Plan for temporary or permanent exclusion of owls from occupied burrows, and/or a Mitigation Land Management Plan for permanent conservation of similar vegetation communities to provide for burrowing owl nesting, foraging, wintering and dispersal comparable to or of higher quality than the impact area.				
Threshold b): The Project would temporarily impact approximately 0.5-acre of black willow thicket (considered habitats that are high priority for inventory by CDFW) that occurs within the off-site improvement areas through the trimming of vegetation along the Riverside Avenue bridge where it crosses over the Santa Ana River. The Project would also permanently impact 0.3-acre of black willow thicket/ornamental that occurs within the Project site associated with Drainage A. Project-related impacts to black willow thicket are considered significant direct and cumulatively considerable. Approximately 1.2 acres of on-site, and approximately 0.5-acre of off-site non-wetland streambeds and riparian vegetation under CDFW jurisdiction would be permanently impacted by the Project. Project-related impacts to non-wetland streambeds and riparian vegetation under CDFW jurisdiction are considered	MM 4.3-5 Prior to issuance of grading permits, the Project Applicant shall provide evidence to the satisfaction of the Public Works Director or City Engineer or their designee and the Development Services Director that compensatory mitigation has been confirmed for impacts to black willow thicket/ornamental at a ratio no less than 1:1 by on- and/or off-site creation, restoration, enhancement, and/or preservation. Purchase of any mitigation credits through an agency-approved mitigation bank or in-lieu fee program shall occur prior to any activities that would impact sensitive plant communities. Any mitigation proposed on-site, or on land acquired for the purpose of in-perpetuity mitigation that is not part of an agency-approved mitigation bank or in-lieu fee program, shall include the creation, restoration, enhancement, and/or preservation of similar habitat pursuant to a Habitat Mitigation and Monitoring Plan (HMMP). Prior to the issuance of grading permits, the Project Applicant shall provide the City of Colton Building Official or	Project Applicant	City of Colton Public Works Director or City Engineer or their designee and the Development Services Director.	Prior to the issuance of a grading permit.	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
significant direct and cumulatively considerable.	their designee with a HMMP which provides details regarding the implementation of the mitigation, performance standards, maintenance, and future monitoring. The goal of the mitigation shall be to preserve, create, restore, and/or enhance similar habitat with equal or greater function and value than the impacted habitat. The HMMP shall describe the offset of impacts to these habitats, and the on-site and/or off-site mitigation shall be preserved in perpetuity pursuant to City-approved legal protection mechanism.				
	MM 4.3-6 Prior to the issuance of any grading permit that would disturb a jurisdictional area, the Project Applicant shall provide evidence to the Public Works Director or City Engineer or their designee that it has obtained regulatory permits from the USACE, RWQCB, and CDFW. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies: 1) On-site and/or off-site creation, restoration, enhancement, and/or preservation of USACE/RWQCB jurisdictional "waters of the U.S." within the watershed at a ratio no less than 1:1 or within an adjacent watershed at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate where applicable). Off-site mitigation may occur on land acquired for the purpose of in-perpetuity preservation, or through the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program. 2) On-site and/or off-site creation, restoration, enhancement, and/or preservation of CDFW jurisdictional streambed and associated riparian habitat within the watershed at a ratio no less than 2:1 or within an adjacent watershed at a ratio no less than 3:1 for permanent impacts, and for any temporary impacts to restore the impact	Project Applicant	City of Colton Public Works Director or City Engineer, USACE, RWQCB, and CDFW	Prior to the issuance of a grading permit	

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	area to pre-Project conditions (i.e., pre-Project contours and revegetate where applicable). Off-site mitigation may occur on land acquired for the purpose of in-perpetuity preservation, or through the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program. The Project Applicant shall demonstrate to the City of Colton that purchase of any mitigation credits through an agency-approved mitigation bank or in-lieu fee program occurred prior to any impacts to jurisdictional drainages. Any mitigation proposed on land acquired for the purpose of in-perpetuity mitigation that is not part of an agency-approved mitigation bank or in-lieu fee program shall include the creation, restoration, enhancement, and/or preservation of similar habitat pursuant to a Habitat Mitigation and Monitoring Plan (HMMP) prepared by a qualified biologist on behalf of the Project Applicant. The HMMP shall be prepared prior to any impacts to jurisdictional features, and shall provide details as to the implementation of the mitigation, performance standards, maintenance, and future monitoring.				
Threshold c): The Project site does not include any federally protected wetlands as defined by the Section 404 of the Clean Water Act (CWA).	No Mitigation is Required.	N/A	N/A	N/A	No Impact.
Threshold d): The Project has the potential to impact nesting birds protected by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code, which is a potentially significant direct and cumulatively considerable impact absent mitigation.	MM 4.3-7 Prior to the issuance of any grading permit that would remove potentially suitable nesting habitat for raptors or songbirds, the Project Applicant shall demonstrate to the satisfaction of the City of Colton Public Works Director or City Engineer or their designee and the Development Services Director that either of the following have been or would be implemented. 1) Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to	Project Applicant	City of Colton Public Works Director or City Engineer and the Development Services Director	Prior to the issuance of a grading permit.	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	January 14 for raptors) to avoid potential impacts to nesting birds. 2) Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) shall require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of vegetation removal activities. If any active nests are detected, a buffer of 300 feet (500 feet for raptors) around the nest would be delineated, flagged, and avoided until the nesting cycle is complete (e.g., it is determined by a qualified biologist that the nestlings have fledged, or the nest has failed). The buffer may be modified and/or other recommendations proposed as determined appropriate by the biological monitor to minimize impacts.				
Threshold e): The Project proposes removal of street trees, and thus has the potential to conflict with the City of Colton Street Tree Ordinance (City of Colton Municipal Code, Chapter 12.20 Trees and Shrubs), which is a potentially significant direct and cumulatively considerable impact absent mitigation.	MM 4.3-8 Prior to the issuance of any grading permit, the Project Applicant shall provide evidence to the Public Works Director or City Engineer or their designee and the Development Services Director that it has conducted a tree inventory for any street trees which may potentially be trimmed or removed by the proposed Project. The Project Applicant shall also provide evidence that it has obtained a permit for trimming or removal of any street trees in accordance with the Street Tree Ordinance of the City of Colton (City of Colton Municipal Code, Chapter 12.20 Trees and Shrubs).	Project Applicant	City of Colton Public Works Director or City Engineer and the Development Services Director	Prior to issuance of a grading permit.	Less-than-Significant Impact
Threshold f): The Project site is not located within a Significant Ecological Area (SEA) or an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan. Therefore, the Project has no potential to conflict with such	No Mitigation is Required.	N/A	N/A	N/A	No Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
plans, which would not result in a cumulatively considerable impact.					
4.4 Cultural Resources					
Summary of Impacts					
Threshold a): The Cultural Resources Assessment performed at the site by Brian F. Smith and Associates (BFSA) identified three historic resources on the Project site; however, none of the historic resources are significant under CEQA. No other significant historic resources are present on the Project site or within the off-site improvement areas; therefore, the Project would not cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations § 15064.5 and impacts would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b): A total of 25 cultural resource sites are known to be present at the Project site, two of which meet the definition of a significant resource under CEQA. Although not located within the development footprint (located in open space areas), there is the potential for these significant cultural resources to be subject to indirect adverse impacts during Project grading and construction activities, absent mitigation. In addition, there is a potential for significant resources to be unearthed during Project construction, which could be significantly impacted if not property identified and treated and without mitigation. As such, impacts to these resources would be potentially significant prior to mitigation.	MM 4.4-1 Prior to the issuance of grading permits associated with the on-site water tank, the City of Colton Public Works Director or City Engineer or their designee and Development Services Director shall ensure that a note is included on the grading plan requiring that the limits of archaeological resource Site SBR-29,034 and Site SBR-29,037 be fenced to prevent any inadvertent intrusion into either of the sites by grading equipment or personnel. The fencing shall be installed prior to any on-site grading associated with the on-site water tank and remain in place throughout the duration of grading activities associated with the on-site water tank. The Construction Contractor shall be responsible for ensuring that the construction employees comply with the note(s).	Project Applicant; Construction Contractor	City of Colton Public Works Director or City Engineer and Development Services Director	Prior to issuance of a grading permit.	Less-than-Significant Impact
	MM 4.4-2 Prior to the issuance of grading permits, the City of Colton Public Works Director or City	Project Applicant; Certified Archaeologist	City of Colton Public Works Director or City	Prior to issuance of a grading permit.	

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	Engineer or their designee and Development Services Director shall approve an Archeological Monitoring Program and Data Recovery Protocol. The Archeological Monitoring Program and Data Recovery Protocol shall include, at a minimum, the following elements: 1) Written verification that a certified archaeologist has been retained to monitor grading activities and implement the Archeological Monitoring Program and Data Recovery Protocol. This verification shall be presented in a letter from the project archaeologist to the City of Colton. 2) Written verification to the City of Colton that a Native American monitor has been retained to be present during grading activities. The Native American monitor shall work in concert with the archaeological monitor to observe ground disturbances. 3) The Project archaeologist and Native American monitor shall attend a pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program. 4) During the original cutting of previously undisturbed deposits, the archaeological monitor(s) and Native American monitor shall be on-site, as determined by the consulting archaeologist, to perform periodic inspections of the excavations. The frequency of inspections shall depend upon the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. 5) Isolates and clearly non-significant deposits shall be documented in the field so that the monitored grading can continue. 6) In the event that previously unidentified cultural resources are discovered (other than isolates and clearly non-significant deposits), the consulting archaeologist shall have the authority to divert or temporarily halt ground disturbance operation in the area of the discovery to allow for the evaluation of potentially significant cultural		Engineer and Development Services Director, Certified Archaeologist, and Native American Monitor		

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	resources. The archaeologist shall contact the City of Colton Building Official or their designee at the time of discovery. The archaeologist, in consultation with the City of Colton Building Official or their designee, shall determine the significance of the discovered resources. The City of Colton Building Official or their designee must concur with the evaluation before construction activities will be allowed to resume in the affected area. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the consulting archaeologist and approved by the City of Colton Building Official or their designee before being carried out using professional archaeological methods. If any human bones are discovered, the San Bernardino County coroner and City of Colton Building Official or their designee shall be contacted. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant (MLD), as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The archaeological monitor(s) shall determine the amount of material to be recovered for an adequate artifact sample for analysis. 7) Any cultural resource material collected during the implementation of the Archeological Monitoring Program and Data Recovery Protocol shall be processed and curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility, to be accompanied by payment of the fees necessary for permanent curation. 8) A report documenting the field and analysis results and interpreting the artifact and research				

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	data within the research context shall be completed and submitted to the satisfaction of the City of Colton Building Official or their designee prior to the issuance of any building permits. The report will include DPR Primary and Archaeological Site Forms.				
	MM 4.4-3 Prior to the approval of a Final Map, the City of Colton Public Works Director or City Engineer or their designee and Development Services Director shall ensure that cultural resource easements are created in order to protect SBR-29,034 and Site SBR-29,037 and ensure that any future trails or other improvements avoid these sites. The easements shall be dedicated to an appropriate tribal entity that will be responsible for overseeing the protection of the cultural resource in perpetuity to the satisfaction of the City of Colton Building Official.	Project Applicant	City of Colton Public Works Director or City Engineer, City of Colton Building Official, and Development Services Director	Prior to approval of the Final Map	
Threshold c): The Project would not impact any known or unique paleontological resource, site, or unique geologic feature because no such resources are known to be present in the Project's ground-disturbing construction footprint. However, the Quaternary older alluvial valley and alluvial fan sediments at the property have a high potential to contain significant paleontological resources. Therefore, prior to mitigation, there is the potential for the Project to adversely impact significant nonrenewable paleontological resources during ground-disturbing construction activities if such resources are unearthed and not properly identified and treated.	MM 4.4-4 Prior to the issuance of grading permits, the City of Colton Public Works Director or City Engineer or their designee shall ensure that a note is included on the grading plan indicating that a paleontological monitor shall be present during all mass grading and excavation activities where Quaternary older alluvial valley and alluvial fan sediments (Qoa_3, Qof_3, and $Qvof_3$) are mapped at the Project site (as shown in Attachment 4 of the Paleontological Resource and Mitigation Monitoring Assessment [*EIR Technical Appendix F2*]). Prior to the issuance of grading permits, the Project applicant shall provide the City of Colton with a Paleontological Mitigation Monitoring and Reporting Program prepared by a professional paleontologist and which is consistent with the provisions of CEQA, the applicable regulations of the City of Colton and the County of San Bernardino, and applicable guidelines of the Society of Vertebrate Paleontology which indicates the	Project Applicant	City of Colton Public Works Director or City Engineer and Development Services Director	Prior to issuance of a grading permit.	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	procedures that will be undertaken to ensure the property identification and treatment of significant paleontological resources should they be unearthed. The City of Colton shall review and approve the Paleontological MMRP prior to the issuance of grading permits.				
Threshold d): In the unlikely event that human remains are discovered during the Project's ground-disturbing activities, compliance with the applicable provisions of California Health and Safety Code § 7050.5 and California Resources Code § 5097 et. seq. would be required. Mandatory compliance with State law would ensure that human remains, if encountered, including those which may be of Native American decent, are appropriately treated and would preclude the potential for significant impacts.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold e): The City of Colton sent notification of the proposed Project on June 1, 2016 to Native American tribes with possible traditional or cultural affiliation to the area. Responses were received from the San Manuel Band of Mission Indians and the Agua Caliente Band of Cahuilla Indians. Consultation with the Agua Caliente Band of Cahuilla Indians concluded on August 25, 2016, and consultation with the San Manuel Band of Mission Indians concluded on July 25, 2017. Neither the San Manuel Band of Mission Indians nor the Agua Caliente Band of Cahuilla Indians identified any significant tribal cultural resources at the Project site pursuant to CEQA statute § 21074(a). The City of Colton has completed mandatory compliance with Public Resources Code §21074 in regards to Native American consultation; no significant tribal cultural	No Mitigation is Required.	N/A	N/A	N/A	No Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
resources have been identified. Accordingly, the Project would have no impact on tribal cultural resources.					
4.5 Geology and Soils					
Summary of Impacts					
Threshold a): The Project would not expose people or structures to substantial adverse effects from seismic hazards. As with all properties in the southern California region, the Project site is subject to strong seismic ground shaking associated with earthquakes; however, mandatory compliance with local and state ordinances and building codes including but not limited to CBSC (Chapter 18) and Chapter 15.06 Building Code of the City of Colton Municipal Code, would ensure that the proposed structures are developed as required to attenuate the risk of loss, injury, or death to less-than-significant levels. According to the geotechnical input report prepared for the Project, the western portion of the Project site that abuts the Santa Ana River Channel may be underlain by shallow groundwater conditions, and thus may be susceptible to liquefaction. Accordingly, the potential for liquefaction to occur on-site during Project operations is considered potentially significant prior to mitigation. Additionally, due to the Project site's lithology and relatively high topographic relief across the site, the potential for landslides at the Project site during construction and operation of the Project is considered potentially significant prior to mitigation.	MM 4.5-1 Prior to issuance of any grading permit, the City of Colton Public Works Director or City Engineer or their designee shall require that a Project-specific geotechnical investigation is prepared which shall, at a minimum, address: slope stability, landslides, collapsible soils, and expansive soils. If warranted, the geotechnical investigation report shall identify recommended remedial measures and Project design features that would address the potential impacts of the identified geologic hazards on the proposed development. Remedial measures to address slope stability and landslides may include removal, repositioning, embedment, anchoring of the boulders; installation of catchment fences; and construction in accordance with the recommendations of the project geotechnical engineer, CALGreen and any City and/or County guidelines. Potential remedial measures that may be required to address collapsible soils include overexcavation of all uncontrolled artificial fill and upper portion of the surficial soils during site grading. Typical remedial measures undertaken to address expansive soils include performing testing after grading of the proposed pads is completed and prior to construction of the proposed foundations to evaluate the expansive potential of the underlying soil, and providing the results to the structural engineer to design a foundation system that is able to withstand the expansive potential of the underlying soils.	Project Applicant; Qualified Geotechnical Engineer	City of Colton Public Works Director or City Engineer	Prior to issuance of grading permit	Less-than-Significant Impact
	MM 4.5-2 Prior to the issuance of the first grading or building permit, the City of Colton Director of Public	Project Applicant; Qualified Geotechnical Engineer	City of Colton Director of Public Works or City Engineer	Prior to issuance of grading and building permits.	

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	Works or City Engineer shall ensure that a report is prepared by a licensed geotechnical engineer that shall examine the western portion of the Project site near the Santa Ana River where groundwater exists locally within a depth of approximately 30 feet. These areas shall be examined by performing geotechnical explorations to a depth of at least 35 feet below the existing grade or proposed grade, whichever is at the lower elevation. If the explorations reveal that differential settlement or lateral movement would occur related to liquefaction, dry seismic settlement, or lateral spreading, remedial measures shall be undertaken as recommended by the licensed geotechnical engineer and approved by the City of Colton, as part of the grading operation and construction phases. Measures may include but not be limited to the removal and recompaction of near surface soils, the use of deep foundations and/or stone columns, and deep dynamic compaction. The remedial measures undertaken shall ensure that potential differential settlements and lateral movements calculated as a result of the geotechnical exploration and analysis can be safely accommodated within habitable structures, paved roads, and wet or dry utilities, thereby safeguarding habitable structures, roads, and utility lines against potential seismic hazards. The findings of the geological explorations and recommendations shall be documented in a report prepared by the licensed geotechnical engineer. The report shall be approved by the City of Colton and the recommendations contained in the report shall be implemented and required as grading permit and building permit conditions of approval.				
Threshold b): The geotechnical input report prepared for the Project concluded that on-site native soils and fill slopes constructed with native soils, have a moderate	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
susceptibility to erosion. However, mandatory compliance with the Project's NPDES permit, regulatory requirements of the SCAQMD (i.e., SCAQMD Rule 403-Fugitive Dust) and City of Colton, and the Project-specific SWPPP and WQMP would ensure that water and wind erosion is minimized and not substantial; impacts would be less than significant and no mitigation is required.					
Threshold c): The Project's geotechnical input report did not identify conditions at the site that would increase the potential for ground subsidence, and the potential for subsidence is considered very low; therefore, a less-than-significant impact would occur. The western portion of the Project site that abuts the Santa Ana River Channel may be susceptible to lateral spreading and liquefaction due to shallow groundwater conditions in this area of the Project site. Accordingly, significant impacts as a result of liquefaction and lateral spreading would occur absent mitigation. Due to the lithology and relatively high topographic relief at the Project site, significant impacts associated with landslides would occur absent mitigation. The geotechnical input report identified the potential for significant collapse is considered "slight" to "moderate"; therefore, a significant impact would occur with respect to collapsible soil conditions at the Project site prior to mitigation.	MM 4.5-1 and MM 4.5-2 (see above)	Project Applicant; Qualified Geotechnical Engineer	City of Colton Director of Public Works or City Engineer	Prior to issuance of grading permit	Less-than-Significant Impact
Threshold d): The Project's geotechnical input report concluded on-site soils exhibit an Expansion Index (EI) in the "very low" to "medium" range. The City of Colton General Plan Update EIR also indicates small areas of expansive soils are anticipated	MM 4.5-1 (see above)	Project Applicant; Qualified Geotechnical Engineer	City of Colton Director of Public Works or City Engineer	Prior to issuance of grading permit	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
to exist at the Project site (City of Colton, 2013c, Exhibit 4.6-4). Accordingly, a potentially significant impact would occur with regard to expansive soils absent mitigation.					
Threshold e): The proposed Project does not include septic tanks or alternative waste water disposal systems; accordingly, no impact would occur.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
4.6 Greenhouse Gas Emissions					
Summary of Impacts					
Threshold a): The City's CAP identified screening tables where Projects that achieve at least 75 points are determined to be consistent with the reduction quantities specified in the City's CAP. If the Project does not achieve the 75 points outlined in the CAP's screening tables, the Project would result in significant impacts with respect to GHG emissions. The Project's annual GHG emissions are calculated to be approximately 16,481.15 total CO2e, or 25.96-percent less than 2008 BAU conditions, which meet the minimum GHG emissions reduction (25 percent) required by the City's CAP. As such, the Project would not generate substantial GHG emissions – either directly or indirectly – that would have a significant impact on the environment.	MM 4.6-1 Prior to issuance of building permits for each planning area, the Project Applicant shall provide documentation to the City of Colton Planning Division demonstrating that each planning area will implement Project design features that will achieve at least 75 points from the City of Colton's Greenhouse Gas Emissions Screening Tables, which shall include at least the following or equivalent to the following Screening Table measures: *Insulation* - Install "Modestly Enhanced," "Enhanced," or "Greatly Enhanced" insulation in walls, roof/attic of proposed structures. *Windows* - Install "Modestly Enhanced," "Enhanced," or "Greatly Enhanced" window insulation of proposed structures. *Cool Roof* - Install "Modest," "Enhanced," or "Greatly Enhanced" cool roofs at proposed structures.	Project Applicant	City of Colton Planning Division	Prior to issuance of building permits	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	Air Infiltration - Install air barrier in exterior walls and caulking of proposed structures. - Install Home Energy Rating Systems (HERS)-verified envelope leakage or equivalent in proposed structures. *Thermal Storage* - Install "Modest" or "Enhanced" thermal mass in proposed structures. *Heating / Cooling Distribution System* - Install "Modest (R-6)" or "Enhanced (R-8)" duct insulation in proposed structures. - Install distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent). *Space Heating/ Cooling Equipment* - Install "Improved Efficiency," "High Efficiency," or "Very High Efficiency" HVAC systems in proposed structures. *Water Heaters* - Install "Improved Efficiency," "High Efficiency," or "Very High Efficiency" water heaters in proposed structures. - Install Solar Pre-Heat System in proposed structures. *Daylighting* - Ensure all living spaces within the proposed residential structures have daylight (through use of windows, solar tubes, skylights, etc.). *Artificial Lighting* - Equip proposed residential structures with Efficient lights (25% of in-unit fixtures considered "high efficacy"), High Efficiency lights (50% of in-unit				

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	fixtures are high efficacy), or Very High Efficiency lights (100% of in-unit fixtures are high efficacy). *Appliances* - Install new Energy Star appliances (i.e., refrigerator dishwasher, or washing machine) at proposed residential structures. *Building Placement* - Design proposed buildings with north/south alignment to optimize natural heating, cooling, and lighting. *Shading* - Design proposed buildings so that at least 90% of south-facing glazing would be shaded by vegetation or overhangs at noon on June 21st. *Energy Star Homes* - Earn EPA Energy Star for Homes (version 3 or above) certification. *Independent Energy Efficiency Calculations* - Earn points through equipping proposed structures with other energy efficient design features that provide for greater efficiency beyond Title 24 Energy Efficiency Standards. *Photovoltaic Power* - Ensure that proposed residences are solar-ready homes. - Utilize photovoltaic-generated energy to meet 10 percent or more of the project's power needs. *Wind Turbines* - Implement individual wind turbines at homes or collective neighborhood arrangements of wind				

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	turbines that would provide 10 percent or more of the project's power needs. *Off-site renewable energy project* - Supply an off-site renewable energy project that would provide the City with renewable energy. *Other Renewable Energy Generation* - Implement other innovative designs that would allow the project to source electricity from the generation of renewable energy. *Water Efficient Landscaping* - Limit conventional turf to less than 25% of required landscape area of the Project. - Prohibit conventional turf (warm season turf to less than 50% of required landscape area and/or low water using plants are allowed). - Plant only California Native Plants that require no irrigation or some supplemental irrigation. *Water Efficient Irrigation Systems* - Install low precipitation spray heads that dispense less than 0.75 inches per hour or utilize drip irrigation. - Install weather-based irrigation control systems or moisture sensors (demonstrate 20% reduced water use). *Recycled Water* - Install recycled water connections (purple pipe) to irrigation system on-site. *Water Reuse* - Install gray water reuse system to collect gray water from clothes washers, showers and faucets for irrigation use. *Storm Water Reuse Systems*				

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	- Utilize innovative on-site storm water collection systems that filter and allow for reuse of storm water for other functions (i.e., supplemental irrigation water). *Potable Water* - Install water efficient showerheads (2.0 gallons per minute [gpm]). - Install water efficient toilets (1.5 gpm). - Install water efficient faucets (1.28 gpm). - Install water efficient dishwasher (6 gallons per cycle or less). - Install water efficient washing machine (water factor less than 5.5). - Earn EPA WaterSense Certification. *Mixed-Use* - Provide a development pattern that includes a mix of complementary land uses that would reduce the need for vehicle trips. *Locate Residential Development near Local Retail Uses* - Locate residential developments within walking and biking distance of local retail to facilitate reduction of vehicle trips and/or vehicle miles traveled (VMT). *Other Trip Reduction Measures* - Implement other measures that reduce vehicle trips or VMT (must be supported with data from the project's TIA or other traffic data). *Bicycle Infrastructure* - Provide bicycle paths within Project boundaries. - Provide bicycle path linkages between residential and other land uses. - Provide bicycle path linkages between residential and transit.				

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	Electric Vehicle Charging Infrastructure - Accommodate for, or equip residential garages with, electric vehicle charging stations.				
Threshold b): The Project would meet the City's goal of reducing GHG emissions to a level that is 15 percent below BAU as established by their CAP via a 25.96 percent reduction in the Project's GHG emissions compared to 2008 BAU emissions. The City of Colton's CAP was designed to ensure compliance with AB 32, which is the primary plan for reducing GHG emissions in the State of California. Therefore, the Project would be consistent with the GHG reduction mandates of the AB 32. The Project would also be consistent with all other applicable plans, policies, and regulations related to the reduction of GHGs.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
4.7 Hazards and Hazardous Materials					
Summary of Impacts					
Thresholds a) and b): Project construction activities may entail the transport and/or disposal of hazardous materials associated with potential soil contamination at the site. Additionally, the potential presence of hazard materials in the soil may create the potential for the release of such hazardous materials into the environment during Project construction activities. Through mandatory compliance with applicable regulations addressing the proper use, storage, and disposal of hazardous substances, no other significant hazards to the public or the environment would occur during the Project's construction or operational activities.	MM 4.7-1 Prior to the issuance of a demolition permit or a grading permit for the Project involving the portion of the Project site subject to the current or former operation of the Roquet Paving Company facility, the Project Applicant shall provide a Phase II soil investigation report to the Building Official or their designee and Public Works Director or City Engineer or their designee for review and approval. The Phase II soil investigation shall be conducted by a qualified professional in accordance with local, State, and federal regulations to confirm whether hazardous materials are present within the portion of the Project site containing the Roquet Paving Company facility. If the Phase II soil investigation report demonstrates that hazardous materials are present in the soils above levels considered safe by local, State, and federal	Project Applicant	City of Colton Building Official	Prior to issuance of grading or demolition permits.	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	regulations for residential occupancy of the property, a treatment/remediation plan shall be developed by the hazardous materials professional to bring contaminant levels within the local, State, and federal requirements for the proposed residential, commercial, and public/institution land uses in the Specific Plan. The treatment/remediation plan may include soil removal, encapsulation, and/or onsite treatment such as in situ treatments and natural degradation; groundwater management and treatment; and institutional controls. Any remediation measures identified in the treatment/remediation plan shall be imposed as condition(s) of approval for the demolition or grading permit. The treatment/remediation plan shall be implemented under the oversight of the City, and at the City's direction include oversight by a state environmental agency. A final report documenting implementation of any required treatment and achievement of the remediation levels required for the safe reuse of the site, shall be submitted to the City of Colton for review and approval prior to issuance of building permits for occupied structures on areas of the site identified in the treatment/remediation plan as requiring remediation.				
Threshold c): The Project site is not located within one-quarter mile of any existing or planned school, and is not anticipated to cause the use of hazardous materials within one-quarter mile of the proposed Project school site. Accordingly, the Project would not expose any nearby school to potential impacts related to hazardous materials.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
Threshold d): The Project site is not listed on any list of hazardous materials compiled pursuant to Government Code §65962.5. No impact would occur.	No Mitigation is Required.	N/A	N/A	N/A	No Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Threshold e): The Project site is not located within two miles of an airport, nor is it located within an airport land use compatibility plan. No impact would occur.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
Threshold f): There are no private airstrips located within the vicinity of the Project site; therefore, no impact would occur.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
Threshold g): Project-related development would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. The Project site does not serve as an emergency evacuation route. No impact would occur.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
Threshold h): The Project site is located within a "Very High Fire Hazard Severity Zone" of a Local Responsibility Area. Mandatory compliance with the fuel modification requirements and building design requirements of the City of Colton Fire Department, as well as compliance with Section 701A of the California Building Code, would reduce impacts to less than significant with respect to wildland fire hazards.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
4.8 Hydrology and Water Quality					
Summary of Impacts					
Threshold a): The Project would not violate any water quality standards or waste discharge requirements on a direct or cumulatively considerable basis. The Project is required to prepare a Storm Water Pollutant Prevention Plan (SWPPP) to address construction-related water quality	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
issues and proposes design features including water quality basins and water quality/detention basins to address long-term water quality, and the impact would be less than significant.					
Threshold b): The Project has a reliable source of domestic water and does not propose any new potable water wells that would directly extract groundwater, nor would it increase the current rate of extraction at the on-site domestic water well. Groundwater recharge would occur in onsite detention basins and landscaped areas, and water conveyed off-site would have the ability to percolate into the groundwater table. The Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level, and the impact would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold c): The Project would not result in substantial erosion or siltation on- or off-site, so the impact would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold d): The Project proposes to install a storm water drainage system that would convey upstream and onsite water in concurrence with the existing drainage pattern. 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. The impact would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold e): The Project proposes to install a storm water drainage system that includes a series of water quality basins and water quality/detention basins. The Project's	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
storm water runoff would not exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. The impact would be less than significant.					
Threshold f): There are no other conditions associated with the proposed Project that would otherwise result in the substantial degradation of water quality. There would be no impact.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
Threshold g): Under existing conditions, small portions of the southerly and easterly areas of the Project site are located within a 100-year flood hazard zone. Accordingly, the Project would place housing within an existing 100-year flood hazard area prior to mitigation.	MM 4.8-1 Prior to the City of Colton's issuance of building permits for structures located within the 100-year floodplain (as shown on applicable FEMA Flood Insurance Rate Maps), the Project Applicant shall provide evidence to the City of Colton that a Conditional Letter of Map Revision (CLOMR) has been issued by FEMA for the Project. The grading plan shall be found to substantially conform to the CLOMR prior to the issuance of a building permit in this area.	Project Applicant	City of Colton Building Division; FEMA	Prior to issuance of building permits for structures located within the 100-year floodplain.	Less-than-Significant Impact
	MM 4.8-2 Prior to the City of Colton's issuance of building permits for structures located within the 100-year floodplain (as shown on applicable FEMA Flood Insurance Rate Maps), the Project Applicant shall provide evidence to the City of Colton that a Final Letter of Map Revision (LOMR) has been issued by FEMA verifying that flood control measures have been completed and the residential development areas are permanently removed from the FEMA 100-year floodplain.	Project Applicant	City of Colton Building Division; FEMA	Prior to issuance of building permits for structures located within the 100-year floodplain.	
Threshold h): Under existing conditions, small portions of the southerly and easterly areas of the Project site are located within a 100-year flood hazard zone. Accordingly, the Project would place structures within an	MM 4.8-1 and MM 4.8-2 (see above)	Project Applicant	City of Colton Building Division; FEMA	Prior to issuance of building permits for structures located within the 100-year floodplain.	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
existing 100-year flood hazard area which could impede or redirect flood flows absent mitigation.	MM 4.8-1 and MM 4.8-2 (see above)	Project Applicant	City of Colton Building Division; FEMA	Prior to issuance of building permits for structures located within the 100-year floodplain.	
Threshold i): The Project site is not located within an inundation area associated with a dam or levee. As such, the Project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or a dam. However, as discussed under Thresholds g) and h), portions of the easterly and southerly areas of the Project site are located within an existing 100-year flood hazard area. Therefore, the Project's potential to expose people or structures to a significant risk involving flooding is considered potentially significant prior to mitigation.	MM 4.8-1 and MM 4.8-2 (see above)	Project Applicant	City of Colton Building Division; FEMA	Prior to issuance of building permits for structures located within the 100-year floodplain.	Less-than-Significant Impact
	MM 4.8-1 and MM 4.8-2 (see above)	Project Applicant	City of Colton Building Division; FEMA	Prior to issuance of building permits for structures located within the 100-year floodplain.	
Threshold j): The Project site is located too far away from enclosed water bodies and the ocean to be subjected to hazards associated with seiches or tsunamis. Due to the steep topographic relief at the Project site and the potential for landslides previously discussed in EIR Subsection 4.5, *Geology and Soils*, the potential exists for mudflow events to occur at the site during construction activities absent implementation of BMPs. However, implementation of the BMPs from the Project-specific WQMP and SWPPP during construction activities would reduce the potential for mudflow events to levels below significant. In the post development condition, the potential for the occurrence of mudflow events is low due to the presence of engineered slopes and flood control features. Accordingly, impacts associated with mudflow are less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.9 Land Use and Planning					
Summary of Impacts					
Threshold a): The proposed Project represents a logical expansion of the existing residential area located along the western side of La Cadena Drive, and would not physically divide an established community.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
Threshold b): The Project would not be inconsistent with any General Plan policy, strategy or objective. The Project would be inconsistent with the current zoning classifications applicable to the Project site, and proposes a Change of Zone for the entire site to reclassify the Project site as "Specific Plan," in accordance with all of the development standards set forth in the proposed Roquet Ranch Specific Plan	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold c): The Project site is not located within an adopted HCP, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan, and therefore would not conflict with any such plans.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
4.10 Noise					
Summary of Impacts					
Threshold a), c), and d): (On-site Exterior Noise): The Project would expose residential homes to unmitigated exterior noise levels that would exceed the 60 dBA CNEL exterior noise level standard for residential uses in the following areas of the Project site: Planning Area 9 (along I-215 freeway and La	MM 4.10-1 Prior to issuance of any grading and building permits, the City of Colton shall review grading and building plans to ensure the following notes are included on the plans. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Colton upon request.	Project Applicant	City of Colton Building Official	Prior to issuance of any grading or building permits	Less-Than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Cadena Drive); Planning Areas 3 and 8 (along Pellissier Road); Planning Areas 2 and 6 (along Pellissier Road); Planning Area 7 (along Roquet Ranch Road); and Planning Area 4 (along Roquet Ranch Road). (On-Site Interior Noise) Without mitigation by the installation of upgraded windows (i.e., windows with a minimum STC rating of 32), proposed residences within Planning Area 9 that abut La Cadena Drive would experience interior noise levels that exceed the City of Colton 45 dBA CNEL interior noise level standard.	a) All construction activities and haul truck deliveries shall be prohibited from occurring between 7:00 p.m. and 7:00 a.m. and on Sundays and Federal holidays. b) All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers, consistent with manufacturer's standards. The construction contractors shall place all stationary equipment so that emitted noise is directed away from the noise sensitive receivers nearest the Project site. c) Construction equipment staging areas shall be located such that a minimum distance of 100 feet is maintained between construction staging areas and noise-sensitive receptors. d) The construction contractor shall design a haul route exhibit that includes delivery routes that minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 7:00 a.m. to 7:00 p.m. Monday to Saturday with no activity on Sundays and Federal holidays).				
	MM 4.10-2 Prior to issuance of building permits, the City of Colton shall verify that final building plans require the construction of 6-foot high noise barriers at lots within Planning Areas 2 to 4, and 6 to 9 that abut Pellissier Road and Roquet Ranch Road. Additionally, the final building plans shall also require the construction of an 8-foot high noise barrier for outdoor living areas at lots within Planning Area 9 which abut La Cadena Drive and face the I-215 Freeway and BNSF rail lines.	Project Applicant	City of Colton Building Official	Prior to issuance of any building permits	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	The recommended noise control barriers shall be constructed so that the top of each wall and/or berm combination extends to the recommended height above the pad elevation of the lot it is shielding. In instances where the road is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the road. The barrier shall provide a weight of at least 4 pounds per square foot of face area with no decorative cutouts or line-of-sight openings between shielded areas and the roadways. The barrier shall consist of a solid face from top to bottom. Unnecessary openings or decorative cutouts shall not be made. All gaps (except for weep holes) should be filled with grout or caulking. The noise barrier shall be constructed using any combination of the following construction materials: • Masonry block; • Stucco veneer over wood framing (or foam core), or 1-inch-thick tongue and groove wood of sufficient weight per square foot; • Glass (1/4-inch-thick), or other transparent material with sufficient weight per square foot; • Earthen berm; • Any combination of these construction materials. During the final building inspection, the City of Colton Building Inspector shall ensure that the sound barriers were constructed to adhere to the requirements stated herein, as well as the design specifications shown on the final approved building plans.				

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	MM 4.10-3 Prior to issuance of building permits in Planning Area 9, the City of Colton shall verify that final building plans require windows with a minimum STC rating of 32 be installed at all buildings situated on lots within Planning Area 9 that abut La Cadena Drive. During the final building inspection, the City of Colton Building Inspector shall ensure that the windows were installed in adherence with the requirements stated herein, as well as the design specifications shown on the final approved building plans.	Project Applicant	City of Colton Building Official	Prior to issuance of any building permits	Less-than-Significant Impact
Threshold b): Construction and operation of the Project would produce vibration levels below the County of San Bernardino vibration standards used as a vibration threshold in this EIR. Vibration impacts would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold e): The Project would not expose people residing or working in the area to excessive noise levels associated with public airports.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
Threshold f): The Project would not expose people residing or working in the area to excessive noise levels associated with private airstrips.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
4.11 Population and Housing					
Summary of Impacts					
Threshold a): Although the Project would accommodate a population of approximately 3,633 residents, such population growth is less than the population increase (5,958 persons) that could result from development of the site in accordance with the existing	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
General Plan land use designations applicable to the site. The Project's population increase of 3,633 persons is also consistent with the growth that is anticipated by the City's General Plan. There would be no impacts to the environmental peculiar to population growth that are not addressed in other Subsections of this EIR.					
Threshold b): The Project site is predominantly vacant and undeveloped and contains no housing under existing conditions. Therefore, the Project would not result in the displacement of a substantial amount of existing housing nor result in the need for construction of replacement housing elsewhere.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
Threshold c): The Project site is predominantly vacant and undeveloped and contains no housing under existing conditions. Therefore, the Project would not displace any persons nor result in the need for construction of replacement housing elsewhere.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
4.12 Public Services					
Summary of Impacts					
Threshold a): Implementation of the Project would result in the development of an on-site fire station site. Development of this proposed on-site fire station would not result in additional physical impacts to the environment that are not already addressed throughout this EIR. Where significant impacts are identified, mitigation measures have been imposed to reduce potential effects to the maximum feasible extent. With mandatory payment of Development Impact Fees in compliance with City requirements,	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
the Project would not result in a cumulatively considerable impact to CFD facilities.					
Threshold b): The Colton Police Department has adequate physical capacity to service the proposed Project. No new or expanded police protection facilities are needed; thus, a less-than-significant impact would occur. Additionally, with mandatory payment of Development Impact Fees in compliance with City requirements, the Project would not result in a cumulatively considerable impact to police protection facilities.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold c): The Project proposes a 10.3-acre site to accommodate the development of an on-site elementary school facility. Construction and operation of this proposed on-site facility would not result in additional physical impacts to the environment that are not already addressed throughout this EIR. Where significant impacts are identified, mitigation measures have been imposed to reduce potential effects to the maximum feasible extent. Additionally, the Project Applicant would be required to contribute fees to the CJUSD in accordance with SB 50 and Colton Municipal Code Chapter 16.92 to offset the costs associated with increasing school capacity needs. Thus, with mandatory regulatory compliance, a less-than-significant physical impact would occur as a result of Project-related demand for school services.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold d): Implementation of the Project would meet the City's parkland dedication standard on-site. The development of on-site parks would not result in additional physical impacts to the environment that are not	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
already addressed throughout this EIR. Where significant impacts are identified, mitigation measures have been imposed to reduce potential effects to the maximum feasible extent. Accordingly, a less-than-significant physical impact would occur as a result of Project-related demand for park services.					
Threshold e): Implementation of the Project would increase demand for library resources which are expected to be met by, the City of Colton Public Library Main Branch. It is not reasonably foreseeable that new or expanded library space would be required as a result of the proposed Project. Accordingly, a less-than-significant physical impact would occur as a result of Project-related demand for library services.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
4.13 Recreation					
Summary of Impacts					
Threshold a): Project-related development would be required to comply with Colton Municipal Code, *Chapter 16.58*, which requires that residential development proposals provide on-site park land and recreational amenities and/or pay fees to the City of Colton. The Project would more than exceed the City's parkland dedication requirement through the provision of sufficient parkland on-site.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b): The Project would not result in physical impacts to the environment associated with the construction of on-site parks that have not already been addressed throughout this EIR. Where significant impacts are identified, mitigation measures have been imposed to reduce potential effects to the maximum feasible extent.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.14 Transportation and Traffic					
Summary of Impacts					
Threshold a): Project-generated traffic would result in level of service deficiencies and direct impacts at four intersections (Intersection #21- South La Cadena Drive / West Maryknoll Drive; Intersection #3 – Main Street / Strong Street; Intersection #27 – South Iowa Avenue / South La Cadena Drive / I-215 southbound off-ramp; and Intersection #29 – South Iowa Avenue / I-215 northbound ramps) for Existing Plus Project conditions. Project traffic would also have a cumulatively considerable impact on the forecasted level of service at seven intersections (Intersection #1 – South Riverside Avenue / Main Street / Placentia Lane; Intersection #3 – Main Street / Strong Street; Intersection #14 - Stephens Avenue / West Center Street; Intersection #5 – Orange Street / West Center Street; Intersection #36 – Michigan Avenue / West Main Street; Intersection #20 – South La Cadena Drive / South Iowa Avenue; and Intersection #21 – South La Cadena Drive / West Maryknoll	MM 4.14-2 Prior to issuance of the first certificate of occupancy for the Project, City of Colton Director of Public Works or their assignee shall verify that the Project has implemented the following intersection improvements in accordance with the recommendations identified in the "Roquet Ranch Specific Plan Traffic Impact Analysis," prepared by Urban Crossroads (dated November 30, 2016): • Intersection #21 – South La Cadena Drive / West Maryknoll Drive: (1) Add a traffic signal, (2) Add a northbound left turn lane, and (3) Add an eastbound left turn lane and an eastbound shared right turn lane. • Intersection #27 – South Iowa Avenue / South La Cadena Drive / I-215 southbound off-ramp: (1) Install a traffic signal, (2) Add 2nd eastbound left turn lane, and (3) Add 2nd northbound through lane. • Intersection #29 – South Iowa Avenue / I-215 northbound ramps: (1) Add southbound right turn lane, and (2) Add 2nd eastbound left turn lane.	Project Applicant	City of Colton Director of Public Works	Prior to issuance of the first certificate of occupancy	Significant and Unavoidable Direct and Cumulatively Considerable Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Drive) in the Opening Year Cumulative (2020) condition. The Project would result in cumulatively considerable impacts to seven intersections in the Horizon Year Cumulative (2040) condition, including: Intersection #3 – Main Street / Strong Street, Intersection #5 – Orange Street / West Center Street; Intersection #18 – South La Cadena Drive / West Litton Avenue; Intersection #20 – South La Cadena Drive / South Iowa Avenue; Intersection #21 – South La Cadena Drive / West Maryknoll Drive; Intersection# 22 – La Cadena Drive South / Pellissier Road / I-215 southbound on-ramp; and Intersection #38 – Mt. Vernon Avenue / Main Street. Project traffic would also result in a cumulatively considerable impact on one roadway segment (La Cadena Drive between West Litton Avenue and Barton Road) under the Horizon Year Cumulative (2040) condition.	MM 4.14-3 Prior to issuance of the first certificate of occupancy for the Project, the Project Applicant shall make a fair share fee payment to the City of Colton for the roadway improvements listed in Table 1-5 of the "Roquet Ranch Specific Plan Traffic Impact Analysis," prepared by Urban Crossroads (dated November 30, 2016), that are located within the geographical limits of the City of Colton and not included within the City of Colton's Development Impact Fee (DIF) program. The fair share fee attributable to the Project shall be calculated according to the percentages specified in Table 1-5 of the "Roquet Ranch Specific Plan Traffic Impact Analysis," prepared by Urban Crossroads (dated November 30, 2016). Specifically, the fair share fee payment required by this Mitigation Measure shall be used by the City to make the following improvements: • Intersection #1 – South Riverside Avenue / Main Street / Placentia Lane: (1) Install a traffic signal, and (2) Add 2nd westbound left turn lane. • Intersection #18 – South La Cadena Drive / West Litton Avenue: Install a traffic signal. • Intersection #20 – South La Cadena Drive / South Iowa Avenue: (1) Add northbound through lane, and (2) Add southbound through lane. • Intersection #22 – La Cadena Drive South / Pellissier Road / I-215 southbound on-ramp: Install a traffic signal.	Project Applicant	City of Colton Director of Public Works	Prior to issuance of the first certificate of occupancy	Significant and Unavoidable Direct and Cumulatively Considerable Impact
Threshold b): The contribution of Project traffic would have a significant direct impact to two freeway segments (I-215 northbound to the north of Barton Road and I-215 northbound between Barton Road and La Cadena Drive) under the E+P scenario. Under the Opening Year (2020) scenario, the Project would result in a cumulatively considerable impact to one off-ramp (South Iowa Avenue / I-215 northbound ramps (AM peak hour only)) due to off-ramp queuing. Project traffic would have a cumulatively considerable impact on the forecasted LOS at	MM 4.14-4 In the event that Caltrans prepares a valid study, as defined below, that identifies fair share contribution funding sources attributable to and paid from private and public development to supplement other regional and State funding sources necessary undertake improvements to I-215 in the Project study area, then the Project Applicant shall use reasonable efforts to pay the applicable fair share amount to Caltrans. The study shall include fair share contributions related to private and/or public development based on nexus requirements contained in the Mitigation Fee Act (Govt. Code § 66000 et seq.) and 14 Cal. Code of Regs.	Project Applicant	City of Colton Director of Public Works; Caltrans	Prior to issuance of grading permits	Significant and Unavoidable Direct and Cumulatively Considerable Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
three freeway segments and two freeway ramps in the Opening Year (2020) condition. Project-generated traffic would have a cumulatively considerable impact on the forecasted level of service at six freeway segments and five of the on- and off-ramps (with respect to merge/diverge operations) in the Horizon Year (2040) condition.	§ 15126.4(a)(4) and, to this end, the study shall recognize that impacts to Caltrans I-215 facilities that are not attributable to development located within the City of Colton are not required to pay in excess of such developments' fair share obligations. The fee study shall also be compliant with Government Code § 66001(g) and any other applicable provisions of law. The study shall set forth a timeline and other relevant criteria for implementation of the recommendations contained within the study to the extent the other agencies agree to participate in the fee study program.				
Threshold c): The Project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold d): The Project would not create or substantially increase safety hazards due to a design feature or incompatible use.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold e): Adequate emergency access would be provided to the Project site during both short-term construction and long-term operation. Thus, the Project would not result in inadequate emergency access to the site or surrounding properties.	MM 4.14-1 Prior to the issuance of grading or building permits, the Project Applicant shall prepare and the City of Colton shall approve a temporary traffic control plan. The temporary traffic control plan shall comply with the applicable requirements of the California Manual on Uniform Traffic Control Devices. A requirement to comply with the temporary traffic control plan shall be noted on all grading and building plans and also shall be specified in bid documents issued to prospective construction contractors.	Project Applicant	City of Colton Director of Public Works	Prior to issuance of any grading or building permits	Less-than-Significant Impact
Threshold f): The Project does not have the potential to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.15 Utilities and Service Systems					
Summary of Impacts					
Threshold a): There is no potential for the Project to exceed wastewater treatment requirements of the SARWQCB. Wastewater generated at the Project site would be conveyed to and treated by the Colton Wastewater Reclamation Plant, which is under the jurisdiction of the SARWQCB, which ensures that all regulatory requirements regarding wastewater treatment are met.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
Threshold b): With the exception of water and sewer facilities that would be installed during the Project's construction period and which are evaluated throughout this EIR. The Project would not require the construction of any new water or wastewater systems that have the potential to cause significant environmental effects. No other new or expanded facilities would be required, and the impact would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold c): Storm water would be collected on the Project site by an on-site drainage system and proposed on-site water quality/detention basins that would be installed during the Project's construction phase and which are evaluated throughout this EIR. The Project would not require the construction of any other new storm water drainage facilities that have the potential to cause significant environmental effects, and the impact would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold d): Supported by information in the San Bernardino Valley 2010 UWMP and the 2016 WSA prepared for this Project (*EIR Technical Appendix M)*, there are sufficient	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
water supplies available to service the residential development on the Project site. The Project's proposed residential uses would not exceed available supplies of water, even during dry year conditions, and the impact would be less than significant.					
Threshold e): The Project would generate approximately 274,275 gallons (0.45 MGD) of wastewater per day which could be adequately accommodated by the excess capacity of 2.4 MGD of the CWRF. Accordingly, the CWRF has sufficient capacity to treat wastewater generated by Project-related development in addition to existing commitments, and the Project would not result in the need for any new or expanded off-site wastewater facilities (such as conveyance lines, treatment facilities, or lift stations). Because there is adequate capacity at the CWRF to serve the Project's projected sewer demand, impacts would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold f): There is adequate capacity at the California Street Landfill to accept the Project's solid waste. Landfill capacity would not be exceeded as a result of the proposed Project, and the impact would therefore be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold g): The Project would comply with all applicable federal, state, and local statutes and regulations related to solid waste disposal, reduction, and recycling, and the impact would therefore be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

1.0 INTRODUCTION

1.1 PURPOSES OF CEQA AND THIS EIR

As stated by the California Environmental Quality Act (CEQA) Guidelines Section (§) 15002(a), the basic purposes of CEQA are to:

- *"Inform governmental decision makers and the public about the potential, significant environmental effects of proposed government actions" (CEQA Guidelines § 15002(a)(1));*
- *"Identify the ways that environmental damage can be avoided or significantly reduced" (CEQA Guidelines § 15002(a)(2));*
- *"Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible" (CEQA Guidelines § 15002(a)(3));" and*
- *"Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved (CEQA Guidelines § 15002(a) (4)).*"

This Environmental Impact Report (EIR) is an informational document that represents the independent judgment of the City of Colton (as the Lead Agency) and evaluates the physical environmental effects that could result from the construction and operation of the Roquet Ranch Specific Plan master-planned community (hereafter, "Project"). Governmental approvals currently requested from the City of Colton by the Project Applicant to implement the Project include a General Plan Amendment, Change of Zone, Specific Plan, and Tentative Tract Map. This EIR also covers other related discretionary and administrative actions that may be required to construct and operate the Project as described in this EIR.

As a first step in the CEQA compliance process, the City of Colton completed an Initial Study pursuant to CEQA Guidelines § 15063 to determine if the Project could have a significant effect on the environment. The Initial Study determined that implementation of the Project has the potential to result in significant environmental effects, and a Project EIR, as defined by CEQA Guidelines § 15161, is required. Pursuant to CEQA Guidelines § 15161, a Project EIR should "…focus primarily on the changes in the environment that would result from the development project," and "…examine all phases of the project including planning, construction, and operation."

Accordingly, and in conformance with CEQA Guidelines § 15121(a), the purposes of this Project EIR are to: (1) disclose information by informing public agency decision makers and the public generally of the significant environmental effects associated with all phases of the Project, (2) identify possible ways to minimize or avoid those significant effects, and (3) to describe a reasonable range of

alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects.

1.2 SUMMARY OF THE PROJECT EVALUATED BY THIS EIR

For purposes of this EIR, the term "Project" refers to the discretionary actions required to implement the Roquet Ranch Specific Plan as proposed and all of the activities associated with its implementation including planning, construction, and ongoing operation of the Roquet Ranch Specific Plan. In summary, the Project proposes to develop an approximately 336.2-acre property with up to 874 residential dwelling units, including a maximum of 450 Low Density (2.1-8.0 dwelling units per acre [du/ac]) detached homes, 293 Medium Density (8.1-16 du/ac) detached paired and conventional detached single-family homes, and 131 High Density (16.1-22 du/ac) attached townhomes. The Project also proposes the following non-residential uses: 1.2 acres of retail land uses (Neighborhood Commercial) use on the southeastern portion of the site, 19.3 acres of recreational open space (located primarily on the northwest portion of the site), 199.7 acres of preserved natural habitat (Open Space-Resources), a 0.8-acre fire station site, and a 10.3-acre school site. In the case that the Colton Joint Unified School District selects not to develop a school facility within Planning Area 12, the Planning Area is permitted to be developed with up to 165 Medium Density residential dwelling units. Additionally, in the case that the City of Colton Fire Department selects not to develop a fire station within Planning Area 13, the Planning Area is permitted to be developed with 11 Medium Density residential units. A 3.0-acre recreational vehicle (RV) parking and parking overflow area is proposed in Planning Area 15 (to the east of the Community Park). This area provides Project residents who own a RV with a designated location to park their RVs and effectively removes RV parking from public roadways. In addition, the RV Storage area provides overflow parking for Rocky Glen Park and The Lodge. If Planning Areas 12 and 13 are not developed for use as an elementary school and fire station, respectively, the total maximum number of dwelling units within the Roquet Ranch Specific Plan Area would be increased to 1,050. Additionally, the Project proposes the construction of a hierarchal roadway circulation system and utility infrastructure systems to serve the Roquet Ranch community.

The Project Applicant proposes the following discretionary actions, which are under consideration by the City of Colton

- **General Plan Amendment** proposes to amend the City of Colton General Plan land use designations for the 336.2-acre Project site from Very Low Density Residential," "Low Density Residential," "Medium Density Residential," "High Density Residential," "Neighborhood Commercial," and "Light Industrial, to "Specific Plan."

- **Change of Zone** proposes to change the zoning designations of the Project site from "Very Low Density Residential (VLDR)," "Medium Density Residential (R-2)," "Multiple-Family Residential (R-3/R-4)," "Light Industrial (M-1)," and "Neighborhood Commercial (C-1)" to "Specific Plan Zone (SP Zone)" to provide amended land use and development

standards for the subject property and formalize planning area boundaries that reflect the proposed Roquet Ranch Specific Plan.

- **Specific Plan** proposes a development plan for the 336.2-acre Project site that includes 450 Low Density single-family detached residential units on 60.2 acres; 293 Medium Density residential units on 19.2 acres; 131 High-Density residential townhome units on 6.0 acres; 1.2 acres of Neighborhood Commercial use; a 10.3-acre school site; a 0.8-acre fire station; 19.3 acres of recreational open space; a 3.0-acre RV parking and parking overflow area; 199.7 acres of open space as resource preservation; and 16.5 acres of roadways. The Specific Plan also proposes to preserve an existing SCE utility easement that transects the site.

- **Tentative Tract Map No. 19983** proposes to subdivide approximately 336.2 acres of the Project site into specific lot configurations within each Planning Area to allow for proposed development. TTM No. 19883 would establish a subdivision of 434 residential lots and one (1) commercial lot. The remaining areas of TTM No. 19983 are proposed for 431 Medium Density Residential units, 131 High Density Residential units, a 10.3-acre school site, a 0.8-acre fire station site, a 3.0-acre RV parking and parking overflow area, open space, parks, trails, landscape, water quality retention basins, and 16.5 acres of roadways.

Refer to Section 3.0, *Project Description*, for a detailed description of the proposed Project, including a list of permits and actions that would be required of the City of Colton and other agencies to construct and operate the Project.

1.3 LEGAL AUTHORITY

This EIR has been prepared in accordance with all criteria, standards, and procedures of CEQA (California Public Resource Code § 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, § 15000 et seq.).

Pursuant to CEQA § 21067 and CEQA Guidelines Article 4 and § 15367, the City of Colton is the Lead Agency under whose authority this EIR has been prepared. "Lead Agency" refers to the public agency that has the principal responsibility for carrying out or approving a project. Serving as the Lead Agency and before taking action to approve the Project, the City of Colton has the obligation to: (1) ensure that this EIR has been completed in accordance with CEQA; (2) review and consider the information contained in this EIR as part of its decision making process; (3) make a statement that this EIR reflects the City of Colton's independent judgment; (4) ensure that all significant effects on the environment are eliminated or substantially lessened where feasible; and, if necessary, (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or project alternatives identified in this EIR are infeasible and citing the specific benefits of the proposed Project that outweigh its unavoidable adverse effects (CEQA Guidelines §§ 15090 through 15093).

Pursuant to CEQA Guidelines §§ 15040 through 15043 and upon completion of the CEQA review process, the City of Colton will have the legal authority to do any of the following:

- Approve the proposed Project;
- Require feasible changes in any or all activities involved in the Project in order to substantially lessen or avoid significant effects on the environment;
- Deny approval of the Project, if necessary, in order to avoid one or more significant effects on the environment that would occur if the Project was approved as proposed; or
- Approve the Project even through the Project would cause a significant effect on the environment if the City of Colton makes a fully informed and publicly disclosed decision that: 1) there is no feasible way to lessen the effect or avoid the significant effect; and 2) expected benefits from the Project will outweigh significant environmental impacts of the Project.

This EIR fulfills the CEQA environmental review requirements for the proposed General Plan Amendment, Change of Zone, Specific Plan, Tentative Tract Map No. 19983, and all other governmental discretionary and administrative actions related to the Project.

1.4 INCLUSION OF TIERING CHECKLISTS

The Project site, and its development with residential and other urban land uses, has been the subject of multiple, significant environmental reviews conducted pursuant to CEQA over the years. In 2013, the City of Colton certified the General Plan Update Environmental Impact Report, SCH No. 2012031037) (General Plan EIR). The General Plan EIR analyzes the environmental effects of long-term implementation of the 2013 City of Colton General Plan Update (General Plan Update). The General Plan Update establishes goals, policies and programs to guide the orderly growth and development of the Colton planning through the year 2030. The General Plan Update and General Plan EIR assumed development of the Project site with urban uses commensurate with the proposed Project. Specifically, the existing General Plan designations for the Project site would permit up to 1,590 dwelling units, whereas the Roquet Ranch Specific Plan proposes only a maximum of 1,050 units.

Subsequently, in April 2016, the Southern California Association of Governments (SCAG) certified Program Environmental Impact Report for the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS EIR). The RTP/SCS EIR analyzes the environmental effects of long-term implementation of SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). For many years, SCAG has prepared RTPs with the primary goal of increasing mobility for the region's residents and visitors. With the RTP/SCS, SCAG also focuses on sustainability and integrated transportation and land use planning, as directed by the Legislature in SB

375. Thus, the RTP/SCS emphasizes development of compact communities in existing urban areas, with a strong commitment to the reduction of emissions from transportation sources in order to reduce greenhouse gas emissions, meeting the National Ambient Air Quality Standards established under the Federal Clean Air Act, and to improve public health. The growth and land use assumptions assumed by the RTP/SCS EIR are adopted at the jurisdictional level. As discussed in Section 4.9, *Land Use and Planning*, the RTP/SCS EIR's Growth Forecast assumes a population of 52,800 for the City of Colton in 2012 and anticipates a 69,100 population in 2040. The Project's proposed 1,050 maximum number units would accommodate an estimated 3,633 residents, a figure well within the RTP/SCS EIR's growth assumptions for the City of Colton.

As the first step in the CEQA compliance process, the City of Colton completed an Initial Study pursuant to CEQA Guidelines § 15063 to determine if the Project is consistent with and within the scope of the General Plan EIR and the RTP/SCS EIR. The Project is generally consistent with and within the scope of those program EIRs, as further described in EIR *Technical Appendix N* and EIR *Technical Appendix O*. The Project thus qualifies for, and this EIR is tiered from the City of Colton General Plan Update and SCAG RTP/SCS EIRs. "Tiering" refers to the coverage of general matters in a broad EIR (such as the General Plan and RTP/SCS EIRs) with subsequent site-specific review incorporating by reference general discussion of the prior EIR and concentrating analysis on the issues specific to the project for which subsequent review is prepared (Pub. Res. Code Section 20168.5; see also, CEQA Guidelines Section 15385). Under CEQA Guidelines Section 15152, where a broad program EIR has been prepared pursuant to CEQA, lead agencies are encouraged to tier any environmental analysis which they prepare for separate but related subsequent projects, including development projects. This approach is intended to focus subsequent analysis on issues that are ripe for discussion at each level of review and limit repetitive discussion of the same issues. Indeed, CEQA provides that environmental review "shall be tiered whenever feasible, as determined by the lead agency." (Pub. Res. Code 21093(b); see also, CEQA Guidelines Section 15006(m), 1512(b))

The City of Colton General Plan Update EIR explicitly states that it is intended to serve as "a first tier level of analysis" and that "[l]ater activities proposed pursuant to the goals and policies of the General Plan will be reviewed in light of this EIR and may focus on those site-specific and localized environmental issues that could not be examined in sufficient detail as part of this EIR" (City of Colton, 2013c, pp. 1-4 through 1-5). Similarly, the SCAG 2016-2040 RTP/SCS EIR expressly states its intended use as a "first-tier, programmatic environmental analysis that will support local agencies in evaluation of subsequent projects, and facilitate avoidance, reduction, and minimization of direct and indirect impacts, growth inducing impacts, and cumulative environmental impacts with respect to local projects" (SCAG, 2015, p. 1-2). Per CEQA Guidelines 15152(d), where, as here, a first-tier EIR has been certified for a broader program, plan or policy, a lead agency for a later project pursuant to or consistent with the program, plan or policy should limit the second-tier EIR to effects which (i) were not examined as significant environmental effects in the first-tier EIR, or (ii) are susceptible to a substantial reduction or avoidance by project revisions, the imposition of conditions, or other means.

In addition to evaluating the extent to which Project is within the scope of the General Plan and RTP/SCS EIRs, the Initial Study also considered whether the Project could have a significant effect on the environment independent of the environmental analysis included in the General Plan and RTP/SCS EIRs. The Initial Study determined that implementation of the Project has the potential to result in significant environmental effects, and a Project EIR, as defined by CEQA Guidelines § 15161, is required. Pursuant to CEQA Guidelines § 15161, a Project EIR should "…focus primarily on the changes in the environment that would result from the development project," and "…examine all phases of the project including planning, construction, and operation." Accordingly, and in conformance with CEQA Guidelines § 15121(a), the purposes of this Project EIR are to: (1) disclose information by informing public agency decision makers and the public generally of the significant environmental effects associated with all phases of the Project, (2) identify possible ways to minimize or avoid those significant effects, and (3) to describe a reasonable range of alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects. In spite of the Project's qualification for reduced environmental review through the tiering process, for full disclosure and transparency, the EIR prepared for this Project goes beyond the requirements of CEQA and fully analyzes and, to the extent feasible, mitigates all environmental impacts associated with the Project independent of the environmental analysis included in the General Plan EIR and RTP/SCS EIR.

1.5 RESPONSIBLE AND TRUSTEE AGENCIES

The California Public Resource Code (§ 21104) requires that all EIRs be reviewed by state responsible and trustee agencies (see also CEQA Guidelines § 15082 and § 15086(a)). As defined by CEQA Guidelines § 15381, "the term 'Responsible Agency' includes all public agencies other than the Lead Agency which have discretionary approval power over the project." A Trustee Agency is defined in CEQA Guidelines § 15386 as "a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California."

For the proposed Project, responsible agencies would include the following:

- **San Bernardino County Flood Control District:** Flood Control Permit Application.
- **Santa Ana Regional Water Quality Control Board (RWQCB):** Construction Activity General Construction Permit, National Pollutant Discharge Elimination System (NPDES) permit, and approval of an Operational Storm Water Pollution Prevention Plan (SWPPP).
- **United States Army Corps of Engineers (USACE):** CWA Section 404 permit.
- **City of Riverside:** Approvals for Orange Avenue roadway alignment.
- **County of San Bernardino:** Approvals needed for grading of County-owned property to the west of the Project site.

Trustee agencies for the proposed Project would include the following:

- **United States Fish and Wildlife Service (USFWS):** Federal Endangered Species Act (FESA) Section 7 consultation for permanent impacts to coastal California gnatcatcher designated

critical habitat and temporary impacts to southwestern willow flycatcher designated critical habitat, and an informal consultation with the USFWS is necessary due to the Project's temporary impacts to the least Bell's vireo.

- **California Department of Fish and Wildlife (CDFW):** Section 1602 Streambed Alteration Agreement and Consistency Determination for Project impacts to the least Bell's vireo under the California Endangered Species Act (CESA).

1.6 EIR SCOPE, FORMAT, AND CONTENT

1.6.1 EIR SCOPE

As a first step in complying with the procedural requirements of CEQA, the City of Colton prepared an Initial Study to preliminarily identify the environmental issue areas that may be adversely impacted by the Project. Following completion of the Initial Study, the City filed a Notice of Preparation (NOP) with the California Office of Planning and Research (OPR) (State Clearinghouse) to indicate that an EIR would be prepared to evaluate the Project's potential to impact the environment. The NOP was filed with the State Clearinghouse and distributed to property owners located within 300 feet of the Project site, Responsible Agencies, Trustee Agencies, and other interested parties on June 24, 2016, for a 30-day public review period. The City of Colton also posted the Initial Study and NOP to its website (www.ci.colton.ca.us/index.aspx?nid=779) for review by the general public. The City distributed the NOP for public review to solicit responses that may assist the City in identifying the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR. In addition, a publicly noticed EIR Scoping Meeting was held at the Luque Community Center in the City of Colton on July 14, 2016, which provided members of the general public an additional opportunity to comment on the scope and range of potential environmental concerns to be addressed in this EIR. Thirteen members of the general public attended the EIR Scoping Meeting.

Based on the information contained in the Initial Study and in consideration of all comments received by the City on the NOP and during the Scoping Meeting, this EIR evaluates the Project's potential to cause adverse effects to the following environmental issue areas:

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

The Initial Study, NOP, and written comments received by the City of Colton during the NOP public review period are provided in *Technical Appendix A t*o this EIR. Substantive issues raised in response to the NOP that are within the scope of the environmental analysis conducted in the EIR are summarized below in Table 1-1, *Summary of NOP Comments* and Table 1-2, *Summary of NOP Comments Received at* EIR Scoping Meeting (July 14, 2016). The purpose of these tables is to present the primary environmental issues of concern raised in comments submitted by public agencies and the public-at-large during the NOP review period. The tables are not intended to list every comment received by the City during the NOP review period. Regardless of whether or not a comment is listed in these tables, all applicable comments received in responses to the NOP and at the EIR Scoping Meeting are addressed in this EIR.

Table 1-1 Summary of NOP Comments

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT IS ADDRESSED
Agua Caliente Band of Cahuilla Indians	August 25, 2016	– Agua Caliente Band of Cahuilla Indians defers to the San Manuel Band of Mission Indians.	Section 4.4, *Cultural Resources*
Department of Transportation District 8, Office of Regional Planning, IGR/CEQA Branch	July 18, 2016	– Recommends all state facilities within a 5-mile radius of the Project be analyzed in the TIA (particularly the Center Street interchange). – Recommends a Synchro analysis, intersection control evaluation, and queuing analysis be performed and submitted to Caltrans for review.	Section 4.14, *Transportation and Traffic* Section 4.14, *Transportation and Traffic*
Inland Empire Biking Alliance	July 25, 2016	– Encourages the City to perform the traffic impact analysis for this EIR using vehicle miles traveled (VMT) methodology in lieu of level of service (LOS). – Recommends the Project provide a direct bicycle linkage to the Santa Ana River Trail to the west. – Provide a figure that shows bicycle linkages throughout the Project.	Section 4.14, *Transportation and Traffic* Section 3.0, *Project Description*; Section 4.14, *Transportation and Traffic* Section 3.0, *Project Description*; Figure 3-5, *Roadway Cross-Sections*

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT IS ADDRESSED
		– The EIR should analyze intersection safety. – The Project should provide roundabouts.	Section 4.14, *Transportation and Traffic* Section 3.0, *Project Description*; Section 4.14, *Transportation and Traffic*
Native American Heritage Commission	July 29, 2016	– EIR should address compliance with AB 52, and SB 18. – Recommended conducting a cultural resources assessment that includes consultation with the regional California Historical Research Information System (CHRIS) Center, an archaeological inventory survey (if necessary), consultation with the NAHC regarding a Sacred Lands File search, and mitigation measures that address how to deal with unknown archaeological resources that may be encountered during grading activities.	Section 4.4, *Cultural Resources* Section 4.4, *Cultural Resources*
Riverside County Flood Control and Water Conservation District	July 21, 2016	– The EIR should address the requirement for a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board.	Section 4.8, *Hydrology and Water Quality*

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT IS ADDRESSED
		– EIR should address whether the Project is located within a Federal Emergency Management Agency (FEMA) mapped floodplain, and whether approvals (i.e., Conditional Letter of Map Revision (CLOMR) and/or Letter of Map Revision (LOMR)) would be required prior to occupancy.	Section 4.8, *Hydrology and Water Quality*
County of Riverside Transportation and Land Management Agency (RCTLMA)	July 21, 2016	– EIR and Traffic Impact Analysis should address potential impacts and identify feasible mitigation measures on any Riverside County intersections and roadways in the area included in the Riverside County General Plan, and also analyze impacts to Riverside County intersections where the Project would add 50 or more peak hour trips.	Section 4.14, *Transportation and Traffic*
		– RCTLMA also requests that the Traffic Impact Analysis adhere to County of Riverside Traffic Study Guidelines.	Section 4.14, *Transportation and Traffic*
		– Alignment of Pellissier Road	Section 4.9, *Land Use and Planning*; Section

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT IS ADDRESSED
		shown on the tract map does not follow the City's General Plan Mobility Element.	4.14, *Transportation and Traffic*
Southern California Association of Governments (SCAG)	July 23, 2016	– The EIR should assess the Project's consistency with the 2016 Regional Transportation Plan (RTP) / Sustainable, Communities Strategy (SCS), particularly to the RTP goals.	Section 4.9, *Land Use and Planning*
South Coast Air Quality Management District (SCAQMD)	July 8, 2016	– Recommend the Lead Agency use the CEQA Air Quality Handbook (1993) when preparing the air quality analysis.	Section 4.2, *Air Quality*
		– Recommend the Lead Agency use the CalEEMod land use emissions software when preparing the air quality analysis.	Section 4.2, *Air Quality*
		– Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project (including construction and operation) and all air pollutant sources related to the project.	Section 4.2, *Air Quality*
		– The SCAQMD requests that the Lead Agency quantify	Section 4.2, *Air Quality*

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT IS ADDRESSED
		criteria pollutant emissions and compare the results to the recommended regional significance thresholds. The SCAQMD also recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs).	Section 4.2, *Air Quality*
		– The SCAQMD also recommends the Lead Agency perform a mobile source health risk assessment in the event the proposed Project generates or attracts vehicular trips.	Section 4.2, *Air Quality*
		– In the event that significant adverse air quality impacts are identified in association with the Project, SCAQMD identifies consulting several sources for mitigation measures, including: Chapter 11 of the SCAQMD CEQA Air Quality Handbook, SCAQMD's CEQA web pages, CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*, SCAQMD's Rule	

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT IS ADDRESSED
		403 (Fugitive Dust), and SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.	

Table 1-2 Summary of NOP Comments Received at EIR Scoping Meeting (July 14, 2016)

COMMENTS	LOCATION IN EIR WHERE COMMENT IS ADDRESSED
– Resident of a neighboring property raised concern that the proposed Project may result in an increase in the number of rattlesnakes on his property during grading/construction activities.	Section 4.3, *Biological Resources*
– The Project should provide access to Center Street (City of Riverside).	Section 4.14, *Transportation and Traffic*
– The EIR should address the sufficiency of availability of water supplies to support the water demand that would be generated by the Project.	Section 4.15, *Utilities and Service Systems*
– The EIR should address how response times from public services (fire and police) would be affected by the proposed Project.	Section 4.12, *Public Services*
– The status of the proposed on-site water tank should be addressed in the EIR.	Section 3.0, *Project Description*; Section 4.15, *Utilities and Services Systems*
– Future access to the Road extension to the north of the Project should be addressed in the EIR.	Section 4.14, *Transportation and Traffic*
– The EIR should address whether the fire department would have access to the northern area of the Project, or if an additional fire access road would need to be constructed.	Section 4.12, *Public Services*; Section 4.7, *Hazards and Hazardous Materials*

The Lead Agency has not identified any issues of controversy associated with the proposed Project after consideration of all comments received in response to the NOP.

1.6.2 EIR FORMAT AND CONTENT

This EIR contains all of the information required to be included in an EIR as specified by the CEQA Statutes and Guidelines (California Public Resources Code, § 21000 et. seq. and California Code of Regulations, Title 14, Chapter 5). CEQA requires that an EIR contain, at a minimum, certain specified

content. Table 1-3, *Location of CEQA Required Topics*, provides a quick reference in locating the CEQA-required sections within this document.

Table 1-3 Location of CEQA Required Topics

CEQA REQUIRED TOPIC	CEQA GUIDELINES REFERENCE	LOCATION IN THIS EIR
Table of Contents	§ 15122	Table of Contents
Summary	§ 15123	Section S.0
Project Description	§ 15124	Section 3.0
Environmental Setting	§ 15125	Section 2.0
Consideration and Discussion of Environmental Impacts	§ 15126	Section 4.0
Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented	§ 15126.2(b)	Section 4.0 & Subsection 5.1
Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project Should it be Implemented	§ 15126.2(c)	Subsection 5.2
Growth-Inducing Impact of the Proposed Project	§ 15126.2(d)	Subsection 5.3
Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects	§ 15126.4	Section 4.0 & Table S-1
Consideration and Discussion of Alternatives to the Proposed Project	§ 15126.6	Section 6.0
Effects Not Found to be Significant	§ 15128	Subsection 5.5
Organizations and Persons Consulted	§ 15129	Section 7.0 & Technical Appendices
Discussion of Cumulative Impacts	§ 15130	Section 4.0
Energy Conservation	Appendix F	Subsection 5.4

In summary, the content and format of this EIR is as follows:

- **Section 1.0, *Introduction*,** provides introductory information about the CEQA process and the responsibilities of the City of Colton, serving as the Lead Agency of this EIR.

- **Section 2.0, *Environmental Setting***, describes the environmental setting, including descriptions of the Project site's physical conditions and surrounding context. The existing setting is defined as the condition of the Project site and surrounding area at the approximate date this EIR's NOP was released for public review (June 24, 2016).

- **Section 3.0, *Project Description***, serves as the EIR's Project Description for purposes of CEQA and contains a level of specificity commensurate with the level of detail proposed by the Project, including the summary requirements pursuant to CEQA Guidelines § 15123.

- **Section 4.0, *Environmental Analysis,*** provides an analysis of potential direct, indirect, and cumulatively considerable impacts that may occur with implementation of the proposed Project. A conclusion concerning significance is reached for each discussion; mitigation measures are presented as warranted. The environmental changes identified in Section 4.0 and throughout this EIR are referred to as "effects" or "impacts" interchangeably. The CEQA Guidelines also identify the terms "effects" and "impacts" as being synonymous (CEQA Guidelines § 15358). In the environmental analysis subsections of Section 4.0, the existing conditions are disclosed that are pertinent to the subject area being analyzed, accompanied by a specific analysis of physical impacts that may be caused by implementation of the proposed Project. The analyses are based in part upon technical reports that are appended to this EIR. Information also is drawn from other sources of analytical materials that directly or indirectly relate to the proposed Project and cited in Section 7.0, *References*. Where the analysis demonstrates that a physical adverse environmental effect may or would occur without undue speculation, feasible mitigation measures are recommended to reduce or avoid the significant effect. In most cases, implementation of the mitigation measures would reduce the adverse environmental impact to below a level of significance. If mitigation measures are not available or feasible to reduce an identified impact to below a level of significance, the environmental effect is identified as a significant and unavoidable adverse impact, for which a statement of overriding considerations would need to be adopted by the City of Colton pursuant to CEQA § 15093.

- **Section 5.0, *Other CEQA Considerations***, includes specific topics that are required by CEQA. These include a summary of the Project's significant and unavoidable environmental effects, a discussion of the significant and irreversible environmental changes that would occur should the Project be implemented, an analysis of the Project's energy consumption, as well as potential growth-inducing impacts of the proposed Project. Section 5.0 also includes a discussion of the potential environmental effects that were found not be significant during this EIR's Initial Study and NOP process and that, therefore, do not require a detailed evaluation in this EIR.

- **Section 6.0, *Project Alternatives***, describes and evaluates potential alternatives to the proposed Project that could reduce or avoid the Project's adverse environmental effects, while still achieving the Project's objectives. CEQA does not require an EIR to consider every conceivable alternative to the Project but rather the consideration of a reasonable range of alternatives that will foster informed decision making and public participation. A range of 4 alternatives is presented in Section 6.0.

- **Section 7.0, *References***, cites all reference sources used in preparing this EIR and lists the agencies and persons that were consulted in preparing this EIR. Section 7.0 also lists the persons who authored or participated in preparing this EIR.

- **Technical Appendices.** CEQA Guidelines § 15147 states that the "information contained in an EIR shall include summarized…information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public," and that the "placement of highly technical and specialized analysis and data in the body of an EIR shall be avoided." Therefore, the detailed technical studies, reports, and supporting documentation that were used in preparing this EIR are bound separately as Technical Appendices. The Technical Appendices are available for review at the Planning Division's public counter located at 650 N La Cadena Drive in the City of Colton during the City's regular business hours or can be requested in electronic form by contacting the City's Planning Division. The individual technical studies, reports, and supporting documentation that comprise the Technical Appendices are as follows:

  A. Initial Study, Notice of Preparation (NOP), and Written Comments on the NOP
  B. Air Quality Impact Analysis
  C. Health Risk Assessment
  D. Biological Resources Assessment
  E. Greenhouse Gas Analysis
  F1. Cultural Resources Assessment
  F2. Paleontological Resources Assessment
  G. Geotechnical Report
  H. Phase I Environmental Site Assessment
  I1. Drainage Report
  I2. Drainage Memorandum
  J. Preliminary Water Quality Management Plan
  K. Noise Impact Analysis
  L. Traffic Impact Analysis
  M. Water Supply Assessment
  N. Tiering Checklist from City of Colton General Plan Update EIR
  O. Tiering Checklist from SCAG RTP/SCS PEIR

- **Documents Incorporated by Reference**. CEQA Guidelines § 15150 allows for the incorporation "by reference all or portions of another document…[and is] most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of a problem at hand." Documents, analyses, and reports that are incorporated into this EIR by reference are listed in Section 7.0, *References,* of this EIR. The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of an EIR. Where this EIR incorporates a document by reference, the document is identified in the body of the EIR, citing the appropriate section(s) of the incorporated document and describing the relationship between the incorporated part of the referenced document and this EIR.

2.0 ENVIRONMENTAL SETTING

As required by CEQA Guidelines § 15125(c), the environmental setting should identify any inconsistencies between a proposed project and applicable general, specific, or regional plans, and place special emphasis on resources that are rare or unique to that region and would be affected by the project. The Project Applicant proposes to develop a master-planned community on an approximate 336.2-acre property. Refer to Subsection 2.4, *Planning Context*, for additional information about applicable plans. There are no rare or unique resources on the Project site.

2.1 REGIONAL SETTING AND LOCATION

The approximate 336.2-acre Project site is located within the southwestern portion of the City of Colton, California, in an area known locally as the La Loma Hills, within San Bernardino County. As shown on Figure 2-1, *Regional Map*, the Project site is located north of the City of Riverside and the County of Riverside, as well as a portion of unincorporated Riverside County, northeast of the City of Jurupa Valley, southeast of the cities of Fontana and Rialto, and east of the City of Grand Terrace. Portions of unincorporated San Bernardino County are located to the north and west of the Project site. The Project site is located approximately 2.0 miles north of the intersection of State Route 60 (SR-60), SR-91, and Interstate 215 (I-215), approximately 11.3 miles east of I-15; approximately 2.3 miles south of I-10; and approximately 0.85 miles west of I-215. Flabob Airport is located approximately 4.0 miles southwest of the Project site, the San Bernardino International Airport (SBIA) is located approximately 6.0 miles northeast of the Project site, the Rialto Municipal Airport is located approximately 7.5 miles northwest of the Project site, the Riverside Municipal Airport is located approximately 7.7 miles southwest of the Project site, and the March Air Reserve Base (March ARB) is located approximately 9.8 miles southeast of the Project site. Box Springs Mountain Park is located approximately 4.5 miles southeast of the Project site and Lake Perris is located approximately 14.5 miles southeast of the Project site. The San Bernardino National Forest is located approximately 12.5 miles north of the Project site.

2.2 LOCAL SETTING AND LOCATION

As depicted on Figure 2-2, *Vicinity Map*, the Project site is located approximately 0.1 mile north of Center Street, 0.25 miles south of Litton Avenue, 350 feet east of Old Pellissier Road, and west of La Cadena Drive (distance varies). At its closest point, the Project site is located approximately 1,000 feet from the Santa Ana River.

The Project site is located in portions of Section 6, Township 2 South, Range 4 West, San Bernardino Baseline and Meridian and encompasses Assessor's Parcel Numbers (APNs): 116-701-101, 116-702-101, 116-701-102, 116-702-105, 116-702-121, 116-703-118, 116-702-123, and 116-702-122. Please see subsection 2.5 below for more information with regard to the environmental setting for each topic area studied in this EIR.

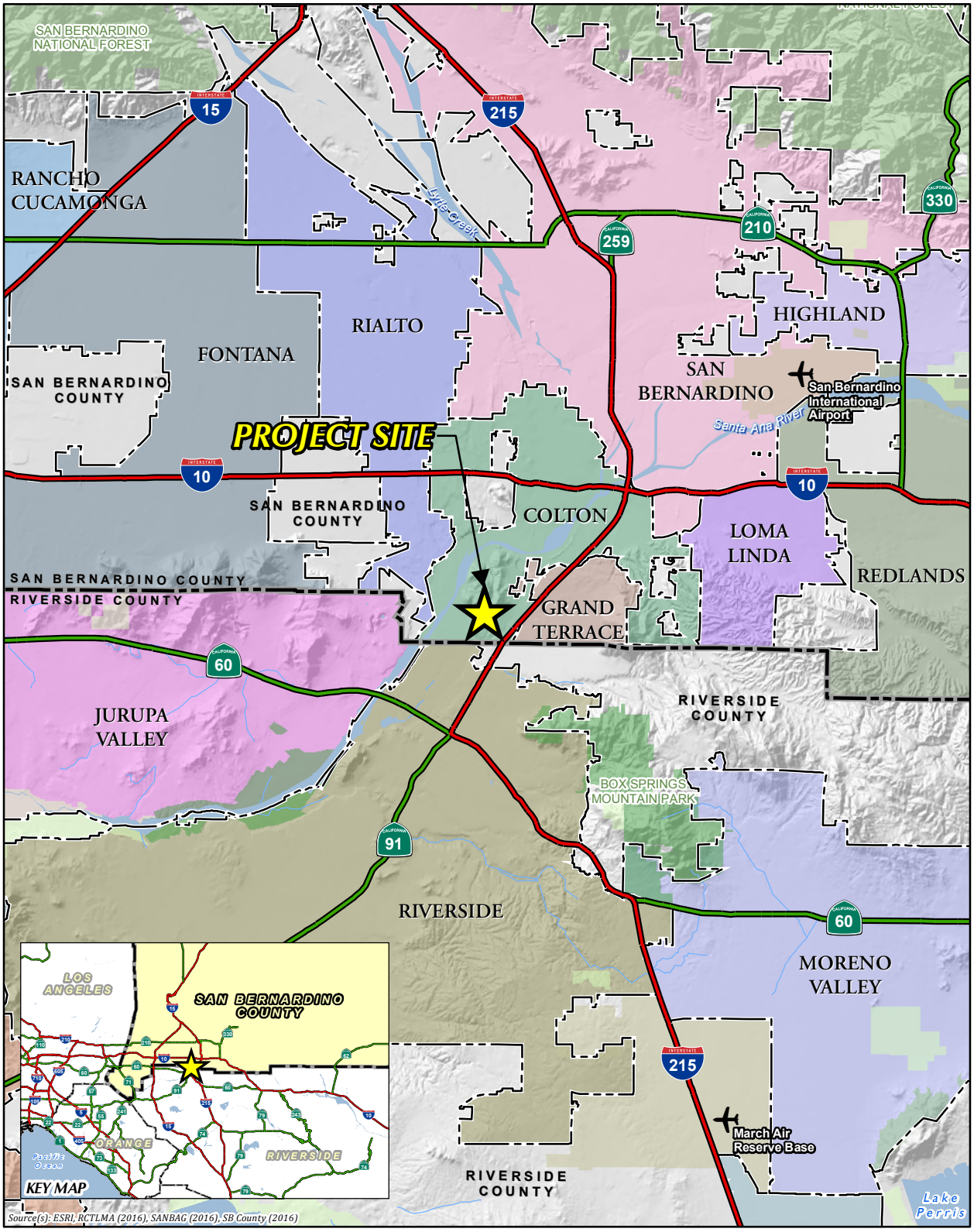


Figure 2-1

0 0.75 1.5 3 Miles

REGIONAL MAP

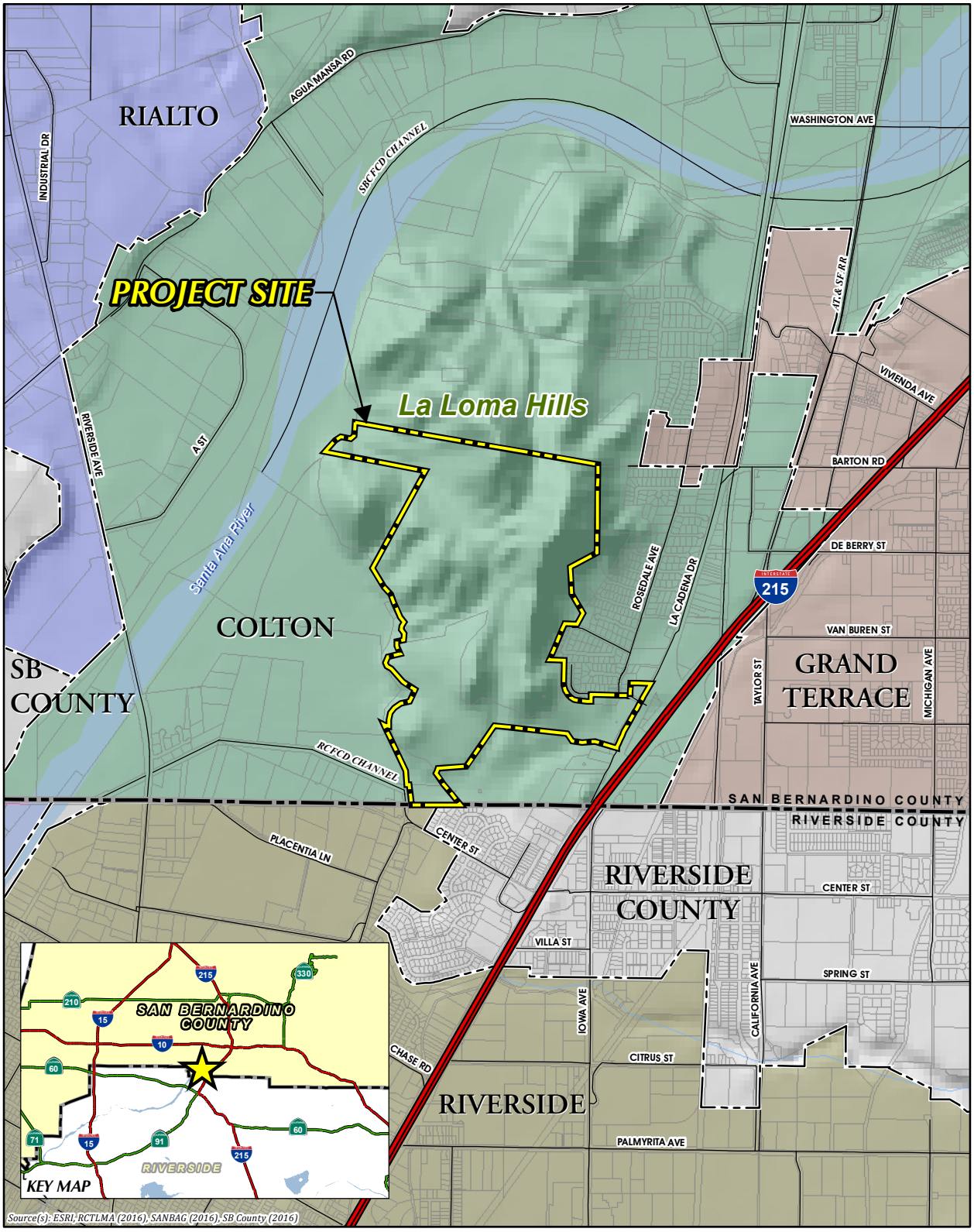


Figure 2-2

VICINITY MAP

2.3 SURROUNDING LAND USES AND DEVELOPMENT

Land uses surrounding the Project site are depicted on Figure 2-3, *Surrounding Land Uses and Development,* and described below.

North: The Project site is bordered by undeveloped/vacant land. The Colton Landfill (no longer in service) is located approximately 0.5-mile north of the Project site.

South: The Project site is bordered on the south by residential, industrial, and commercial land use within San Bernardino County and vacant undeveloped land and residential land within Riverside County.

East: The Project site is bordered on the east by vacant undeveloped land, residential, and commercial land uses.

West: The Project site is bordered on the west by undeveloped/vacant land and the Santa Ana River.

2.4 PLANNING CONTEXT

This Subsection provides a description of the Project site's land use and zoning designations, as well as a description of the regional planning authorities and documents that are applicable to the Project.

2.4.1 SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG)

The Southern California Association of Governments (SCAG) is responsible for regional planning in Southern California. SCAG provides a framework to coordinate local and regional decisions regarding future growth and development and prepares future growth forecasts for the region. As the designated Metropolitan Planning Organization (MPO) for the area, SCAG is mandated by the federal government to research and develop plans for transportation, growth management, hazardous waste management, and air quality, based on the regional growth projections. The subregional council for the City of Colton and San Bernardino County is the San Bernardino Association of Governments (SANBAG). (City of Colton, 2013c, p. 4.10-5)

On April 7, 2016, SCAG adopted the *2016-2040 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS)* with goals to: 1) Align the plan investments and policies with improving regional economic development and competitiveness; 2) Maximize mobility and accessibility for all people and goods in the region; 3) Ensure travel safety and reliability for all people and goods in the region; 4) Preserve and ensure a sustainable regional transportation system; 5) Maximize the productivity of our transportation system; 6) Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking); 7) Actively encourage and create incentives for energy efficiency, where possible; 8) Encourage land use and growth patterns that facilitate transit and active transportation; and 9) Maximize the security of the regional transportation system through improved system monitoring,

Figure 2-3

0 275 550 1,100 Feet

SURROUNDING LAND USES AND DEVELOPMENT

rapid recovery planning, and coordination with other security agencies. Performance measures and funding strategies also are included to ensure that the adopted goals are achieved through implementation of the RTP. (SCAG, 2016a, p. 64)

2.4.2 SAN BERNARDINO LOCAL AGENCY FORMATION COMMISSION (LAFCO)

The San Bernardino County Local Agency Formation Commission (LAFCO) is a state-mandated, independent agency with countywide jurisdiction over changes in organization and boundaries of cities and special districts within San Bernardino, including the City of Colton. The San Bernardino LAFCO has the responsibility to limit urban sprawl, prevent future conversions of agricultural and open space lands, review and approve changes in boundaries, establish City and County sphere of influence (SOI), and assist local government agencies in improving the efficiency of urban services. (City of Colton, 2013c, p. 4.10-5)

2.4.3 CITY OF COLTON GENERAL PLAN

According to the *City of Colton General Plan Land Use Plan*, the Project site is designated as Very Low Density Residential, Low Density Residential, Medium Density Residential, High Density Residential, Neighborhood Commercial, and Light Industrial (See Figure 2-4, *Existing General Plan Land Use Designations*). (City of Colton, 2015a)

2.4.4 CITY OF COLTON ZONING CODE

The City of Colton Zoning Code is the General Plan's primary implementation tool. Whereas the General Plan is a policy document and sets forth direction for land use policy-level decisions, the Zoning Code is a regulatory document that establishes specific standards for the use and development of all properties within the City. The Zoning Code regulates development intensity using a variety of methods, such as setting limits on building setbacks, yard landscaping standards, and building heights. The Zoning Code also indicates the permitted land uses in the various zones (City of Colton, 2013c, p. 4.10-10). According to the *City of Colton Zoning Map, Title 18, C.M.C.*, the Project site is currently zoned Very Low Density Residential (VLDR), Low Density Residential (R-1), Medium Residential (R-2), Multiple Family Residential (R-3/R-4), Neighborhood Commercial (C-1), and Light Industrial (M-1) (City of Colton, 2015b).

2.5 EXISTING PHYSICAL SITE CONDITIONS

Pursuant to CEQA Guidelines § 15125, the physical environmental conditions for purposes of establishing the setting of an EIR is the environment as it existed at the time the EIR's NOP was released for public review. The NOP for this EIR was released for public review on June 24, 2016 and the following subsections provide a description of the Project site's physical environmental conditions as of that approximate date ("existing conditions"). More information regarding the Project site's environmental setting is provided in the various subsections of EIR Section 4.0, *Environmental Analysis*.

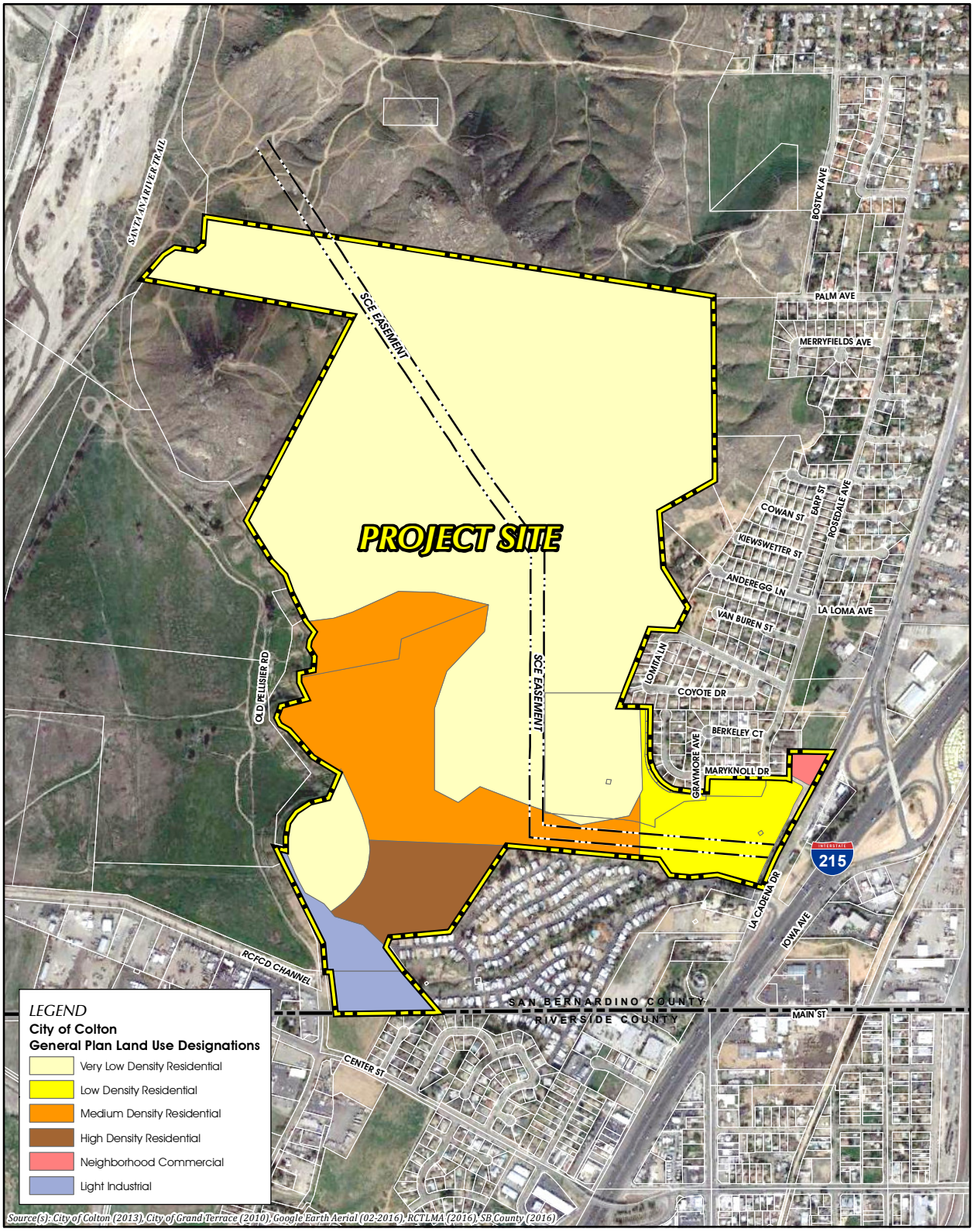


Figure 2-4

0 275 550 1,100 Feet

EXISTING GENERAL PLAN LAND USE DESIGNATIONS

2.5.1 LAND USE

The Project site consists of largely undeveloped hillside terrain containing native and non-native vegetation with rock outcroppings and scattered dirt trails. An overhead electric power transmission line generally bisects the Project site, trending southeast in the northern portion of the Project site. Along the southern boundary of the Project site, the transmission line turns to the east and exits the site at the eastern boundary. Roquet Paving Inc. also operates a small construction yard on the southeast portion of the Project site. (Leighton, 2014, p. 2)

2.5.2 AESTHETICS AND TOPOGRAPHIC FEATURES

The City of Colton General Plan Update Environmental Impact Report (GPU EIR) identifies views of the San Bernardino and San Gabriel Mountains, located north of the City's planning area, as a scenic backdrop for Colton and the surrounding cities and communities. No scenic vistas are recognized by the GPU EIR. (City of Colton, 2013c, p.4.1-2) As mentioned above in Subsection 2.2, the Santa Ana River is located in close proximity to the western boundary of the Project site. The GPU EIR considers the Santa Ana River and its surrounding natural areas as a scenic resource. The General Plan planning area does not have any officially designated Scenic Highways or any highways that are considered eligible for Scenic Highway status. (City of Colton, 2013c, p.4.1-2)

The Project site is located in the Pellisier Ranch/La Loma Hills area, located at the southern edge of the City of Colton. This area covers approximately 1,450 acres and represents the largest remaining developable land in the City of Colton. The Santa Ana River defines the north and western boundaries, with the Riverside County line forming the southern border. The eastern edge of the area is bounded largely by neighborhoods located on the west side of La Cadena Drive (City of Colton, 2013c,p. 4.1-3). There are no sources of artificial lighting on the Project site. Nighttime illumination occurs offsite from existing residential neighborhoods to the east and mobile home park, light industrial/industrial park uses, and low-density residential development to the south of the Project site.

The Project site is located in the La Loma Hills, an example of the limited surface exposure Peninsular Ranges Provinces. The Peninsular Ranges are a north-south trending mountain range extending from Southern California into Mexico. The La Loma Hills are characterized by steep slope areas (i.e., slopes in excess of 20 percent) and are generally undeveloped and characterized by numerous rock outcroppings formed by plutonic rock formations, interspersed with grasses. (City of Colton, 2013c, pp. 4.6-1 and 4.9-9) The steeper hillside areas of the Project site have little to no vegetation due to the presence of rock outcrops (Leighton, 2014, p. 2). As depicted on Figure 2-5, *USGS Topographic Map*, the Project site ranges from 1,478 feet above mean sea level (ASML) near the northeast portion of the Project site to 900 feet AMSL in the southern portion of the Project site.

Refer to EIR Section 4.1 *Aesthetics*, for a detailed discussion of the aesthetics and topographic features of the Project site.

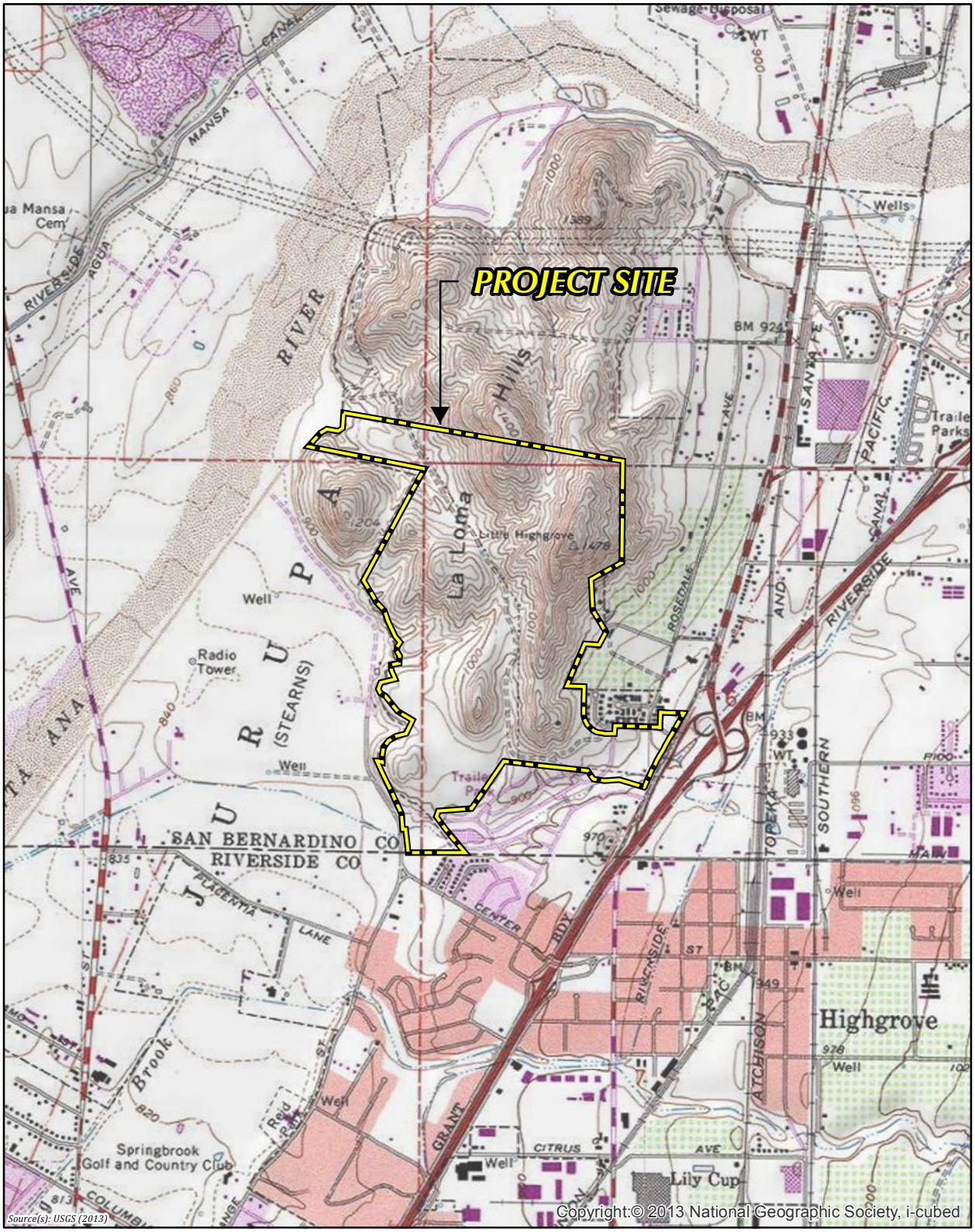


Figure 2-5

0 500 1,000 2,000 Feet

USGS TOPOGRAPHIC MAP

2.5.3 AIR QUALITY AND CLIMATE

The Project site is located in the 6,745-square-mile South Coast Air Basin (SCAB), which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD), the agency charged with bringing air quality in the SCAB into conformity with federal and state air quality standards. As documented in the Project's Air Quality Impact Analysis (*Technical Appendix B* to this EIR), although the climate of the SCAB is characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. More than 90% of the SCAB's rainfall occurs from November through April. Temperatures during the year range from an average minimum of 36°F in January to over 100°F maximum in the summer. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Ana[s]" each year.

Although air quality in the SCAB has improved over the past several decades, according to the SCAQMD, the SCAB currently does not meet state or federal criteria for ozone (8-hour standard) and particulate matter less than 2.5 microns ($PM_{2.5}$), and does not meet the state criteria for ozone (1-hour standard) and particulate matter less than 10 microns (PM_{10}) (CARB, 2014).

Refer to EIR Sections 4.2, *Air Quality*, and 4.6, *Greenhouse Gas Emissions*, for a detailed discussion of the Project site's existing air quality and climatic setting.

2.5.4 AGRICULTURAL SETTING

According to maps pursuant to the Farmland Mapping and Monitoring Program (FMMP), the Project site contains lands classified as "Grazing Land" and does not contain any lands mapped by the California Department of Conservation as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) (CDC, 2014). "Grazing Land" is land on which the existing vegetation is suited to the grazing of livestock (City of Colton, 2013c, p. 4.2-1). Under existing conditions, the Project site is not used as grazing land for livestock. The City of Colton has no agriculturally zoned parcels and the County of San Bernardino does not have any Williamson Act contracts within the City of Colton or its SOI (City of Colton, 2013c, p. 4.2-1 and 4.2-6). Accordingly, there are no Williamson Act contracts involving land within the boundaries of the Project site.

2.5.5 CULTURAL SETTING

The Project site is located in the southwestern foothills of San Bernardino County. This region is close to the traditional territory of multiple Native American groups, including the Serrano, the Cahuilla, and the Luiseño. The majority of the Project site has been historically disturbed by agricultural activities, roadway construction, and the operation of the Roquet Paving Inc. facility on the southeast

portion of the Project site. In the existing condition, 25 known archeological sites are contained within the Project site, which are described in detail in Section 4.4, *Cultural Resources*.

Refer to EIR Section 4.4, *Cultural Resources,* for a detailed discussion of the Project site's cultural setting.

2.5.6 GEOLOGIC SETTING

The Project site is located in the northern Peninsular Ranges Geomorphic Province of southern California along the western margin of the San Bernardino Valley. The San Andreas Fault Zone, located approximately 12.4 miles northeast of the Project site, separates the valley from the rugged San Bernardino Mountains. The San Jacinto Fault Zone is located approximately 4.0 miles to the northeast, and the active Cucamonga Fault is located approximately 14.2 miles northwest of the Project site. The Project site is not located within a State of California designated Alquist-Priolo Earthquake Fault Zone or a County of San Bernardino designated Earthquake Fault Zone. (Leighton, 2014, pp. 3-4)

The Project site and its surroundings are underlain by granitic bedrock of Upper Cretaceous age. The bedrock units are mantled by older alluvium that eroded from the adjacent mountains and was transported to the Project site. The active flood plain of the Santa Ana River that borders the Project site on the west contains younger alluvium. The soils on the Project site consist of artificial fill and colluvium/alluvium. The Project site is underlain by granitic rock with various ridges and knobs of exposed granitic outcrops across the Project site. (Leighton, 2014, pp. 3-4)

Refer to EIR Section 4.5 *Geology and Soils,* for a detailed discussion of the geology and soils of the Project site.

2.5.7 HYDROLOGIC SETTING

The Project site is located within the Santa Ana River Basin watershed. The Santa Ana River serves as the defining waterbody in the watershed and ultimately outlets to the Pacific Ocean. The Santa Ana Region (Region 8 is the jurisdictional boundary of the watershed) is approximately 2,800 square miles in size, representing the smallest of California's nine regional management districts, known as Regional Water Quality Control Boards (RWQCB). The City of Colton planning area is located within the Upper Santa Valley Groundwater Basin, which is divided into numerous subbasins based on geologic formations (such as faults or impervious rocks). (City of Colton, 2013c, pp. 4.9-1 through 4.9-3)

The Santa Ana River represents the primary threat of flooding in the City's planning area (City of Colton, 2013c, pp. 4.9-1 and 4.9-6). Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Number 06071C Panel 8688H identifies the majority of the Project site within Zone X (Other Areas), which are "areas of 0.2 percent annual change flood; areas of 1 percent annual chance flood with average depths of less than 1-foot or with drainage areas less than 1.0 square mile; and areas protected by levees from 1 percent annual chance flood" (FEMA, 2008). However,

the southern portion of the Project site is located in both Flood Zone X (shaded) listed as "Other Flood Areas" and Flood Zone AE. Zone AE is described as "the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1 percent annual chance flood can be carried without substantial increases in flood heights." The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. The FEMA flood map (No. 06071C Panel 8688H) indicates that the 1 percent annual chance flood discharge is contained in the existing Highgrove Channel that is located downstream from the Project site west of Orange Street.

For the City's planning area, which includes the Project site, water quality and waste discharge standards are adopted and enforced by the Santa Ana RWQCB through its Water Quality Control Plan, also known as the "Basin Plan." (City of Colton, 2013c, p. 4.9-16)

A water supply well currently exists on the Project site, and provides water for limited domestic water production.

In the existing condition, storm water within the Project site generally sheet flows toward the southern boundary of the Project site where it is ultimately discharged into a drainage channel that flows to the Santa Ana River. The Project site and off-site areas support nine drainages referred to in the biological resources assessment report (*Technical Appendix D*) as Drainages A, A1, B, C, D, D1, E, E1, and E2. Drainages A and A1 are located in the southeastern corner of the Project site; Drainage B is located in the southwestern portion of the Project site; Drainages C and D occur near the western Project boundary; and Drainages E, E1, and E2 are in the northwestern corner of the Project site.

Refer to EIR Section 4.8, *Hydrology / Water Quality*, for a detailed discussion of the Project site's hydrological setting.

2.5.8 NOISE SETTING

Primary sources of noise in the Project site's vicinity include airport noise from distant airports including Flabob Airport and San Bernardino Municipal Airport, as well as vehicular noise from the nearby Interstate 215 (I-215) and La Cadena Drive. To determine the existing acoustical setting, 24-hour noise measurements were taken by Urban Crossroads, Inc. at 10 locations in the Project study area in 2016. Measured hourly noise levels ranged from 50.2 to 61.7 equivalent-level decibels (dBA Leq), which correlates to a Community Noise Equivalent Level (CNEL) ranging from 58.9 dBA CNEL to 68.1 dBA CNEL

Refer to EIR Section 4.10, *Noise*, for a detailed discussion of the Project site's acoustical setting.

2.5.9 TRANSPORTATION AND TRAFFIC SETTING

The Project site is located approximately 2.0 miles north of the intersection of State Route 60 (SR-60), SR-91, and Interstate I-215 and approximately 11.3 miles east of I-15; approximately 2.3 miles south of I-10; and approximately 0.85 miles west of I-215. The Project site is located approximately 0.1 mile

north of Center Street, 0.25 miles south of Litton Avenue, 350 feet east of Old Pellissier Road, and west of La Cadena Drive (distance varies).

Congestion Management Plan (CMP) intersections in the area surrounding the Project site include ramp-to-arterial intersections with the I-215 Freeway corridor and intersections located along S. La Cadena Drive and Barton Road. Because the Project site is mostly vacant, a nominal amount of traffic is generated by uses on the site under existing conditions.

Refer to EIR Section 4.14, *Transportation / Traffic*, for a detailed discussion of the Project site's transportation traffic setting.

2.5.10 UTILITIES AND SERVICE SYSTEMS

The Project site includes water and sewer facilities in the existing condition within the southeast portion of the Project site associated with the Roquet Paving Inc. facility. Additionally, a small water extraction well is currently in operation within the southeastern portion of the Project site. The Project site is located near developed areas that include existing water and sewer infrastructure. Additionally, the Project site is bisected by a Southern California Edison (SCE) power line easement containing overhead power lines that runs along a north-south alignment through the Project site.

2.5.11 VEGETATION AND HABITAT

The Project site and off-site areas are primarily vegetated with native brittle bush scrub, which is dominated by brittle bush (*Encelia farinosa*), as well as smaller scattered patches of other native plant communities, such as California buckwheat scrub, California sagebrush scrub, and black willow thicket (intermixed with some ornamental vegetation). A large portion of the site is composed of disturbed areas, consisting of dirt roads, disced fields comprised of non-native species, and areas with little to no vegetation that exhibit signs of previous human disturbance. Other non-native plant communities present include non-native grassland, ruderal vegetation, and ornamental species. There are also scattered areas of rock outcrops along the steep hillsides, wash areas, and unvegetated developed areas on the Project site.

Additional information related to the vegetation and habitat onsite at the Project site is provided in Section 4.3, *Biological Resources*.

2.5.12 WILDLIFE

Biological surveys of the Project site identified the presence of the Orange-throated whiptail (*Aspidoscelis hyperythra*), Red diamond rattlesnake (*Crotalus ruber*), Swainson's hawk (*Buteo swainsoni*), Southwestern willow flycatcher (*Empidonax traillii extimus*), Least Bell's vireo (*Vireo bellii pusillus*), and the San Diego black-tailed jackrabbit (Lepus californicus bennettii) as occurring within the Project site. Additionally, a total of 40 special status wildlife species were preliminarily identified as having the potential to occur within the Project vicinity. Of those 40 special status wildlife

species, after study, 22 were determined not to occur on the site, and 18 were determined to have the potential to occur on the Project site.

3.0 PROJECT DESCRIPTION

This section provides all of the information required of an EIR Project Description by CEQA Guidelines § 15124, including a description of the Project's precise location and boundaries; a statement of the Project's objectives; a description of the Project's technical, economic, and environmental characteristics; and a description of the intended uses of this EIR including a list of the government agencies that are expected to use this EIR in their decision-making processes; a list of the permits and approvals that are required to implement the Project; and a list of related environmental review and consultation requirements.

Under existing conditions, the 336.2-acre site consists of largely undeveloped hillside terrain containing native and non-native vegetation with scattered dirt trails. The Project proposes to develop the site with up to 874 residential dwelling units, including a maximum of 450 Low Density (2.1-8.0 dwelling units per acre [du/ac]) detached homes, 293 Medium Density (8.1-16 du/ac) conventional detached single-family homes, and 131 High Density (16.1-22 du/ac) attached townhomes. The Project also proposes the following non-residential uses: 1.2 acres of retail land uses (Neighborhood Commercial) use on the southeastern portion of the site, 19.3 acres of recreational open space (located primarily on the northwest portion of the site), 199.7 acres of preserved natural habitat (Open Space-Resources), a 0.8-acre fire station site, and a 10.3-acre school site. In the case that the Colton Joint Unified School District selects not to develop a school facility within Planning Area 12, the Planning Area can be developed with up to 165 Medium Density residential dwelling units. Additionally, in the case that the City of Colton Fire Department selects not to develop a fire station within Planning Area 13, the Planning Area can be developed with 11 Medium Density residential units. If Planning Areas 12 and 13 are not developed for use as an elementary school and fire station, respectively, the total maximum number of dwelling units within the Roquet Ranch Specific Plan Area would be increased to 1,050. Additionally, the Project proposes the construction of a hierarchal roadway circulation system and utility infrastructure systems to serve the Roquet Ranch community.

This EIR analyzes the physical environmental effects associated with all components of the proposed Project, including planning, construction, and ongoing operation. The governmental approvals requested from the City of Colton to implement the Project (DAP-001-228) consist of the following:

1. Adoption by resolution of a Specific Plan;
2. Adoption by resolution of a General Plan Amendment;
3. Adoption by ordinance of a Change of Zone; and
4. Approval of a Phased Tentative Tract Map (TTM 19983).

The Project's applications, as submitted to the City of Colton by the Project Applicant, are herein incorporated by reference pursuant to CEQA Guidelines § 15150 and are available for review at the City of Colton Planning Department, 650 North La Cadena Drive, Colton, CA 92324. All other discretionary and administrative approvals that would be required of the City of Colton or other government agencies are also within the scope of the Project analyzed in this EIR.

3.1 PROJECT LOCATION

The Roquet Ranch Project Site comprises 336.2 acres of land within the southwestern portion of the City of Colton, California known as La Loma Hills. From a regional perspective, and as previously depicted in Figure 2-1, *Regional Map,* the Project is located north of the City of Riverside and unincorporated Riverside County, and approximately two (2) miles north of the intersection of State Route 60 (SR-60), SR-91, and Interstate 215 (I-215); east of the City of Rialto, and approximately 11.3 miles east of I-15; approximately 2.3 miles south of I-10; and west of the City of Grand Terrace and approximately 0.85 miles west of the I-215. At the local scale, the Project site is approximately 0.1 miles north of Center Street, 350 feet east of Old Pellissier Road and east of the Santa Ana River (distance varies), 0.25 miles south of Litton Avenue, and west of La Cadena Drive (distance varies). The San Bernardino International Airport/Norton Air Force Base is located approximately 6.0 miles northeast of the Project site.

As shown previously in Figure 2-7, *USGS Topographic Map*, the Project is located in portions of Section 6, Township 2 South, Range 4 West, San Bernardino Baseline and Meridian. The Project site encompasses Assessors' Parcel Numbers (APNs): 116-701-101, 116-702-101, 116-701-102, 116-702-105, 116-702-121, 116-703-118, 116-702-123, and 116-702-122.

Refer to EIR Subsection 2.0, *Environmental Setting*, for more information related to the regional and local setting of the Project site.

3.2 STATEMENT OF OBJECTIVES

The underlying purpose of the proposed Project is to develop the Project site as a master-planned residential community. The primary objective of the proposed Project is to develop a community of residential villages accompanied by recreational areas, open spaces, and commercial areas in order to achieve maximum utilization of the existing and proposed land use designations applied to the property by the City of Colton General Plan, as well as comply to the greatest feasible extent with applicable City of Colton standards, codes, and policies. The following is a list of specific objectives that the proposed Project intends to achieve.

A. To develop a master-planned community that is compatible with the surrounding areas.

B. To provide high-quality housing opportunities that are marketable and accessible within the City of Colton.

C. To preserve natural hillsides, natural habitats, and natural drainage courses within open space where feasible.

D. To provide a range of housing types and styles that appeal to a diversified range of households and income levels.

E. To cluster development areas in order to provide neighborhood parks with active and passive recreational amenities for residents of the Roquet Ranch community and the City of Colton as a whole.

F. To provide neighborhood-oriented retail services which generate sales tax revenue for the City of Colton.

G. To provide sites available to the Colton Unified School District (CUSD) and Colton Fire Department (CFD) for their potential use as an elementary school site and fire station site, respectively.

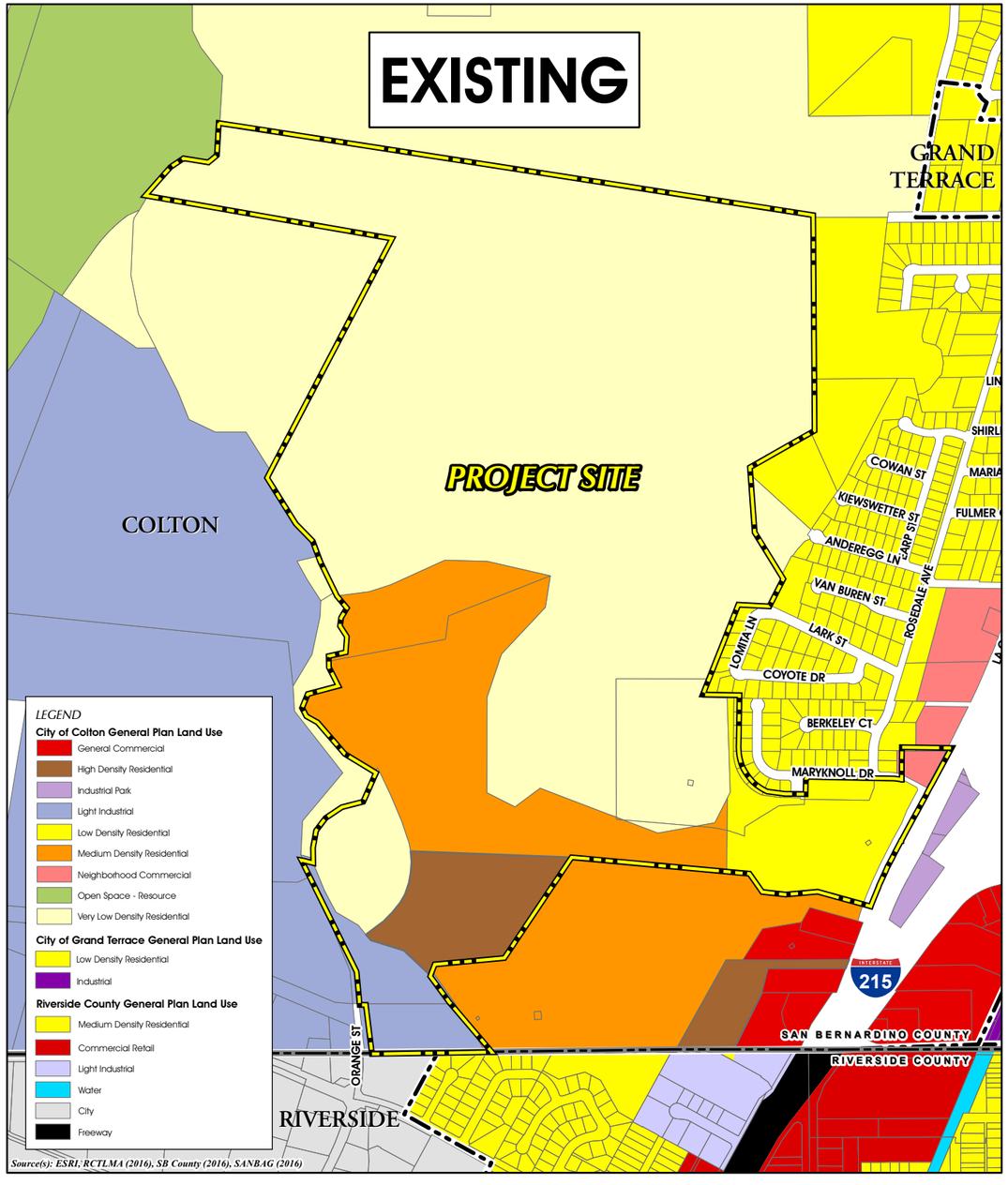
3.3 PROJECT'S COMPONENT PARTS

The proposed Project consists of applications for General Plan Amendment, Specific Plan, Change of Zone, and a Phased Tentative Tract Map No. 19983. A summary of each of these discretionary approvals that are sought by the Project Applicant is provided below. Additional discretionary and administrative actions that would be necessary to implement the proposed Project are listed in Table 3-6, *Matrix of Project Approvals/Permits*, at the end of this EIR section.

3.3.1 GENERAL PLAN AMENDMENT

As shown on Figure 3-1, *Existing and Proposed General Plan Land Use Designations*, the Colton General Plan designates the majority of the Project site as "Very Low Density Residential" (0.1-2 d.u./ac), with the remaining southern portions of the site designated as "Low Density Residential" (2.1-8 d.u./ac), "Medium Density Residential" (8.1-16 d.u./ac), "High Density Residential" (16.1-22 d.u./ac), "Neighborhood Commercial," and "Light Industrial". According to the City of Colton General Plan, the Neighborhood Commercial land use designation allows for a variety of retail, office, and service-oriented business activities that serve a local neighborhood area and population. The maximum building intensity allowed within the Neighborhood Commercial land use designation is implemented by a Floor Area Ratio (FAR) of 0.5. The Light Industrial land use designation supports a variety of fabrication, manufacturing, assembly, distribution, warehouse uses, and commercial and office uses. The maximum building intensity allowed within the Light Industrial land use designation is a FAR of 0.5. (City of Colton, 2015a, pp. LU 21 - LU 25)

As shown on Figure 3-1, the Project Applicant is seeking a General Plan Amendment (GPA) to change the City of Colton General Plan land use designations for the 336.2-acre Project site from Very Low Density Residential, Low Density Residential, Medium Density Residential, High Density Residential, Neighborhood Commercial, and Light Industrial to "Specific Plan" to facilitate development of the Roquet Ranch Specific Plan. With approval of the GPA, the specific land use designations proposed as part of the Roquet Ranch Specific Plan would apply to the entire Project site, and would include "Low Density Residential", "Medium Density Residential", "High Density Residential," "Neighborhood Commercial", "Public/Institution", "Open Space-Recreation", and "Open Space-Resource".



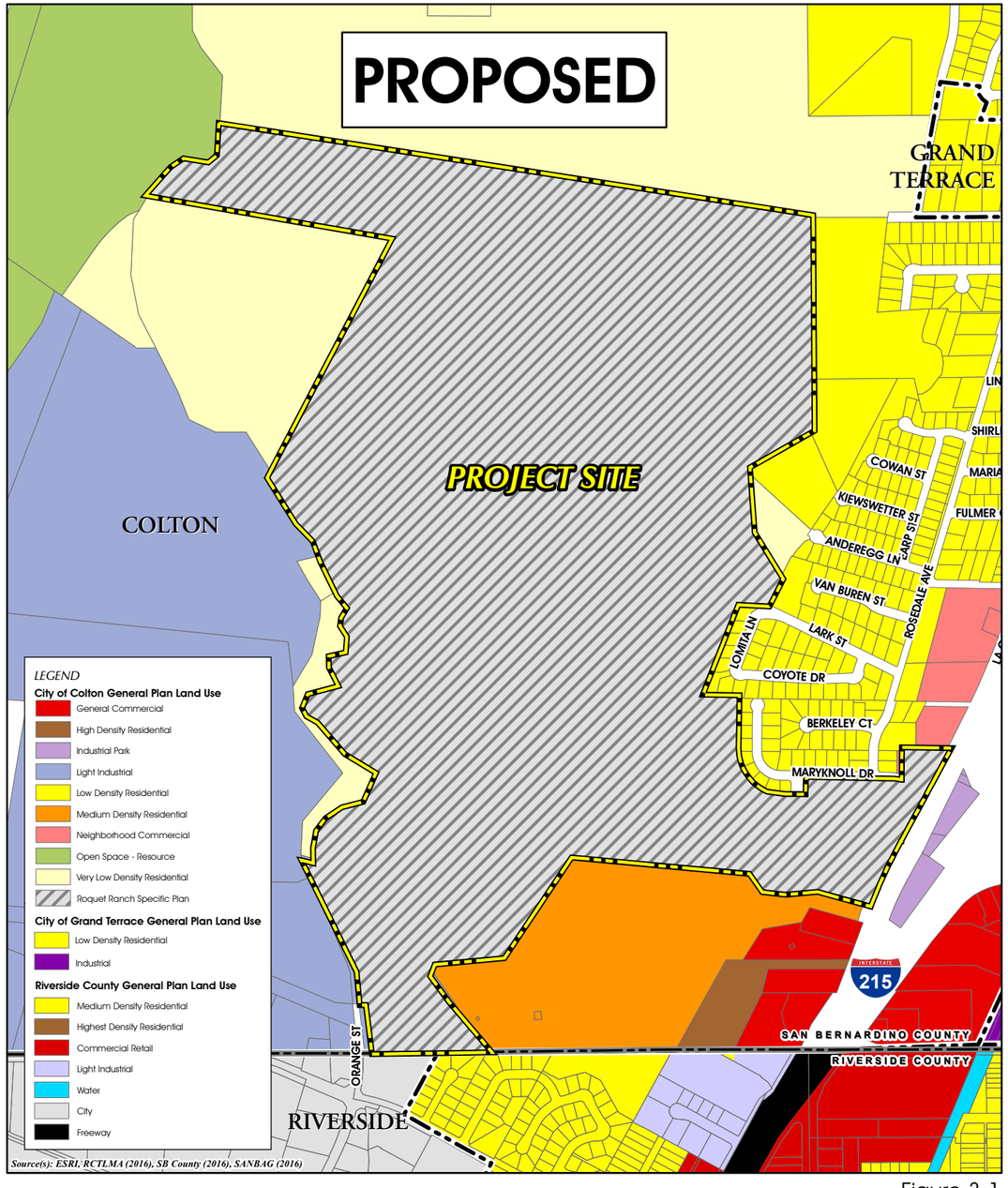
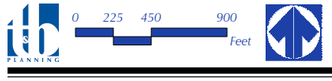


Figure 3-1



EXISTING AND PROPOSED GENERAL PLAN LAND USE DESIGNATIONS

3.3.2 CHANGE OF ZONE

The City of Colton Zoning Ordinance, which is part of the City's Municipal Code, assigns a zoning designation to all properties inside the City's boundaries. Development is required by law to comply with the provisions of the Zoning Ordinance. A change of zone is proposed as part of the Project, as shown on Figure 3-2, *Existing and Proposed Zoning Designations*.

Under existing conditions, the northern portion of the majority of the Project site is zoned for "Very Low Density Residential (VLDR)," while the remaining southern portions of the Project site are zoned for "Medium Density Residential (R-2)," "Multiple-Family Residential (R-3/R-4)," "Light Industrial (M-1)," and "Neighborhood Commercial (C-1)" (City of Colton, 2016b). According to the City of Colton Municipal Code, the M-1 zoning designation allows for "…a variety of fabrication, manufacturing, assembly, distribution, and warehouse uses and, to a lesser degree, supporting commercial and office uses" (City of Colton, 2016a, Section 18.26.010).

As shown on Figure 3-2, the change of zone proposes to change the zoning designations of the site from "Very Low Density Residential (VLDR)," "Medium Density Residential (R-2)," "Multiple-Family Residential (R-3/R-4)," "Light Industrial (M-1)," and "Neighborhood Commercial (C-1)" to "Specific Plan Zone (SP Zone)" to provide amended land use and development standards for the subject property and formalize planning area boundaries that reflect the proposed Roquet Ranch Specific Plan. The proposed SP zoning designation would allow for a variety of uses including residential uses, commercial uses, an elementary school, a fire station, open space, recreational areas, parks, and other uses adopted with the Specific Plan.

3.3.3 SPECIFIC PLAN

A. Proposed Land Uses

The Roquet Ranch Specific Plan proposes to develop the 336.2-acre site with 450 Low Density single-family detached residential units on 60.2 acres; 293 Medium Density residential units on 19.2 acres; 131 High-Density residential townhome units on 6.0 acres; 1.2 acres of Neighborhood Commercial use; a 10.3-acre school site; a 0.8-acre fire station site; 19.3 acres of recreational open space; 199.7 acres of open space as resource preservation; and 16.5 acres of roadways. The Specific Plan would preserve the existing SCE utility easement that transects the site. The Project proposes to cluster development within the most disturbed areas of the Project site and avoid a large portion of the native habitat within the La Loma Hills in order to preserve natural hillsides, natural habitats, and natural drainage courses within open space. The majority of the La Loma Hills in the eastern portion of the Project site would be avoided, and two existing on-site drainages (Drainage E and Tributary E1 within the northwestern portion of the Project site) would only be temporarily impacted for restoration purposes.

The proposed Specific Plan land use plan is depicted on Figure 3-3, *Specific Plan Land Use Plan*, while, Table 3-1, *Specific Plan Land Use Summary*, provides a detailed summary of the proposed land uses.

Specifically, the proposed land uses within the Roquet Ranch Specific Plan are as follows:

- ***Low Density Residential (2.1-8.0 du/ac):*** Roquet Ranch includes a maximum of 450 Low Density Residential homes. In Planning Areas 1, 2, 3, 5, and 7, this density range accommodates conventional, detached homes on minimum 5,000 square-foot (s.f.) lots; 4,000 s.f. lots; 3,825 s.f. lots; 3,400 s.f. lots; and 2,975 s.f. lots. Planning Area 7 includes single family detached homes on minimum 2,975 s.f. lots.

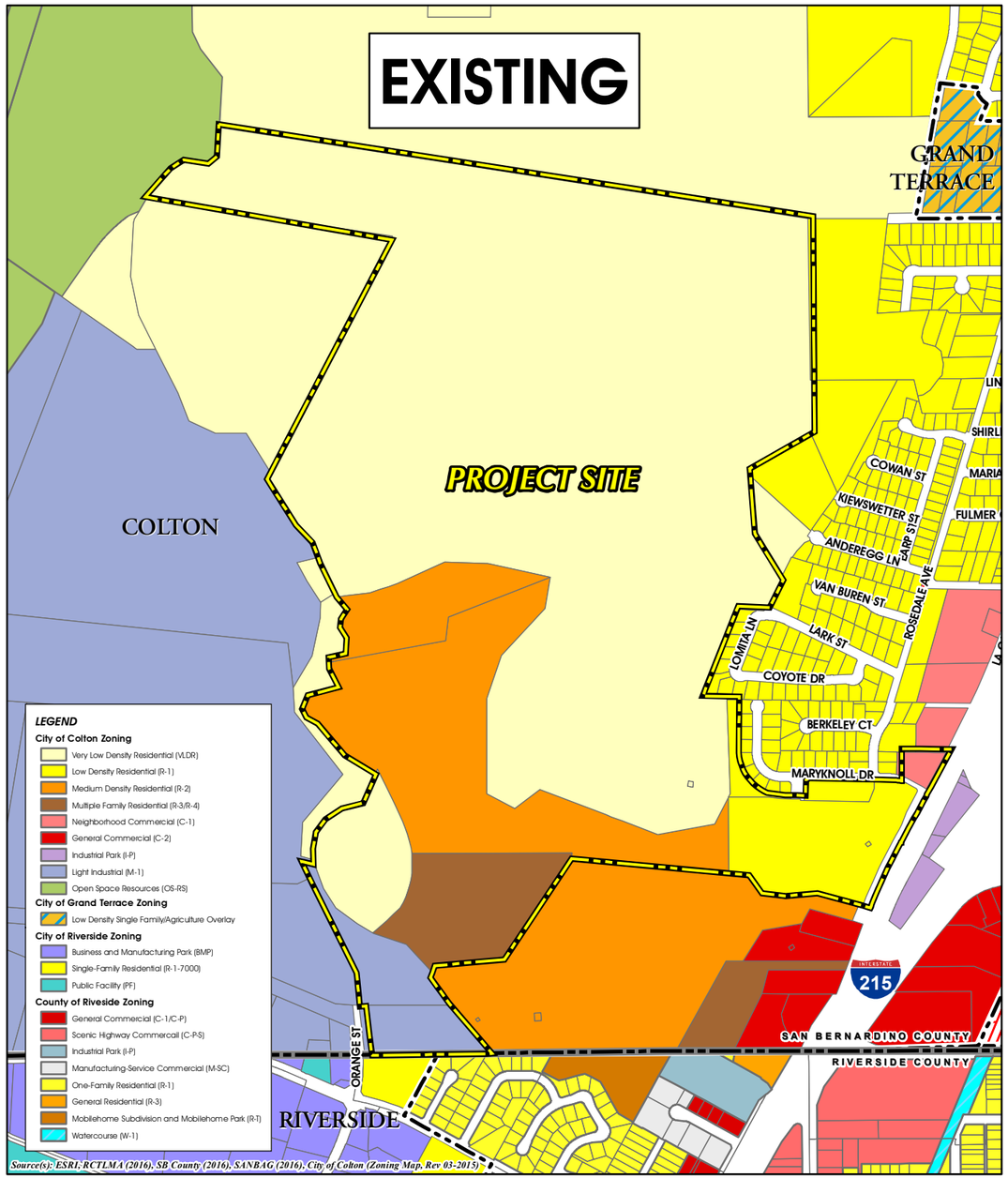
- ***Medium Density Residential (8.1-16 du/ac):*** The Roquet Ranch Specific Plan proposes a maximum of 469 Medium Density Residential homes (if the school facility and fire station are not constructed). Within Planning Area 4, a total of 78 traditional single-family detached residences would be constructed on 5,000 s.f. lots. Within Planning Area 6, a total of 78 single-family residential units would be constructed on minimum lot sizes of 2,975 s.f. Planning Area 9 would be developed with a total of 137 townhome units. Should the Colton Unified Joint School District elect not to construct a school facility within Planning Area 12, it would be developed with a total of 165 townhome units or cluster condominiums. In the event that the City of Colton Fire Department selects not to develop Planning Area 13 with a fire station, the Planning Area would be developed with a total of 11 townhome units.

- ***High Density Residential (16.1-22 du/ac):*** The Roquet Ranch Specific Plan proposes to develop Planning Area 8 with a total of 79 townhome units, and Planning Area 10 with 52 townhome units.

- ***Neighborhood Commercial (FAR=0.5):*** The Roquet Ranch Specific Plan would allow the development of a 1.2-acre neighborhood-serving commercial retail center on the southeastern portion of the Project site within Planning Area 11.

- ***Public Institution:*** The Roquet Ranch Specific Plan proposes a 10.3-acre public school site on the central portion of the Roquet Ranch Specific Plan Area, within Planning Area 12. If the Colton Unified Joint School District decides to not construct the school within the public/institution area, the site may be developed with Medium Density Residential uses to accommodate a maximum of 165 townhome or cluster condominium units. A 0.8-acre fire station site is proposed within Planning Area 13; if the City of Colton Fire Department elects not to construct a fire station within Planning Area 13, then the Planning Area would be developed with up to 11 townhome units. A 3.0-acre recreational vehicle (RV) Parking and Park Overflow area is proposed in Planning Area 15 (to the east of the Community Park). This area would provide Project residents who own a RV with a designated location to park their RVs. In addition, the RV Storage area would provide overflow parking for Rocky Glen Park and The Lodge.

- ***Open Space – Recreation:*** The Project proposes developing 19.3 acres of recreational open space within Planning Areas 14A, 14B, 16, 17, 18, and 19. This includes the development of



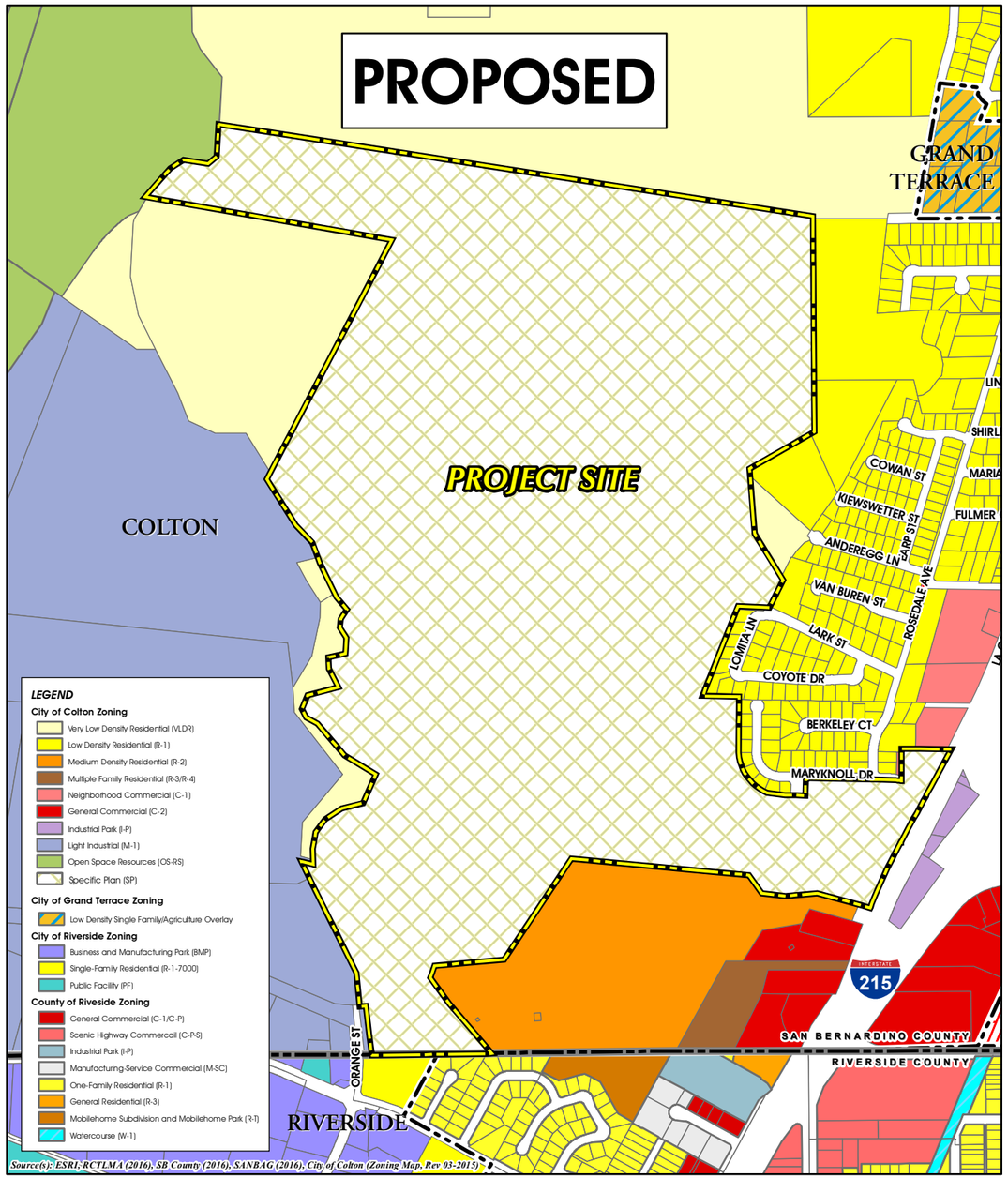


Figure 3-2

0 225 450 900 Feet

EXISTING AND PROPOSED ZONING DESIGNATIONS

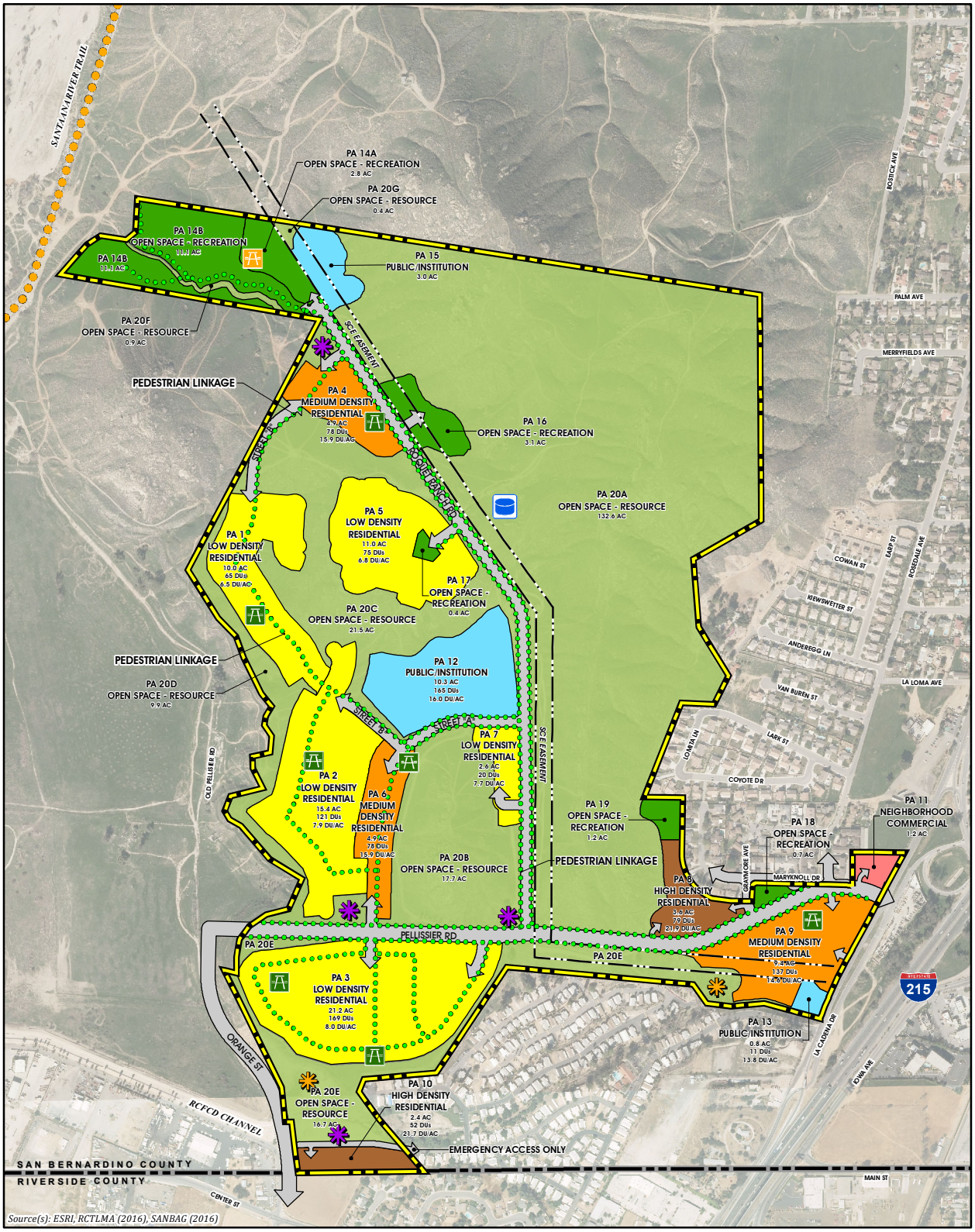


Figure 3-3

0 225 450 900 Feet

SPECIFIC PLAN LAND USE PLAN

Table 3-1 Specific Plan Land Use Summary

PA	LAND USE	DENSITY RANGE (du/ac)[1]	ACRES	TARGET DWELLING UNITS	TARGET DENSITY
Residential					
1	Low Density Residential	2.1-8.0	10.0	65	6.5
2	Low Density Residential	2.1-8.0	15.4	121	7.9
3	Low Density Residential	2.1-8.0	21.2	169	8.0
4	Medium Density Residential	8.1-16.0	4.9	78	15.9
5	Low Density Residential	2.1-8.0	11.0	75	6.8
6	Medium Density Residential	8.1-16.0	4.9	78	15.9
7	Low Density Residential	2.1-8.0	2.6	20	7.7
8	High Density Residential	16.1-22.0	3.6	79	21.9
9	Medium Density Residential	8.1-16.0	9.4	137	14.6
10	High Density Residential	16.1-22.0	2.4	52	21.7
Residential Subtotal		--	*85.4*	*874*	*10.2*
Non-Residential					
11	Neighborhood Commercial	--	1.2	--	--
12	Public/Institution	--	10.3	165[2]	16.0
13	Public/Institution	--	0.8	11[3]	13.8
14A	Open Space-Recreation	--	2.8	--	--
14B	Open Space-Recreation	--	11.1	--	--
15	Public/Institution	--	3.0	--	--
16	Open Space-Recreation	--	3.1	--	--
17	Open Space-Recreation	--	0.4	--	--
18	Open Space-Recreation	--	0.7	--	--
19	Open Space-Recreation	--	1.2	--	--
20A	Open Space-Resource	--	132.6	--	--
20B	Open Space-Resource	--	17.7	--	--
20C	Open Space-Resource	--	21.5	--	--
20D	Open Space-Resource	--	9.9	--	--
20E	Open Space-Resource	--	16.7	--	--
20F	Open Space-Resource	--	0.9	--	--
20G	Open Space-Resource	--	0.4	--	--
	Circulation	--	16.5	--	--
Non-Residential Subtotal		--	*250.8*	*176*	--
ROQUET RANCH TOTAL		**--**	***336.2***	***1,050***	***3.1***

[1]du/ac = dwelling units per acre.
[2]PA 12 is proposed as an elementary school site with Medium Density Residential as an alternative overlay use with a maximum of 165 dwelling units.
[3]PA 13 is proposed as a fire station site with Medium Density Residential as an alternative overlay use with a maximum of 11 dwelling units.

a 13.9-acre Community Park within Planning Areas 14A and 14B as well as four (4) neighborhood parks on a total of 5.4 acres within Planning Areas 16 through 19.

- ***Open Space – Resource:*** A total of 199.7 acres of natural open space is proposed within Planning Areas 20A through 20G, with a majority being located in the northeastern portion of the community to preserve the scenic natural resources of the La Loma Hills. The open space areas also include manufactured slope areas which would be revegetated with native and naturalized landscaping.

- ***Roads/Rights of Way:*** Roadway improvements and dedications are proposed to encompass approximately 16.5 acres of the Project site. The Specific Plan would include roadway improvements associated with Orange Street, Pellissier Road, and Roquet Ranch Road as the main public entryways/roadways on-site as well as several private roadways and alleys to provide accessibility within and between individual planning areas.

B. Specific Plan Design Guidelines

The Roquet Ranch Specific Plan proposes design guidelines for site planning, architecture, landscape, lighting, signage, fencing, and other elements of the built environment. As stated in the proposed Specific Plan, it is the intent of the Specific Plan to establish a community that is integrated with the unique character of the hillside setting in which it is located by using architectural styles and product types suitable for a rural hillside setting. The Roquet Ranch Specific Plan is herein incorporated by reference and available to the public at the City of Colton Planning Department, 659 North La Cadena Drive, Colton, CA 92324.

The Community Theme section (Specific Plan Subsection IV.B) presents community improvements that occur at the community level to set the overall design theme for the Project. These major improvements include streetscapes; community entries; land use transitions; community walls and fences; landscaping; project signage; greenbelts; and parks, trails and open space. The community design theme section is intended to integrate the structural and aesthetic elements of a balanced, active community that captures and enhances the unique character of the hillside setting in which it is located.

The proposed community theme would be established through the use of architectural styles common to Southern California, as well as through landscaping that incorporates plants at focal points throughout the community to reflect the identity of the Project area. The architectural styles for the proposed Project include Craftsman, Farmhouse, Hacienda, Monterey, Spanish Colonial, and Traditional Ranch. The architectural design guidelines also incorporate a variety of site planning concepts to encourage the creation of a dynamic visually interesting street scene and encourage outdoor living spaces. For a detailed description of the proposed design guidelines, refer to the Design Guidelines section (Specific Plan Section IV) of the Specific Plan.

C. Master Circulation Plan

The Roquet Ranch Specific Plan would result in the construction of approximately 16.5 acres of on-

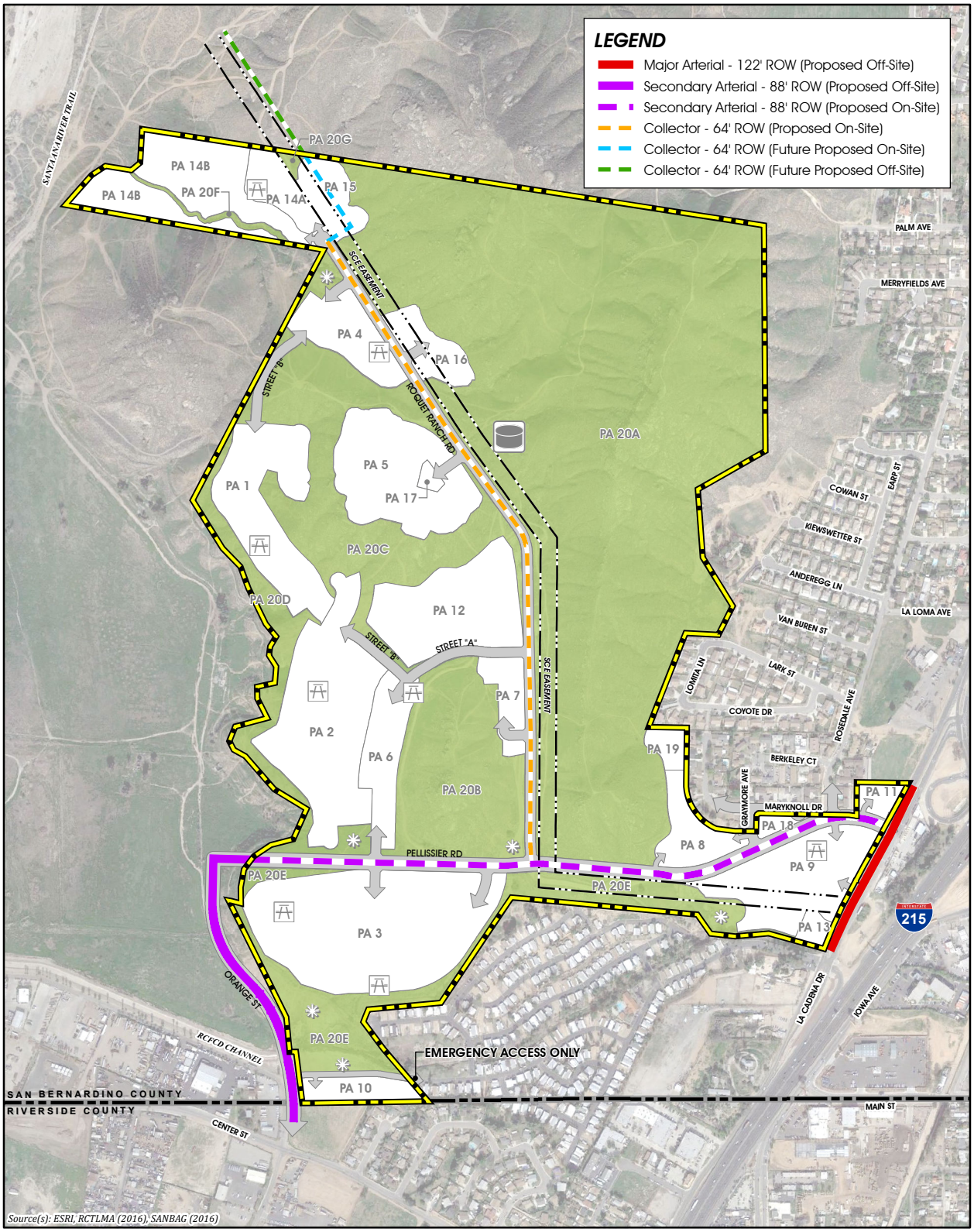
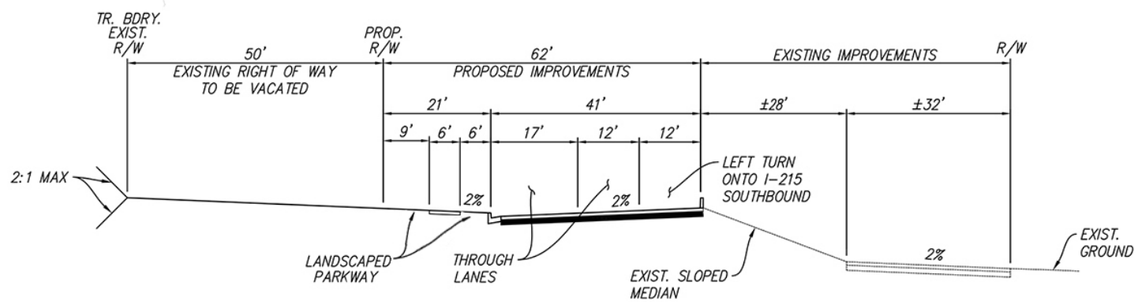


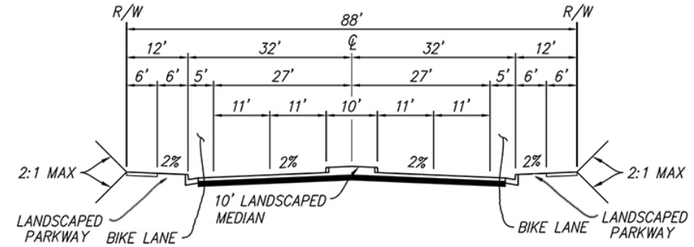
Figure 3-4

MASTER CIRCULATION PLAN



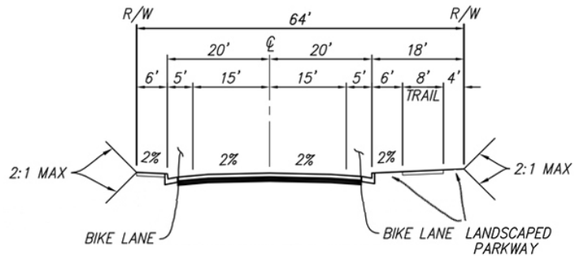
LA CADENA DRIVE

MAJOR ARTERIAL



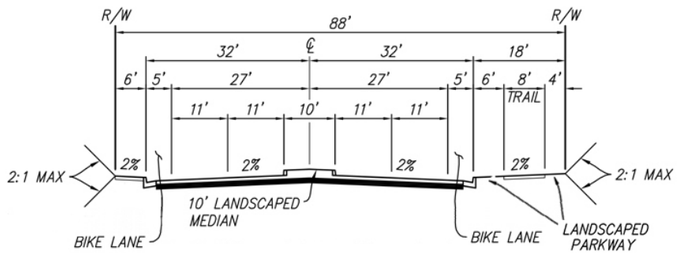
PELLISSIER ROAD

SECONDARY ARTERIAL



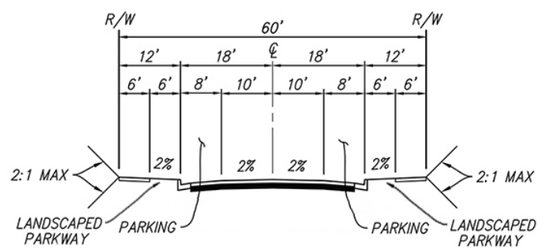
ROQUET RANCH ROAD

COLLECTOR STREET



ORANGE STREET

SECONDARY ARTERIAL



LOCAL STREET

Source(s): K&A Engineering, Inc. (01-16-2017)

Figure 3-5

NOT TO SCALE

ROADWAY CROSS-SECTIONS

site roadways. The Master Circulation Plan, which is a component of the Roquet Ranch Specific Plan, identifies a proposed hierarchical circulation system with new roadway rights-of-way ranging from 60 to 88 feet in width. The proposed roadway system is depicted on Figure 3-4, *Master Circulation Plan*. Figure 3-5, *Roadway Cross-Sections,* identifies the planned improvements to each of the major roadways highlighted on Figure 3-5.

At build out, primary access to the Project site would be provided from the southeast from the existing La Cadena Drive, (a Major Arterial [96' right-of-way with a 12' median]) via existing Pellissier Road (a Secondary Arterial [88' right-of-way]). In addition, primary access to the community from the southwest from Center Street (a Secondary Arterial [100' right-of-way]) would be provided via the existing Orange Street (a Secondary Arterial [88' right-of-way]). Access to the northern portion of the Project site is provided via the existing Roquet Ranch Road, a Collector Street with a 64' right-of-way. The proposed Project would result in the construction of half-width improvements along the Project's frontage with La Cadena Drive. Additionally, the Project would include a 60' roadway easement through Planning Area 15 that could accommodate a future connection between Planning Area 15 and an off-site roadway to the north, should the City construct such a roadway in the future. No roadways to the north of the Project site are planned in the near term, and the proposed Project does not include a roadway connection to the north. Refer to Figure 3-4 and Figure 3-5 for the planned improvements to these roadways. A summary of the roadway cross-sections proposed throughout Roquet Ranch is provided below.

- ***Pellissier Road (88' ROW).*** Pellissier Road would be designated by the Roquet Ranch Specific Plan as a Secondary Arterial, with an 88-foot right-of-way that includes four (4) 13.5-foot wide vehicular travel lanes (two [2] westbound and two eastbound); two (2) 5-foot wide Class II bike lanes (one [1] westbound and one [1] eastbound); and 5-foot wide parkway-adjacent sidewalks in both directions. A 7-foot wide parkway would occur adjacent to the sidewalks on each side of Pellissier Road. Pellissier Road would provide primary access to the Project site from La Cadena Road to the east of the site.

- ***Orange Street (88' ROW).*** Orange Street would be designated by the Roquet Ranch Specific Plan as a Secondary Arterial with an 88-foot right-of-way that includes four (4) 13.5-foot wide vehicular travel lanes (two [2] northbound and two [2] southbound); a 6-foot wide landscaped median; two (2) 5-foot wide Class II bike lanes (one [1] northbound and one [1] southbound); and a 5-foot wide curb-adjacent sidewalk on the west side of the street. On the east side of Orange Street, a 19-foot wide pedestrian easement would be provided, consisting of a 6-foot wide curb-adjacent parkway, 8-foot wide decomposed granite multi-use trail, and 5-foot wide parkway. Orange Street would provide primary access to the Project site from Center Street to the south of the site, subject to the approval of the City of Riverside.

- ***Roquet Ranch Road (64' ROW).*** Roquet Ranch Road would be designated by the Roquet Ranch Specific Plan as a Collector Street, which would include a 64-foot right-of-way comprised of two (2) 15-foot wide travel lanes (one [1] northbound and one [1] southbound), and 5-foot wide Class II bike lanes (one [1] northbound and one [1] southbound). A 6-foot wide curb-adjacent sidewalk would occur on the west side of the Roquet Ranch ROW. A 19-

foot wide trail easement would occur on the east side of Roquet Ranch Road, and would consist of an 8-foot wide multi-use trail in between a 6-foot wide curb-adjacent parkway and 5-foot wide landscaped area. Roquet Ranch Road would provide local access to the residential and open space land uses throughout the majority of the Project from Pellissier Road.

- ***Local Streets (60' Width): Streets A through R.*** These proposed roads would include two (2) 10-foot wide travel lanes, two (2) 8-foot wide parking lanes, and 12-foot wide landscaped parkways on both sides of the right-of-way that include 5.5-foot wide parkway-adjacent sidewalks.

D. Drainage and Water Quality Improvements

The conceptual drainage system for the Roquet Ranch community is illustrated on Figure 4.8-3, *Conceptual Drainage Plan*. As shown on Figure 4.8-3, a network of drainage lines and water quality management basins and water quality/detention basins are proposed throughout the Project site to accommodate storm water runoff flows. The proposed water quality/detention basins are designed according the City of Colton standards to detain and slowly release storm water to allow particles and associated pollutants to settle out. A total of four (4) water quality basins and two (2) water quality/detention basins are proposed throughout the Project site. Of the water quality basins, one would be located in the northwest portion of the Project site to the north of Planning Area 4, and the other three (3) would be located in the southern portion of the Project site. The two (2) water quality/detention basins would be located in the southwest and southeast portions of the Project site within Planning Area 20E. Proposed storm drains would be located within Roquet Ranch Road, Pellissier Road, Orange Street, and local roads and would convey storm water into the six (6) proposed basins. Additionally, an open drainage channel is proposed in the southern portion of the Project site within Planning Area 20E.

Storm water that would be collected from the hillsides north of Planning Area 14B would be discharged to a proposed storm drain system that would convey storm water to the water quality basin located north of Planning Area 4. Storm water that collects from the Planning Areas within the central, southern, and western portions of the Project site would discharge to a system of interceptor drains and storm drains that would convey storm water to proposed water quality basins on the southern portion of the Project site. Additionally, storm water collected on the southeast portion of the Project site would also be discharged to the existing off-site storm drain in La Cadena Drive to the east of the Project site and the existing Cadena Creek channel to the south of the Project site. The two (2) water quality/detention basins on the southern portion of the Project site would receive storm water flows from the southern portions of the Project site prior to being discharged to Cadena Creek and the Highgrove Channel.

E. Water and Sewer Plans

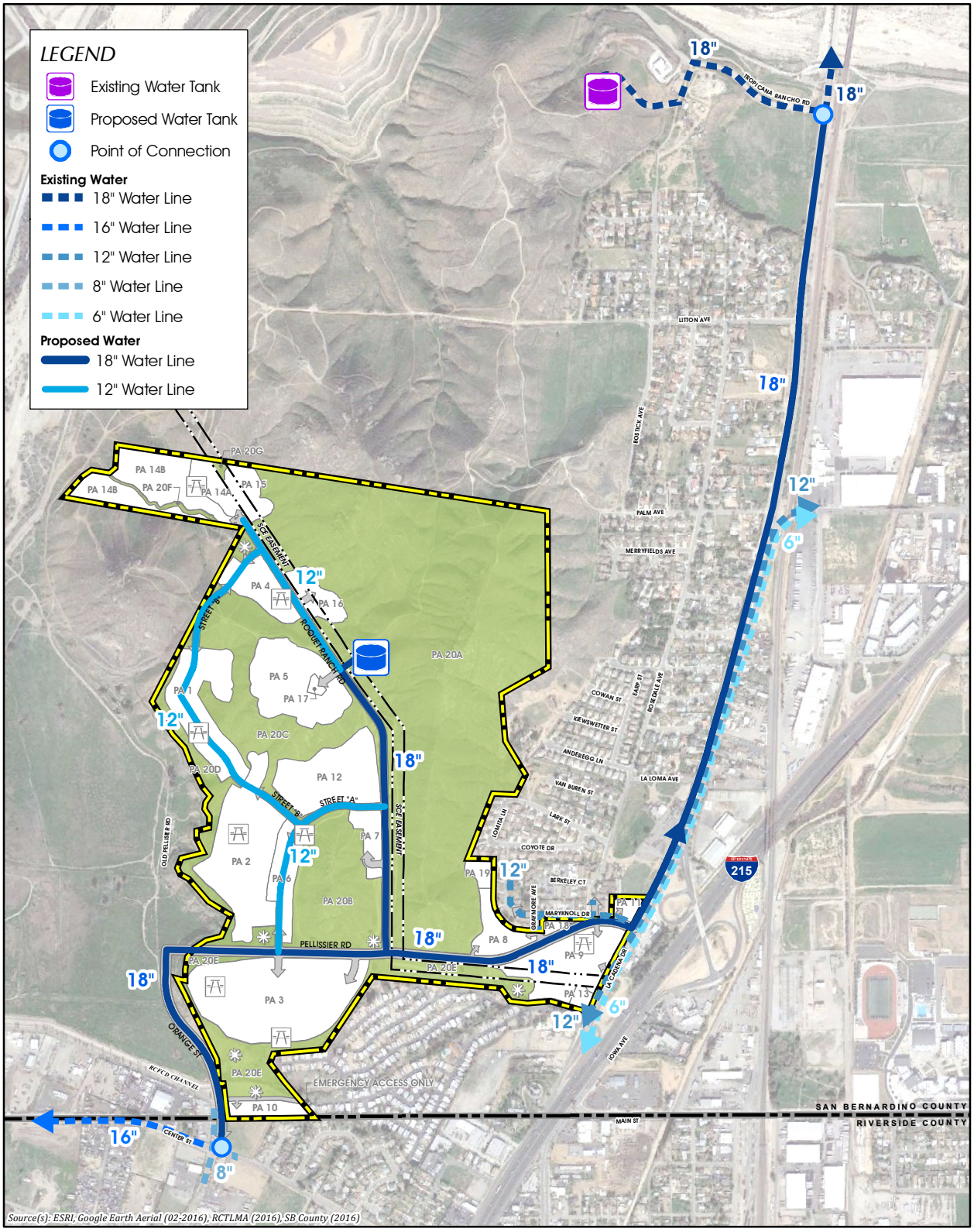
1. Water Plan

Potable water services to the Roquet Ranch Project site would be provided by the City of Colton. As shown in Figure 3-6, *Proposed Conceptual Water Plan*, the community's domestic water system would be composed of a backbone system within four (4) major internal roadways, Roquet Ranch Road, Pellissier Road, Street "A", and "Street B" which would connect to proposed domestic water lines throughout the various Planning Areas. Additional off-site water lines are proposed in La Cadena and Orange Street.

The Project proposes construction of a 12-inch water line in the northern portion of Roquet Ranch Road, Street "A", and Street "B". An 18-inch water line is proposed in the southern portion of Roquet Ranch Road, as well as Pellissier Road, and Orange Street. A series of 8-inch water lines would be provided along the internal access roadways within each Planning Area. A 1.8 million-gallon potable water reservoir is proposed in Planning Area 20A, which would connect to the 18-inch water line in Roquet Ranch Road. As shown in Figure 3-6, two (2) points of off-site connection for water service are proposed, with a connection to an existing 16-inch water line in Center Street to the south (via the proposed 18-inch line in Orange Street), and at the intersection of La Cadena Drive and Tropicana Rancho Road to the northeast (via a proposed 18-inch water line extending northward from the intersection of La Cadena Road and Pellissier Road) which would connect to an existing 18-inch water line in Tropicana Rancho Road that connects to an existing water tank. The existing on-site groundwater extraction well may be utilized at its current extraction rate for landscape irrigation.

2. Sewer Facilities

The City of Colton would provide sewer services to the Project site. As shown on Figure 3-7, *Proposed Conceptual Sewer Plan*, the Project proposes construction of an 8-inch gravity feed sewer line along portions of Roquet Ranch Road, Street "A", Pellissier Road, and internal streets. An 8-inch force main sewer line is proposed in the northwest portion of the site along portions of Roquet Ranch Road and Street "B". The 8-inch gravity feed line and the 8-inch force main would connect to a proposed sewer lift station on the northwest portion of the Project site within Planning Area 14B. A 12-inch force main sewer line is proposed within La Cadena Drive, Pellissier Road, and Orange Street, which would connect to an existing 12-inch force main sewer line in Center Street. An additional 12-inch gravity feed sewer line is proposed within Planning Area 3 which would connect to an off-site existing 10-inch gravity feed sewer line located in the existing residential neighborhood to the adjacent southeast of the Project site. A 15-inch gravity feed sewer line is proposed to extend from the existing residential neighborhood to the adjacent southeast, along the emergency access road between Planning Areas 10 and 20E, and extending south in Orange Street to the point of connection with an existing 12-inch gravity feed sewer line in Center Street. A 12-inch gravity feed sewer line is proposed to extend south from Pellissier Road through Planning Area 9 to the point of connection with an existing 10-inch gravity feed sewer line that occurs on the southeast portion of the Project site. The 10-inch gravity feed sewer line would be realigned to extend southwesterly through the existing mobile home park that



Source(s): ESRI, Google Earth Aerial (02-2016), RCTLMA (2016), SB County (2016)

Figure 3-6

0 325 650 1,300 Feet

PROPOSED CONCEPTUAL WATER PLAN

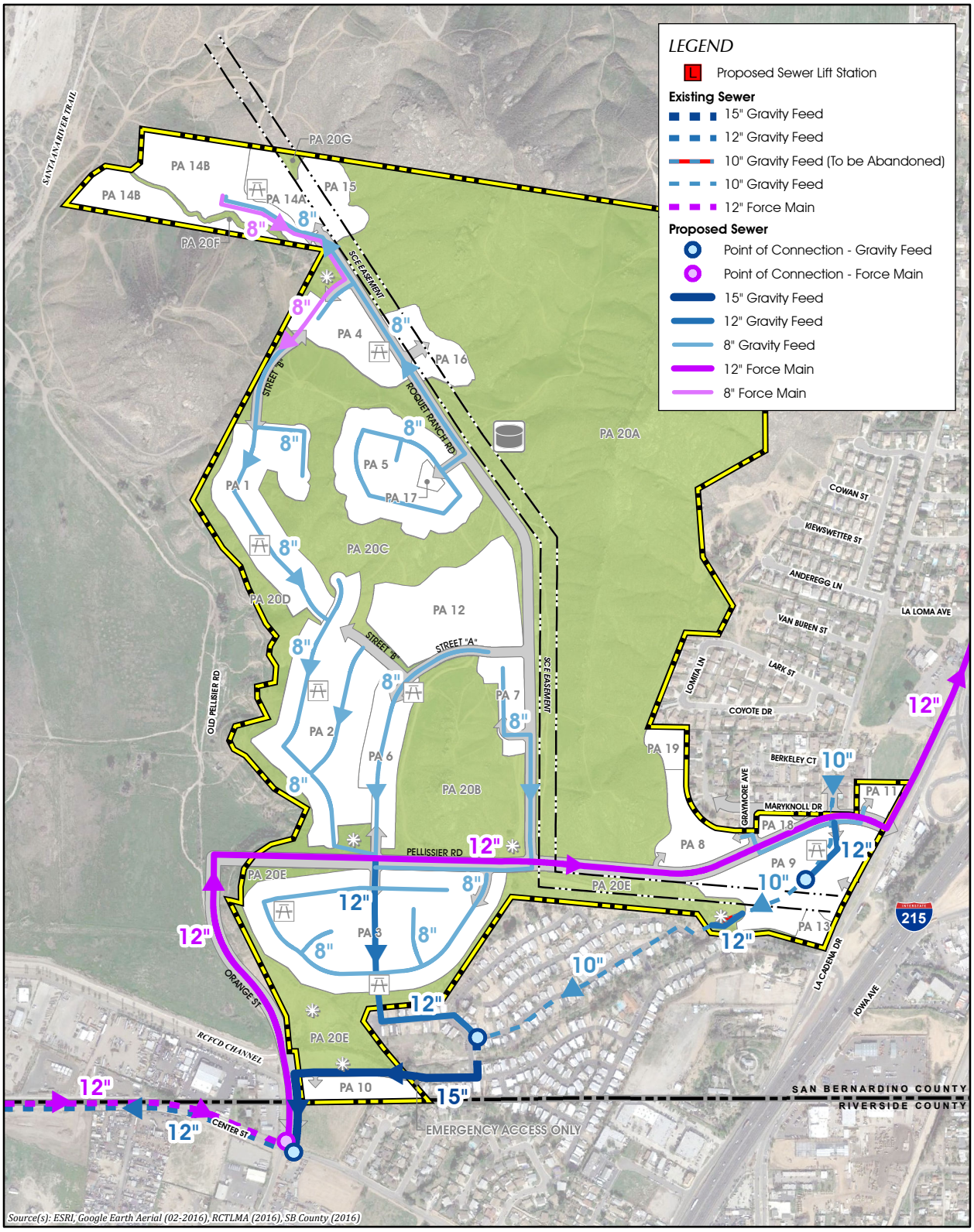


Figure 3-7

PROPOSED CONCEPTUAL SEWER PLAN

Figure 3-8

OPEN SPACE AND RECREATION PLAN

abuts the southern boundary of the Project site. All on-site sewer lines would be maintained by the City of Colton.

F. *Master Open Space and Recreation Plan*

As shown on Figure 3-8, *Open Space and Recreation Plan*, and summarized in Table 3-2, *Open Space and Recreation Plan Summary*, the Project proposes 219 acres of open space and recreation land uses.

Table 3-2 Open Space and Recreation Plan Summary

PA	LAND USE	ACRES
Open Space - Recreation		
14A	Open Space-Recreation – *Community Park*	2.8
14B	Open Space-Recreation – *Community Park*	11.1
16	Open Space-Recreation – *Neighborhood Park*	3.1
17	Open Space-Recreation – *Neighborhood Park*	0.4
18	Open Space-Recreation – *Neighborhood Park*	0.7
19	Open Space-Recreation – *Neighborhood Park*	1.2
	Open Space - Recreation Subtotal	*19.3*
Open Space - Resource		
20A	Open Space-Resource	132.6
20B	Open Space-Resource	17.7
20C	Open Space-Resource	21.5
20D	Open Space-Resource	9.9
20E	Open Space-Resource	16.7
20F	Open Space-Resource	0.9
20G	Open Space-Resource	0.4
	Open Space - Resource Subtotal	*199.7*

- ***Open Space-Recreation.*** Three types of recreational uses are proposed:
    - ***Community Parks:*** The Roquet Ranch Specific Plan proposes a 13.9-acre Community Park (Planning Areas 14A and 14B) in the northwestern portion of the Project site. The proposed Community Park would include the following recreational amenities: basketball court, a baseball field, soccer fields, barbeque area with shade structures, tot lots, restroom facilities, a private recreational facility, a passive native meadow area with shade pavilions and picnic seating, and dog parks. The westernmost termination point of the pedestrian trail within Planning Area 14B would be designed to accommodate a future connection to the Santa Ana River Trail (not proposed by this Project).
    - ***Pocket Parks:*** Seven (7) Pocket Parks are proposed throughout the Project site (within Planning Areas 1 through 4, 6, and 8). The Pocket Parks include recreational amenities such as shaded tot lots, open play fields, and picnic and seating areas.

- ***Neighborhood Parks:*** Four (4) Neighborhood Parks are proposed throughout the Project site (within Planning Areas 16 through 19), which would be public parks that would include recreational amenities such as covered picnic areas, tot lots, open play fields, and community gardens.

- ***Open Space-Resource:*** The Open Space-Resource areas are proposed to encompass approximately 199.7 acres throughout the Project site, with a majority being located in the northeastern portion of the community to preserve the scenic natural resources of the La Loma Hills (Planning Areas 20A through 20G). The open space areas also include manufactured slope areas, which would be subject to minimal grading and revegetated with native and naturalized landscaping.

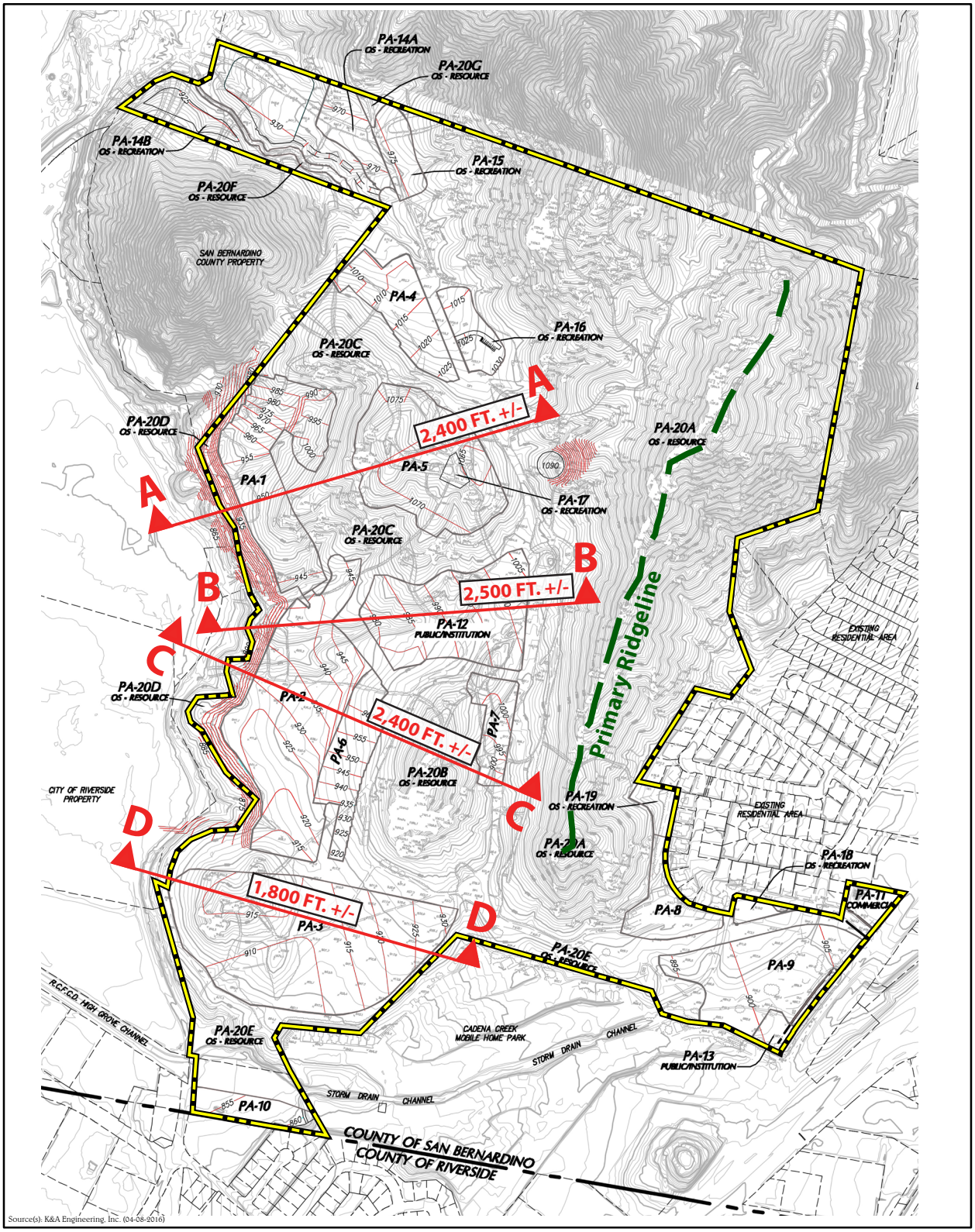
G. Grading Plan

As shown in Figure 3-9, *Conceptual Grading Plan*, the Specific Plan contains a conceptual grading plan, which conceptually would establish the development pads, provide for appropriate site drainage, and accommodate necessary utility infrastructure. The proposed site grading would remain sensitive to natural land formations within the Project boundary and neighboring land uses. A total of 199.7 acres would be designated as Open Space-Resource on the northeast portion of the Project site, which would be left undisturbed and undeveloped, with the exception of the area around roadways and the proposed water tank which would be graded to support these adjacent uses and then maintained as open space thereafter. Erosion control measures would be applied to portions of undeveloped slope areas adjacent to major roadways and residential planning areas within the community; these disturbed Open Space-Resource areas would be revegetated and owned and maintained by the Master Home Owners' Association.

The area proposed to be graded by the Project totals approximately 238.2 acres, which includes the off-site improvement areas. Grading would require approximately 1.95 million cubic yards (cy) of cut and 1.8 million cy of fill; approximately 0.15 cy of earthwork materials is anticipated to be exported from the site. Cut slopes would occur along the portions of the western Project boundary (including off-site areas) that abut the foothills of the La Loma Hills in order to maintain the integrity of the mountain side and protect nearby residents. Minor grading would occur within the Open Space-Resource areas in order to provide for hillside stabilization around roadways, parks, and planning areas containing residential, public institution, and commercial land uses. Additionally, grading is proposed within portions of the Open Space-Resource area (Planning Area 20A) to the east of the proposed water tank in the central area of the Project site in order to provide hillside stabilization. As shown on Figure 3-9, final graded elevations are proposed to be between 865 ft. above mean sea level (amsl) at immediately off-site to the west of Planning Area 1, and 1,075 ft. amsl in Planning Area 5.

H. Maintenance Plan

The Specific Plan includes a Maintenance Plan, which establishes the maintenance districts and associations and what their responsibilities are within the Project area. It is anticipated that public roadways would be maintained by the City of Colton. Other common Project facilities would be



Source(s): K&A Engineering, Inc. (04-08-2016)

Figure 3-9

NOT TO SCALE

CONCEPTUAL GRADING PLAN

divided among a Master Homeowners' Association, Neighborhood Associations, and/or similar maintenance mechanisms.

It is anticipated that maintenance responsibilities for certain flood control facilities would be assumed by the San Bernardino County Flood Control District. Maintenance of other common Project facilities and landscaping would be the responsibility of either the City of Colton, the community's Master Homeowners Association (HOA), Residential Neighborhood Association (RNA), Community Service Area (CSA) or similar public, semi-public or private maintenance organizations.

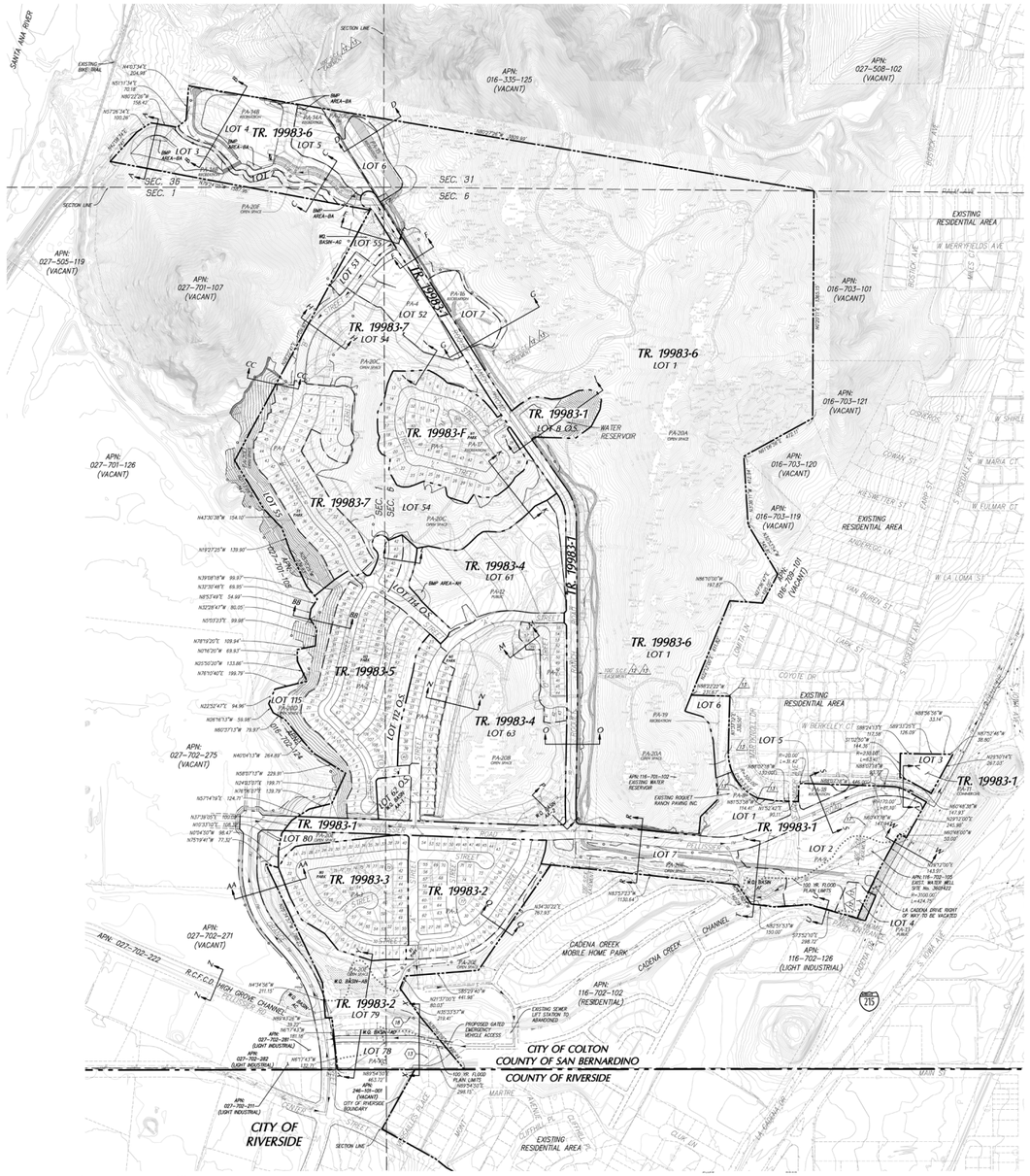
The City of Colton would assume ownership and maintenance of the sewer facilities, water facilities, street lighting, Rocky Glen Park, neighborhood parks, and public roadways. It is anticipated that private roads and parks (those which would not be directly associated with a CSA, a Parks and Recreation District, or a similar public agency for maintenance) would be maintained by the Master HOA or RNA.

Any open space or park areas not directly associated with a CSA, a Parks and Recreation District, or a similar public agency for maintenance would be the responsibility of the Master HOA or an RNA. The RV parking area proposed in Planning Area 15 would be maintained by the Master HOA or an RNA. It is anticipated the natural open space areas (Planning Areas 20A-G) would be conveyed to a public, semi-public or private conservation organization. Following conveyance, the open space areas would be maintained by the acquiring conservation organization. Should the areas not be conveyed to a conservation organization, the Project HOA would own and maintain them. The elementary school site in Planning Area 12 would be maintained by CUSD. Colton Fire Department would maintain the fire station site within Planning Area 13.

The San Bernardino County Flood Control District would maintain major backbone drainage/flood control facilities (all facilities of 42 inches and larger). Drainage/flood control facilities less than 42 inches (i.e., much of the local drainage devices, inlets, catch basins, storm drains, etc., constructed in roadways and drainage easements) would be maintained by the Project Master HOA.

3.3.4 TENTATIVE TRACT MAP NO. 19983

Figure 3-10, *Tentative Tract Map No. 19983*, depicts the proposed Tentative Tract Map (TTM) No. 19983, which proposes to subdivide approximately 336.2 acres of the Project site into specific lot configurations within each Planning Area to allow for proposed development. The TTM would establish a subdivision of 434 residential lots and one (1) commercial lot. The remaining areas of TTM 19983 are proposed for 431 Medium Density Residential units, 131 High Density Residential units, a 10.3-acre school site, a 0.8-acre fire station site, open space, parks, trails, landscape, water quality retention basins, and roads. TTM No. 19983 also indicates 16.5 acres would consist of roadways, Table 3-3, *Total Land Use Summary in Tentative Tract Map No. 19983*, shows the breakdown of land uses indicated by TTM 19983.



Source(s): K&A Engineering, Inc. (January 2017)

LEGAL DESCRIPTION
SEE SHEET 3

DATE
NOVEMBER, 2016

ENGINEER
K & A ENGINEERING, INC.
357 N. SHERIDAN STREET, SUITE 117
CORONA, CA 92880
PHONE: (951) 279-1800
PROJECT MANAGER: JIM BOLTON, P.E.

APPLICANT
SUNMEADOWS, LLC
27127 CALLE ARROYO, SUITE 1910
SAN JUAN CAPISTRANO, CA 92675
PHONE: (949) 218-6023
ATTENTION: WILLIAM LO

OWNER
APN: 116-701-101, 116-702-101, 116-703-118, 116-701-102, 116-702-105 & 116-702-121
ROQUET RANCH, LLC
C/O JN REALTY & DEVELOPMENT, INC.
7095 INDIANA AVENUE
RIVERSIDE, CA 92506
MANAGERS: MARY COWELL & THERESA TATE

OWNER
APN: 116-702-122 & 116-702-123
G.W. SINGLETARY PRIVATE REVOCABLE LIVING TRUST
1733 MASSACHUSETTS AVENUE
RIVERSIDE, CA 92507
ATTENTION: GAYLENE TAYLOR

UTILITIES AND SERVICES

	AGENCY SERVING THE AREA	FACILITIES PRESENT
ELECTRIC:	CITY OF COLTON	YES
GAS:	SOUTHERN CALIFORNIA GAS CO.	YES
TELEPHONE:	VERIZON	YES
CABLE TV:	TIME WARNER	YES
WATER:	CITY OF COLTON	YES
SEWER:	CITY OF COLTON	YES

SCHOOL DIST: COLTON UNIFIED SCHOOL DISTRICT

PROPERTY ACREAGE
TOTAL TTM GROSS 336.2 AC.

ASSESSOR'S PARCEL NUMBER
116-701-101, 116-702-101, 116-703-118
116-701-102, 116-702-105, 116-702-121
116-702-122, 116-702-123

THOMAS BROTHERS MAP
THOMAS GUIDE SAN BERNARDINO (2007) PAGE 686

EXISTING GENERAL PLAN DESIGNATIONS
(VLDR) VERY LOW DENSITY RESIDENTIAL, (MD) MEDIUM DENSITY RESIDENTI
(HD) HIGH DENSITY RESIDENTIAL, (LD) LOW DENSITY RESIDENTIAL
(LI) LIGHT INDUSTRIAL, (NC) NEIGHBORHOOD COMMERCIAL

PRESENT USE
VACANT

PROPOSED USE
RESIDENTIAL, PUBLIC, COMMERCIAL, RECREATION & OPEN SPACE

EXISTING ZONING
R-1, R-2, R-3, R-4, VLDR, C-1 & M-1

PROPOSED ZONING
R-1, R-2, R-3, R-4, C-1, P-I, OS-R & OS-RS

PROPOSED DEVELOPMENT

PA-1	RESIDENTIAL	10.0 AC
PA-2	RESIDENTIAL	15.4 AC
PA-3	RESIDENTIAL	21.2 AC
PA-4	RESIDENTIAL	4.9 AC
PA-5	RESIDENTIAL	11.0 AC
PA-6	RESIDENTIAL	4.9 AC
PA-7	RESIDENTIAL	2.6 AC
PA-8	RESIDENTIAL	3.6 AC
PA-9	RESIDENTIAL	9.4 AC
PA-10	RESIDENTIAL	2.4 AC
PA-11	COMMERCIAL	1.2 AC
PA-12	PUBLIC/INSTITUTION	
	RESIDENTIAL	10.3 AC
PA-13	PUBLIC/INSTITUTION	
	RESIDENTIAL	0.8 AC
OPEN SPACE (RECREATION)		22.3 AC
OPEN SPACE (RESOURCE)		199.7 AC
CIRCULATION		16.5 AC

TOTAL AREAS = 336.2

EARTHWORK QUANTITY ESTIMATE
1,840,000 C.Y. CUT
1,814,000 C.Y. FILL

GEOLOGIC HAZARD NOTE
PROJECT SITE HAS VERY LOW POTENTIAL FOR LIQUEFACTION
GEOLOGICAL HAZARD: LEIGHTON AND ASSOCIATES, INC.
GEOLOGICAL INVESTIGATION, DATED AUGUST 11, 2015

WELLS
THERE IS ONE EXISTING WATER WELL ON SITE

EXISTING EASEMENT NOTES
SEE SHEET 4

FLOOD PLAIN DESIGNATION
A POTION OF THIS LAND IS SUBJECT TO OVERFLOW INUNDATION OR FLOOD HAZARD.
FEMA FIRM PANEL No. 06071C8686H, 06071C8687H, 0671C8688H & 06071C8689
DATED: AUGUST 28, 2008

LEGEND:

LOT NUMBER	431
PAD ELEVATION	900.0
EASEMENT NOTES	X X
S.C.E. ACCESS	
PARCEL BOUNDARY	
TRACT BOUNDARY	
PROPOSED RIGHT OF WAY	
EXISTING LOT LINE	
PLANNING AREA BOUNDARY	
100 YEAR FLOOD PLAIN LIMITS	
PROPOSED CONTOUR	1200
EXISTING CONTOUR	1200
DAYLIGHT LINE	
O.S.	OPEN SPACE
EXISTING R/W TO BE VACATED	
FM	SEWER FORCE MAIN
SD	STORM DRAIN
RCB	REINFORCED CONCRETE BOX CULVERT

Figure 3-10

NOT TO SCALE

TENTATIVE TRACT MAP NO. 19983

Table 3-3 Total Land Use Summary in Tentative Tract Map No. 19983

Land Use	Acreage
Residential	85.4
School	10.3
Fire Station	0.8
Neighborhood Commercial	1.2
Parks	19.3
Open Space/Landscape	199.7
Circulation	16.5
Gross Acreage:	336.2

3.4 PROJECT CONSTRUCTION AND OPERATIONAL CHARACTERISTICS

3.4.1 CONSTRUCTION DETAILS

A. Proposed Physical Disturbances

Physical disturbances necessary to implement the proposed Project are depicted on Figure 3-11, *Proposed Physical Disturbances*. As shown, proposed grading activities would result in impacts to approximately 238.2 acres.

Off-site improvements proposed by the Project include the following:

- Construction of a 12-inch underground sewer force main in La Cadena Drive between the eastern Project boundary (intersection of La Cadena Drive and Pellissier Drive) and Deberry Street;
- Construction of underground electric utilities in La Cadena Drive along the property frontage (intersection of La Cadena Drive and Maryknoll Drive);
- Construction of an 18-inch underground water line in La Cadena Drive between the eastern Project boundary (intersection of La Cadena Drive and Pellissier Drive) and Tropicana Ranch Road;
- Construction of a 15-inch underground sewer main in unnamed roads to the south of the Project boundary, and between the southwest Project boundary and Center Street;
- Abandonment of an existing sewer lift station in the residential neighborhood that abuts the Project site to the south;
- Construction of underground electric lines in Pellissier Road from western Project boundary to intersection of Orange Street and Pellissier Road;
- Construction of underground force main and water main utilities in Orange Street south to the intersection of Orange Street and Center Street;
- Construction of underground electric lines in Orange Street south to the intersection of Orange Street and the existing RCFCD right-of-way;

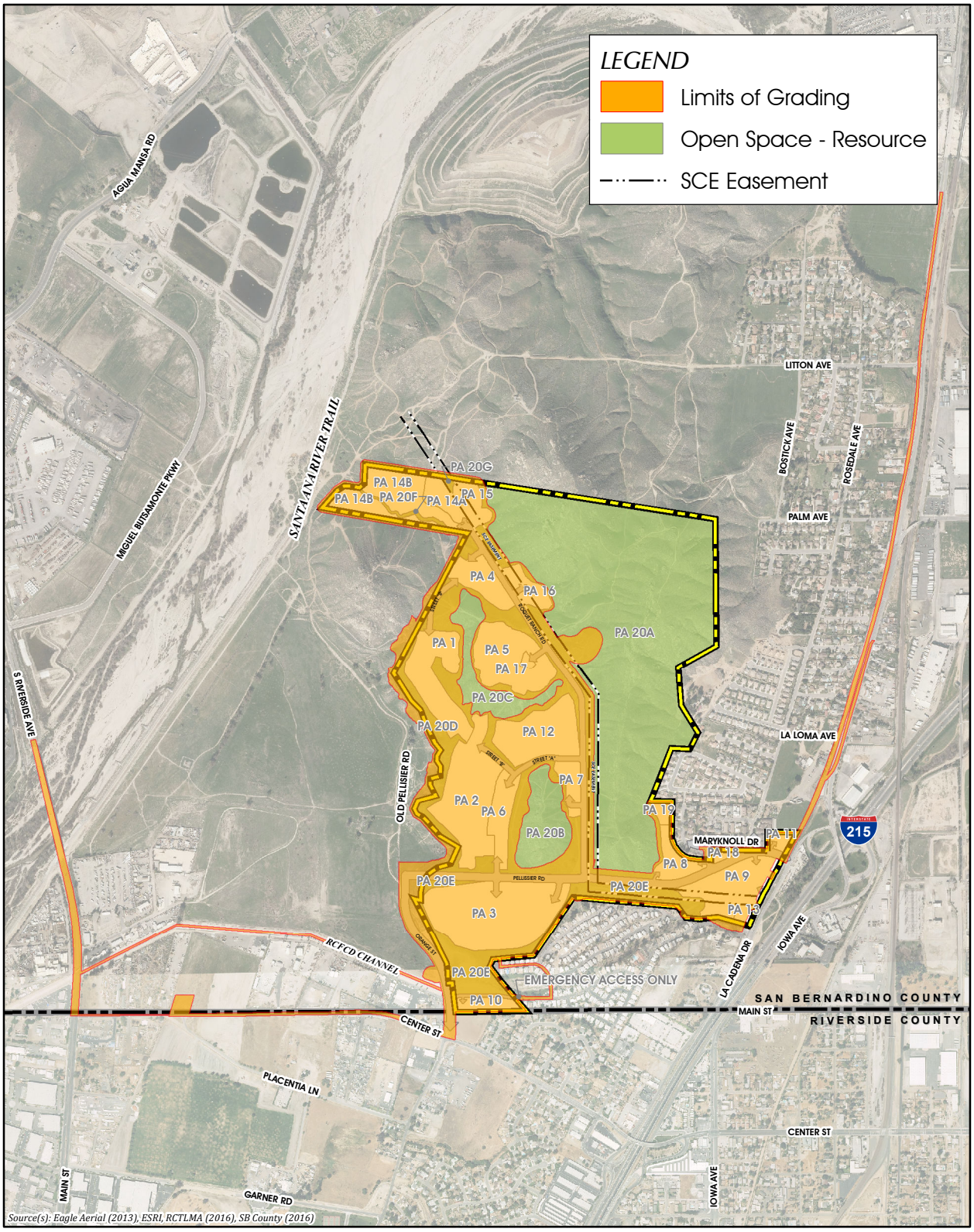


Figure 3-11

PROPOSED PHYSICAL DISTURBANCES

- Construction of pole-mounted overhead electric lines within RCFCD right-of-way from Orange Street to Riverside Avenue that would connect with proposed segment of utilities in Riverside Avenue that would be suspended along the side of the Riverside Avenue bridge from the RCFCD right-of-way across the Santa Ana River to existing underground utilities within Riverside Avenue.
- As an alternative to connecting to and construction the overhead electric utilities in the RCFCD right-of-way (west of Project site), the Project proposes extending electric utilities in Orange Street to the intersection of Center Street and Orange Street, extending the utilities westward in Center Street, northward in Riverside Avenue (alongside the bridge) to the point of connection in Riverside Avenue on the north side of the Santa Ana River Trail;
- Undergrounding of existing off-site overhead electric utilities in La Cadena Drive (to the southeast of the Project boundary);
- Construction of a new sewer lift station at the northern intersection of Placentia Lane and Center Street; and
- Full width improvements in Maryknoll Drive and Rosedale Avenue.

Underground utilities would be installed to a depth of 3 to 6 feet below grade. No other on- or off-site physical impacts are proposed as part of the Project. However, mitigation measures which require off-site improvements (i.e., off-site intersection improvements) are anticipated from Project implementation. Refer to the *Mitigation* subsection of each subsection of EIR Section 4.0, *Environmental Analysis*, for full information on the required mitigation measures.

B. Construction Equipment

Table 3-4, *Construction Equipment Assumptions*, shows the type, quantity, and operation duration of construction equipment that would be used during construction of the Project.

C. Timing and Phasing of Construction

Construction of the Project is anticipated to begin in 2017, with the last set of homes and site improvements to be completed in late 2020. The phasing plan is described in Section II of the Roquet Ranch Specific Plan, and is summarized below:

Phase I

Phase I generally covers the southern and eastern portions of the Roquet Ranch Specific Plan, and would include: residential Planning Areas 2, 3, 6 through 10, 13, and would encompass Open Space-Resource Planning Areas 20A, 20B, 20E, the Neighborhood Commercial area within Planning Area 11, and the Fire Station Site (or residential alternative). The neighborhood parks within Planning Areas 18 and 19 would also be constructed as part of Phase I. Pellissier Road, Orange Street, and Roquet Ranch Road would also be constructed as part of this phase. Maryknoll Drive would be re-aligned to connect with Graymoor Avenue which would allow Pellissier Road at La Cadena Drive to be the

Table 3-4 Construction Equipment Assumptions

Activity	Equipment	Number	Hours Per Day
Rough Grading (Phase 1 & Phase 2)	Excavators	1	8
	Graders	1	8
	Water Trucks	2	8
	Rubber Tired Dozers	3	8
	Scrapers	6	1
	Tractors/Loaders/Backhoes	1	8
Underground Infrastructure (Phase 1)	Excavators	2	8
	Other Construction Equipment	1	8
	Tractors/Loaders/Backhoes	1	8
Building Construction (Phase 1)	Cranes	2	8
	Forklifts	6	8
	Generator Sets	2	8
	Tractors/Loaders/Backhoes	6	8
	Welders	2	8
Architectural Coating (Phase 1)	Air Compressors	1	8
Paving (Phase 1)	Paving Equipment	2	8
	Pavers	2	8
	Rollers	2	8
Fine Grading (Phase 2)	Excavators	1	8
	Graders	1	8
	Water Trucks	2	8
	Rubber Tired Dozers	3	8
	Scrapers	6	1
	Tractors/Loaders/Backhoes	1	8
Underground Infrastructure (Phase 2)	Excavators	2	8
	Other Construction Equipment	1	8
	Tractors/Loaders/Backhoes	1	8
Building Construction (Phase 2)	Cranes	1	8
	Forklifts	3	8
	Generator Sets	1	8

Activity	Equipment	Number	Hours Per Day
	Tractors/Loaders/Backhoes	3	8
	Welders	1	8
Architectural Coating (Phase 2)	Air Compressors	1	8
Paving (Phase 2)	Paving Equipment	2	8
	Pavers	2	8
	Rollers	2	8

Source: (Urban Crossroads, 2016)

primary access point to the Roquet Ranch community. The associated roads and all necessary utilities would also be constructed.

Phase II

Phase II covers development of the northern and western portion of the Roquet Ranch Specific Plan and would include residential Planning Areas 1, 4, and 5, the School Site (or residential alternative) within Planning Area 12, the Community Park and private recreation facility within Planning Areas 14A and 14B, the RV Parking and Park Overflow area within Planning Area 15, Hillcrest Park within Planning Area 16, and the Pocket Park within Planning Area 17. The associated roads and all necessary utilities would also be constructed.

Table 3-5, *Construction Duration*, below shows the approximated construction phase start dates and end dates that were assumed in the Project's Air Quality Impact Analysis (*Technical Appendix B*).

Table 3-5 Construction Duration

Construction Phase	Start Date	End Date
Rough Grading	October 2017	February 2018
Underground Infrastructure	February 2018	April 2018
Building Construction	April 2018	December 2018
Architectural Coating	May 2018	December 2018
Paving	December 2018	December 2018
Fine Grading	December 2018	March 2019
Underground Infrastructure	March 2019	May 2019
Building Construction	May 2019	November 2020
Architectural Coating	February 2020	November 2020
Paving	November 2020	December 2020

Source: (Urban Crossroads, 2016a, Table 3-2)

3.4.2 OPERATIONAL CHARACTERISTICS

The proposed Project would be mainly operated as a residential community with a retail component, fire station, and elementary school. As such, typical operational characteristics include resident and visitor travel to and from the site; recreational activities within neighborhoods and park areas; and general maintenance within neighborhoods and on-site parks. Provided below is a summary of the Project's operational characteristics.

A. Future Population

Implementation of the proposed Project would result in an increase of up to 1,050 dwelling units. Based on the average household size of 3.46 cited in the City of Colton General Plan, the Project would generate a future population of approximately 3,633 residents (1,050 x 3.46 = 3,633).

It should be noted that the estimated future population is based on the scenario where the Colton Unified School District does not select to develop Planning Area 12 as a school site as proposed by the current Land Use Plan, and the fire station site within Planning Area 13 is not developed as a fire station, which represents the maximum number of residents that could be generated by the proposed Project. In the case where the school site is developed with an elementary school, the total number of dwelling units would be reduced by 165 units, and the estimated future population would commensurately be reduced by 571 people (165 dwelling units x 3.46 persons per dwelling unit = 571). In the case where the fire station site is developed with a fire station, the total number of dwelling units would be reduced by 11 units, and the estimated future population would commensurately be reduced by 39 people (11 dwelling units x 3.46 persons per dwelling unit = 39).

B. Future Employment

Commercial land uses are proposed within Planning Area 11 within 1.2 acres. Based on the employees per acre factor of 6.74 that is specified for San Bernardino County in Table 7B of the Employment Density Study prepared for the Southern California Association of Governments (SCAG), the commercial land use component of the Project would generate approximately eight (8) new jobs within the City of Colton. Based on the employees per acre factor of 12.57 specified in Table 7B, the proposed elementary school would generate approximately 130 new jobs within the City of Colton. (NCI, 2001, Table 7B)

C. Future Traffic

Based on a Project-specific Traffic Impact Analysis conducted by Urban Crossroads (EIR *Technical Appendix L*), and as discussed in Subsection 4.14, *Transportation and Traffic*, to this EIR, the proposed Project is estimated to result in a total of 10,021 daily trips, with 819 trips in the AM peak hour and 991 trips in the PM peak hour.

D. Water Demand

The 2010 San Bernardino Valley Regional Urban Water Management Plan indicates a 5-year base daily per capita water use factor of 221 gallons per capita per day (GPCD) for the region (KJC, 2012, p. 13-9). In a scenario in which the elementary school proposed within Planning Area 12 is not developed, and the Project is estimated to result in a population of 3,633 residents and eight (8) employees, the estimated demand for potable water generated by the proposed Project is equal to 804,661 gallons/day. Alternatively, if Planning Area 12 is developed with an elementary school facility, the Project is estimated to result in a population of 3,062 residents, 130 school employees, and eight (8) neighborhood commercial employees, and the estimated demand for potable water generated by the proposed Project is equal to 707,200 gallons/day (using the 221 GPCD factor). The proposed school site would result in additional demands for potable water. Because the Project involves a proposal for residential development comprising more than 500 dwelling units, a water supply assessment (WSA) (EIR *Technical Appendix M*) was required pursuant to Section 10910 of the California Water Code.

E. Wastewater Demand

The City of Colton General Plan does not identify a wastewater demand generation rate. Therefore, the wastewater generation rate for the proposed Project has been estimated based on the generation rate of 75 gallons per capita day (GPCD), identified in the City's 2016 Sewer Master Plan (Carollo, 2016b, pp. ES-4, p. ES-4). Additionally, the Design Guidelines for Water and Sewer Facilities prepared by Water Agencies' Standards indicates a wastewater treatment demand factor of 1,500 gallons per day (GPD) per gross acre for commercial sewer generation (WAS, 2014). Using both of these factors, the estimated demand for wastewater treatment for the scenario in which Planning Area 12 is not developed with the elementary school site is 274,275 GPD. Should Planning Area 12 be developed with an elementary school, the estimated demand for wastewater treatment is 231,450 GPD, with additional wastewater demand generated by the proposed school site. Refer to Section 4.15, *Utilities, and Service Systems*, for additional details.

3.5 SUMMARY OF REQUESTED ACTIONS

The City of Colton has primary approval responsibility for the proposed Project. As such, the City serves as the Lead Agency for this EIR pursuant to CEQA Guidelines § 15050. Accordingly, the City of Colton Planning Commission will hold a public hearing to consider the Final EIR, the Project's General Plan Amendment, Specific Plan, Change of Zone, and Tract Map 19983. The Planning Commission will make advisory recommendations to the City Council on whether to approve, approve with changes, or deny General Plan Amendment, Specific Plan, Change of Zone, and Tract Map 19983. The City Council will consider the information contained in the Final EIR and this EIR's Administrative Record in its decision-making processes and will approve or deny the General Plan Amendment, Specific Plan, Change of Zone, and Tract Map 19983. Upon approval or conditional approval of the above described Project actions and upon certification of the Final EIR by the Planning Commission and City Council, the City would conduct administrative reviews and grant subsequent permits and approvals to implement Project requirements and conditions of approval. A list of the

primary actions under the City of Colton's jurisdiction is provided in Table 3-6, *Matrix of Project Approvals/Permits*.

3.6 RELATED ENVIRONMENTAL REVIEW AND CONSULTATION REQUIREMENTS

Subsequent to approval of Specific Plan, General Plan Amendment, and Vesting Tentative Tract Map 19983 by the City of Colton, additional discretionary and/or administrative actions would be necessary to implement the proposed Project. Table 3-6, *Matrix of Project Approvals/Permits,* lists the agencies that are expected to use this EIR and provides a summary of the subsequent actions associated with the Project. This EIR covers all federal, state, local government and quasi-government approvals which may be needed to construct or implement the Project, whether or not they are explicitly listed in Table 3-6 or elsewhere in this EIR (CEQA Guidelines §15124(d)).

Table 3-6 Matrix of Project Approvals/Permits

PUBLIC AGENCY	APPROVALS AND DECISIONS
City of Colton	
Proposed Project – City of Colton Discretionary Approvals	
City of Colton City Council	• Approve, conditionally approve, or deny the Roquet Ranch Specific Plan, General Plan Amendment, Change of Zone, and Vesting Tentative Tract Map 19983 (appealable to City Council). • Reject or certify this EIR along with appropriate CEQA Findings (appealable to City Council).
Subsequent City of Colton Discretionary and Ministerial Approvals	
City of Colton Subsequent Implementing Approvals	• Approve Final Maps, parcel mergers, lot line adjustments, or parcel consolidations, as may be appropriate. • Approve Conditional or Temporary Use Permits, if required. • Issue Grading Permits. • Issue Building Permits. • Approve Road Improvement Plans. • Issue Encroachment Permits. • Accept public right-of-way dedications. • Approve street vacations. • Approval of Community Facilities District(s) or other financing mechanisms for public improvements.
City of Colton Water Department	• Approvals for construction of water and sewer infrastructure.
Other Agencies – Subsequent Approvals and Permits	
United States Army Corps of Engineers (USACE)	• Clean Water Act (CWA) Section 404 permit
United States Fish and Wildlife Service	• Federal Endangered Species Act (FESA) Section 7 consultation
City of Riverside	• Approvals for Orange Avenue roadway alignment
San Bernardino County Flood Control District	• Flood Control Permit Application
California Department of Fish and Wildlife	• Section 1602 Streambed Alteration Agreement • California Endangered Species Act (CESA) Consistency Determination
Santa Ana Regional Water Quality Control Board	• Issuance of a Construction Activity General Construction Permit. • Issuance of a National Pollutant Discharge Elimination System (NPDES) Permit. • Approve Operational Storm Water Pollution Prevention Plan

4.0 ENVIRONMENTAL ANALYSIS

4.0.1 SUMMARY OF EIR SCOPE

In accordance with CEQA Guidelines §§ 15126-15126.4, this EIR Section 4.0, *Environmental Analysis*, includes analyses of potential direct, indirect, and cumulatively considerable impacts that could occur from planning, constructing, and operating the proposed Project.

In compliance with the procedural requirements of CEQA, an Initial Study was prepared to determine the scope of environmental analysis for this EIR. A tiered Initial Study was separately prepared to determine the extent to which the Project was within the scope of, and consistent with, previously certified program Environmental Impact Reports applicable to the Project site, as set forth in EIR *Technical Appendices N and O*.

The City of Colton received written comments regarding the EIR scope in response to the NOP issued for this EIR. Oral comments on the EIR scope were provided by members of the public at the EIR scoping meeting held on July 14, 2016, at the Luque Community Center in the City of Colton. Taking all known information and public comments into consideration, 15 primary environmental subject areas are evaluated in detail in this Section 4.0, as listed below. Each subsection evaluates several specific subject matters related to the main environmental topic. The title of each subsection is not limiting; therefore, refer to each subsection for a full account of the subject matters addressed therein.

4.1 Aesthetics
4.2 Air Quality
4.3 Biological Resources
4.4 Cultural Resources
4.5 Geology/Soils
4.6 Greenhouse Gas Emissions
4.7 Hazards/Hazardous Materials
4.8 Hydrology/Water Quality
4.9 Land Use and Planning
4.10 Noise
4.11 Population and Housing
4.12 Public Services
4.13 Recreation
4.14 Transportation/Traffic
4.15 Utilities/Service Systems

As concluded by the Project's Initial Study (included in *Technical Appendix A* to this EIR) and after consideration of all comments received by the City on the scope of this EIR and documented in the City's administrative record, two environmental subjects were determined by the City to have no potential to be significantly impacted by the Project: Agricultural Resources/Forestry Resources and Mineral Resources. These two subjects are discussed briefly in Section 5.0, *Other CEQA Considerations*.

Public Resources Code (PRC) § 21100(b)(3) and CEQA Guidelines § 15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Accordingly, in addition to the subject matters listed above, this EIR addresses the topic of energy conservation in Section 5.0, *Other CEQA Considerations*.

4.0.2 SCOPE OF CUMULATIVE EFFECTS ANALYSIS

CEQA requires that an EIR contain an assessment of the cumulative impacts that may be associated with a proposed project. As noted in CEQA Guidelines § 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "A cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects creating related impacts" (CEQA Guidelines § 15130(a)(1)). As defined in CEQA Guidelines § 15355:

> *'Cumulative Impacts' refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.*
>
> *(a) The individual effects may be changes resulting from a single project or a number of separate projects.*
>
> *(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

CEQA Guidelines § 15130(b) describes two acceptable methods for identifying a study area for purposes of conducting a cumulative impact analysis. These two approaches include: "1) a list of past, present, and probable future projects producing related or cumulative impacts, including if necessary, those projects outside the control of the agency ['the list of projects approach'], or 2) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact ['the summary of projections approach']."

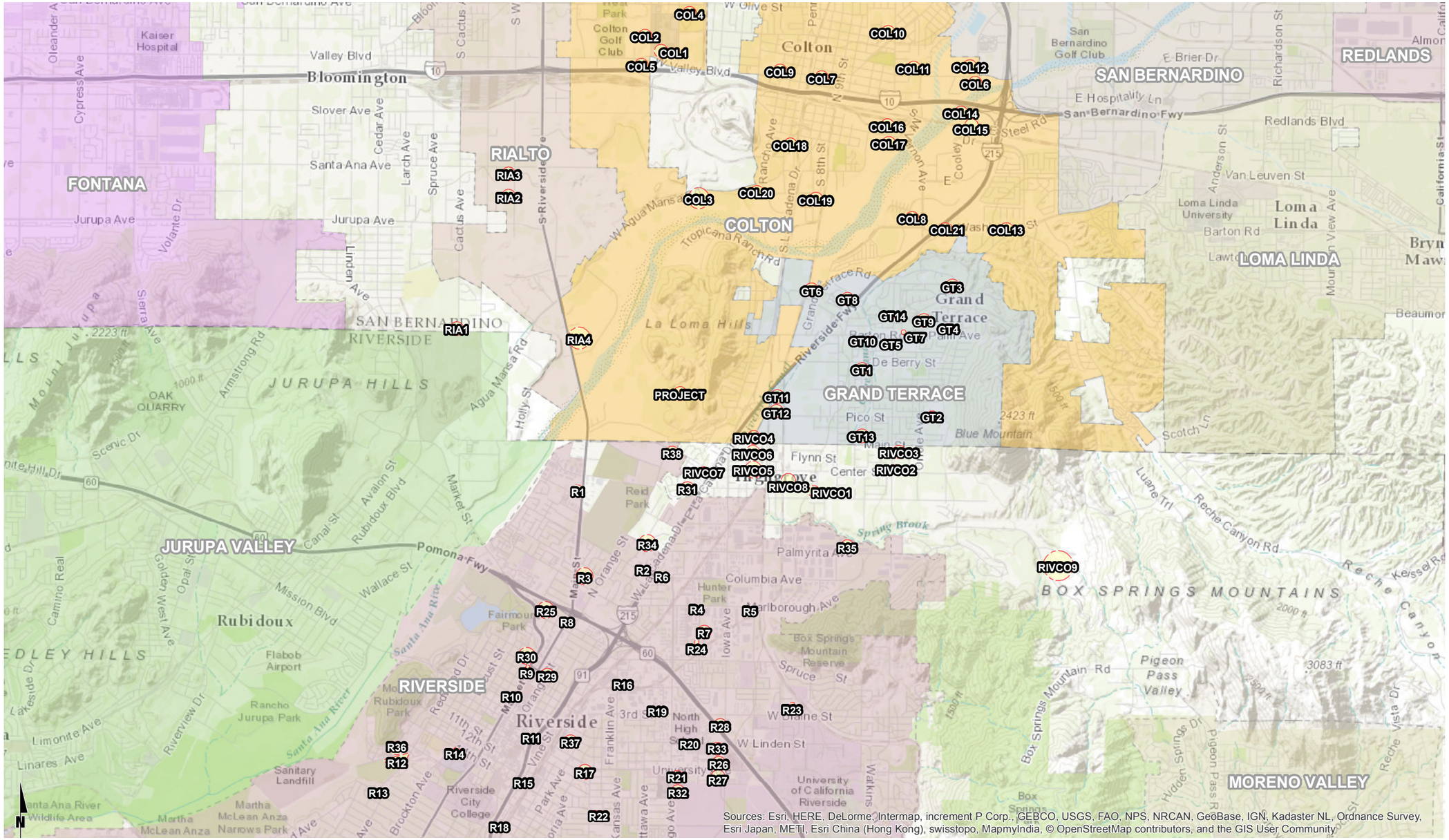
The summary of projections approach is used in this EIR, except for the evaluation of cumulative traffic and vehicular-related air quality, greenhouse gas, and noise impacts. The analysis of cumulative traffic impacts uses a combined approach, utilizing the summary of projections approach with the manual addition of past, present, and reasonably foreseeable projects that were not accounted for in the projections, where appropriate. This approach was determined to be appropriate by the City of Colton because long-range planning documents contain a sufficient amount of information to enable an analysis of cumulative effect for all subject areas, with expectation of traffic and vehicular-related air quality, greenhouse gas, and noise effects, which require a greater level of detailed study. The cumulative impact analyses of vehicular-related air quality, greenhouse gas, and noise impacts, which rely on data from the Project's traffic study, inherently utilize the combined approach. With the combined approach, the cumulative impact analyses for the air quality, greenhouse gas, noise, and traffic issue areas overstate the Project's (and Project-related components') potential cumulative impacts as compared to an analysis that would rely solely on the list of projects approach or solely the

summary of projections approach; therefore, the combined approach provides a conservative, "worst-case" analysis for cumulative air quality, greenhouse gas, noise, and traffic impacts.

The list of projects used to supplement the summary of projections approach for the cumulative traffic impact analysis (as well as vehicular-related air quality, greenhouse gas, and noise impact analyses) includes approved and pending development projects in proximity to the Project site that would contribute traffic to the same facilities as the Project, as well as several large, traffic-intensive projects farther from the Project site that have the potential to affect regional transportation facilities. As such, the cumulative impact analysis of traffic and vehicular-related air quality, greenhouse gas, and noise impacts includes 86 other past, present, and reasonably foreseeable projects within this study area in addition to the summary of projections (Urban Crossroads, 2016, Table 4-4). This methodology recognizes development projects that have the potential to contribute measurable traffic to the same intersections, roadway segments, and/or state highway system facilities as the proposed Project and have the potential to be made fully operational in the foreseeable future. Specific development projects included in the traffic and vehicular-related air quality, greenhouse gas, and noise cumulative impact analyses shown in Figure 4.0-1, *Cumulative Development Projects Location Map*, and are listed in Table 4.0-1, *Cumulative Projects List*.

For the cumulative impact analyses that rely on the summary projections approach (i.e., all issue areas with the exception of traffic and vehicular-related air quality, greenhouse gas, and noise, as described in the preceding pages), the cumulative study area includes the City of Colton, City of Grand Terrace, City of Rialto, City of Riverside, and County of Riverside. These jurisdictions encompass the southwestern area of San Bernardino County and northwestern area of Riverside County and have similar environmental characteristics as the Project area. This area has historically been used for rural uses, but has in recent decades been developed for residential and non-residential developments ranging from rural to higher densities. This study area exhibits similar characteristics in terms of climate, geology, and hydrology, and therefore is also likely to have similar biological and archaeological characteristics as well. This study area also encompasses the service areas of the Project site's primary public service and utility providers. Areas outside of this study area either exhibit topographic, climatological, or other environmental circumstances that differ from those of the Project area, or are simply too far from the proposed Project site to produce environmental effects that could be cumulatively considerable. Exceptions include cumulative air quality analysis, which considers the entire South Coast Air Basin (SCAB) and greenhouse gas emissions and associated global climate change, which potentially affect all areas of Earth. Additionally, the analysis of potential cumulative hydrology and water quality effects considers other development projects located within the boundary of the Santa Ana River Basin watershed.

Environmental impacts associated with buildout of the cumulative study area were evaluated in CEQA compliance documents prepared for the respective General Plans of each of the above-named jurisdictions. The location where each of these CEQA compliance documents is available for review is provided below. All of the CEQA compliance documents listed below are herein incorporated by reference pursuant to CEQA Guidelines § 15150.



Source(s): Urban Crossroads (July 28, 2016)

Figure 4.0-1

NOT TO SCALE

CUMULATIVE DEVELOPMENT PROJECTS LOCATION MAP

Table 4.0-1 Cumulative Projects List

#	Project/Location	Land Use	Quantity	Units
CITY OF COLTON				
COL1	CUSM (300 N. Pepper Av.)	Medical College	150	STU
COL2	1601 W. Valley Blvd.	Hotel	NA	RM
		Gas Station	NA	VFP
COL3	1600 Agua Mansa Road	Warehouse	805.500	TSF
COL4	Cal-Med Surgery Center (1281 W. C St.)	Medical Office	NA	TSF
COL5	Valley Orange Ent. (1600 W. Valley Blvd.)	Service Station	8	VFP
COL6	Diesel Injection (1610 Fairway Dr.)	Auto Shop	1.350	TSF
COL7	New Juan Colorado Family Restaurant (195 W. Valley Bl.)	Restaurant	NA	TSF
COL8	1175 S. Mt. Vernon Av.	Commercial	104.000	TSF
COL9	495 W. Valley Bl.	Church	NA	Seats
COL10	Smart & Final Extra (1023 N. Mt. Vernon)	Discount Super Store	27.870	TSF
		Fast Food w/ Drive-Thru	4.400	TSF
COL11	839 Fairway Dr.	Assisted Living and Memory Care Facility	103	Beds
COL12	1601 Fairway Dr.	Industrial	178.980	TSF
COL13	1550 E. Washington St.	Church	120	Seats
COL14	1559 Steel Rd.	Industrial	60.000	TSF
COL15	1603 Steel Rd.	Industrial	159.271	TSF
COL16	785 E. M Street	Metal Building	20.600	TSF
COL17	Colton Iron Metal (790 E. M St.)	Recycling Center	3.630	AC
COL18	644-660 Laurel Lane	SFDR	7	DU
COL19	1200 Jefferson Ln.	Office	NA	TSF
COL20	602 Agua Mansa Rd.	Trucking Facility	19.919	TSF
COL21	1395 Washington St.	Tire Store	NA	TSF
COUNTY OF RIVERSIDE				
RIVCO1	TR28957	Single-Family Residential	36	DU
RIVCO2	TR32989	Single-Family Residential	29	DU
RIVCO3	TR32291	SFDR	69	DU
RIVCO4	CUP03718	Light Industrial	19.988	TSF
RIVCO5	PP24798	Retail	2.400	TSF
		Offices	3.405	TSF
		Laundromat	2.961	TSF
RIVCO6	PP25482	General Office	2.632	TSF
RIVCO7	Truck Sales Facility (PP25505)	Office	1.952	TSF
		Storage	6.000	TSF
RIVCO8	TR36668 (Bixby Highgrove)	Single-Family Residential	201	DU
RIVCO9	Spring Mountain Ranch (SP 323) (PM36448; TR29597; TR29598; TR29600; TR29741; TR30908; TR30909)	Single-Family Residential	1,518	DU
		Elementary School	750	STU
		Day Care Center	4.000	TSF
		Commercial Retail	104.000	TSF
CITY OF GRAND TERRACE				
GT1	SA-14-03	Single-Family Residential	1	DU
GT2	TT18071 (Karger Pico Tract)	Single-Family Residential	18	DU
GT3	SA 13-05	SFDR	1	DU
GT4	Site and Architectural Review 12-04	Townhomes	12	DU
GT5	Grand Terrace Town Square Master Plan	Commercial Retail	209.611	TSF
	SA-07-07	Retail	65.730	TSF
GT6	SA 14-05; SA 14-07	SFDR	1	DU
	SA 14-06	SFDR	1	DU
GT7	Barton Plaza Commercial Center (Phase 2)	Commercial Center	16.251	TSF
GT8	SA 15-01	Commercial	1.800	TSF
GT9	SA 15-06 ACUP15-07 E15-08	Medical Office	2.870	TSF

Table 4.0-1 Cumulative Projects List

#	Project/Location	Land Use	Quantity	Units
GT10	SA 15-07 E15-09	Commercial Hair Salon	1.800	TSF
GT11	SA 15-04 E15-07	Office/Shop	8.800	TSF
GT12	SA 15-05; ACUP15-06; V15-02	Office	1.400	TSF
GT13	TTM 15-01; SA 15-03; E15-05	SFDR	12	DU
GT14	SA05-19-A1; E15-06	Condo/Townhomes	35	DU
CITY OF RIALTO				
RIA1	Panattoni I-10 (Cactus Av. & El Rivino Rd.)	Warehouse	2,475.745	TSF
RIA2	CapRock III	Warehouse	582.000	TSF
RIA3	Newmark Merrill Companies	Discount Super Store	198.000	TSF
		Tire Store	9.861	TSF
		Retail	25.436	TSF
		Fast Food w/ Drive-Thru	5.484	TSF
RIA4	Kore Infrastructure	Biosolids Facility	288	TPD
CITY OF RIVERSIDE				
R1	P09-0749	Industrial	54.22	AC
R2	TR34908 (P06-0782)	Single-Family Residential	15	DU
R3	TR33550 (P05-0269; P08-0416)	Single-Family Residential	9	DU
R4	P09-0612	Adult Day Care	39	STU
R5	P11-0329; P11-0330; P11-0332	Metrolink train station and parking lot	600.00	Spaces
R6	P10-0685; P10-0794	Gas Station & Car Wash	16	VFP
R7	P10-0733	Church	598	Seats
R8	P09-0419; P10-0476	Gas Station & Car Wash	16	VFP
R9	P14-0183	Apartments	146	DU
R10	P06-0028; P06-0029; P06-0031	Condos	205	DU
		Hotel	125	DU
		Commercial	31.600	TSF
R11	P09-0835; P10-0002	Office with Parking Structure	132.136	TSF
R12	P10-0454	Public Park	43.64	AC
R13	TR36516 (P12-0799; P12-0800)	Single-Family Residential	7	DU
R14	Jacobs Medical Office (P06-1237)	Medical Office	65.281	TSF
R15	P14-0315; P14-0437	Security Operations Building	3.150	TSF
R16	P10-0212; P10-0213	School Bus Storage Yard	4.38	AC
R17	P13-0650; P13-0651	Bed and Breakfast	3.650	TSF
R18	P14-0132	Metal Processing Facility	30.324	TSF
R19	P09-0530; P09-0531	RTA Bus Storage	2.60	AC
R20	P11-0545	Church	80	Seats
R21	P12-0336	Mixed Use Urban	17.80	AC
R22	P09-0808; P08-0809	Senior Housing	134	Beds
R23	P09-0717; P09-0718	Apartments	55	DU
R24	P07-1161	Health/Fitness Club	5.580	TSF
R25	P13-0087; P13-0262	Senior Adult Housing - Attached	67	DU
R26	P08-0980; P09-0095	Apartments	57	DU
R27	P08-0960; P09-0025	Apartments	53.5	DU
R28	P09-0125	Apartments	11.5	DU
R29	P15-0535	Hotel	239	RM
R30	P15-0653	Townhomes	NA	DU
R31	P15-0812	Residential Condo/Townhouse	61	DU
R32	P16-0011	Health/Fitness Club	18.000	TSF
R33	P15-0877; P16-0067	Hotel	144	RM
R34	P16-0016	Single Family Detached	5	DU
R35	P13-0956; P13;0959; P13-0960; P13-0963; P13-0964 P13-0965;	Industrial Park	1,461.44	TSF
R36	P12-0334	Single Family Detached	2.8	AC

Table 4.0-1 Cumulative Projects List

#	Project/Location	Land Use	Quantity	Units
R37	P14-0045; P14-0046; P14-0047; P14-0048; P14-0049	Apartments	208	DU
R38	P14-1033; P14-1034	Warehousing	308.000	TSF

[1] Dwelling Units; TSF = Thousand Square Feet; STU = Students; AC = Acres; TPD = Tons Per Day
Source: (Urban Crossroads, 2016, Table 4-4)

- City of Colton General Plan EIR (SCH No. 2012031037), available for review at the City of Colton, Planning Division, 650 North La Cadena Drive, Colton, CA 92324;

- City of Grand Terrace General Plan EIR (SCH No. 2008011109), available for review at the City of Grand Terrace, Planning Division, 22795 Barton Road Grand Terrace, CA 92313;

- City of Riverside General Plan EIR (SCH No. 2004021108), available for public review at the City of Riverside, Planning Division, 3900 Main Street, Riverside, CA 92522;

- County of Riverside General Plan EIR No. 521 (SCH No. SCH 2009041065), available for public review at the Riverside County Planning Department, 4080 Lemon Street, 12th Floor, Riverside, CA 92501

4.0.3 IDENTIFICATION OF IMPACTS

Subsections 4.1 through 4.15 of this EIR evaluate the 15 environmental subjects warranting detailed analysis, as determined by this EIR's Initial Study and in consideration of public comment on this EIR's NOP. The format of discussion is standardized as much as possible in each section for ease of review. The environmental setting is discussed first, followed by a discussion of the Project's (and Project-related components') potential environmental impacts based on specified thresholds of significance used as criteria to determine whether potential environmental effects are significant.

The thresholds of significance used in this EIR are based on the thresholds presented in CEQA Guidelines Appendix G and as applied by the City of Colton to create the Project's Initial Study Checklist (included in *Technical Appendix A* to this EIR). The thresholds are intended to assist the reader of this EIR in understanding how and why this EIR reaches a conclusion that an impact would or would not occur, is significant, or is less than significant.

Serving as the CEQA Lead Agency for this EIR, the City of Colton is responsible for determining whether an adverse environmental effect identified in this EIR should be classified as significant or less than significant. The standards of significance used in this EIR are based on the independent judgment of the City of Colton, taking into consideration CEQA Guidelines Appendix G, the City of Colton's Municipal Code and adopted City policies, the judgment of the technical experts that prepared this EIR's Technical Appendices, performance standards adopted, implemented, and monitored by regulatory agencies, significance standards recommended by regulatory agencies, and the standards in CEQA that trigger the preparation of an EIR.

As required by CEQA Guidelines § 15126.2(a), impacts are identified in this EIR as direct, indirect, cumulative, short-term, long-term, on-site, and/or off-site impacts of the proposed Project and/or Project-related components. A summarized "impact statement" is provided in each subsection following the analysis. Each subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations) that the Project and its implementing actions are required to comply with (if any). If impacts are identified as significant after mandatory compliance with regulatory criteria, feasible mitigation measures are presented that would either avoid the impact or reduce the magnitude of the impact. For any impact identified as significant and unavoidable, the City of Colton would be required to adopt a statement of overriding considerations pursuant to CEQA Guidelines § 15093 in order to approve the Project despite its significant impact(s) to the environment. The statement of overriding considerations would list the specific economic, legal, social, technological, and other benefits of the Project, supported by substantial evidence in the Project's administrative record, that outweigh the unavoidable impacts.

4.1 AESTHETICS

This Subsection characterizes the existing aesthetic conditions at the Project site and discusses views of the Project site from surrounding vantage points. Potential visual and aesthetic changes that may result from Project implementation are analyzed. The resources relied upon to prepare this Subsection include analysis of aerial photography (Google Earth, imagery dated February 2016) (Google Earth Pro, 2016), and photographs taken in April 2016 by T&B Planning, Inc. Information from the Roquet Ranch Specific Plan was used to write this Subsection (T&B Planning, Inc., 2016). This Subsection also is based on information contained in the City of Colton General Plan Update EIR (City of Colton, 2013c), and the California Department of Transportation (Caltrans) Scenic Highway Mapping System (Caltrans, 2011).

4.1.1 EXISTING CONDITIONS

The Project site is located in the southern portion of the City of Colton within an area known as the La Loma Hills. The La Loma Hills area is characterized as a prominent undeveloped swath of hills and ridgelines bounded by the Santa Ana River to the north and west, residential neighborhoods and commercial land uses to the east and southeast, and industrial uses to the southwest. (Google Earth Pro, 2016; City of Colton, 2013c, p. 4.1-3)

Pursuant to CEQA Guidelines § 15125, the physical environmental condition for purposes of establishing the setting of an EIR is the environment as it existed at the time the EIR's NOP was released for public review. The NOP for this EIR was released on June 24, 2016. As of that date, the Project site consisted of predominantly vacant undeveloped land. No structures exist on-site, with the exception of the existing Roquet Paving Company facility located on the southeastern portion of the Project site. The property is located in an area of high topographic relief and contains a prominent ridgeline.

A. Site Photographs

To illustrate the existing visual conditions on the Project site in more detail, a photographic inventory was conducted. Figure 4.1-1, *Site Photograph Key Map*, depicts the locations of six representative vantage point photographs, each of which are described below. These photographs, shown on Figure 4.1-2, *Site Photographs 1-3*; and Figure 4.1-3, *Site Photographs 4-6*, provide a representative visual inventory of the Project site's visual characteristics as seen from surrounding public viewing areas and from within the Project site.

- Site Photograph #1 (Figure 4.1-2): Site Photograph #1 was taken from the southeastern portion of the Project site where along the frontage with La Cadena Drive, looking toward the south and west. This photograph shows that the southeast portion of the Project site is flat and contains land that is bare. The on-site prominent ridgeline is visible beyond the residential neighborhood on the right side of the photograph.

Figure 4.1-1

0 200 400 800 Feet

SITE PHOTOGRAPH KEY MAP

SOUTH WEST

Site Photograph #1: From southeastern portion of Project site along La Cadena Drive, looking south to west.

EAST SOUTH

Site Photograph #2: From southeastern corner of Project site along Maryknoll Drive, looking east to south.

WEST NORTH

Site Photograph #3: From eastern boundary of Project site along Lark Street, looking west to north.

Figure 4.1-2

NOT TO SCALE

SITE PHOTOGRAPHS 1-3

SOUTH

NORTH

Site Photograph #4: From southeastern portion of Project site along La Cadena, looking south to north.

WEST

EAST

Site Photograph #5: From southern boundary of Project site along Graymoor Avenue, looking west to east.

NORTH

EAST

Site Photograph #6: From southwest corner of Project site along Old Pellisier Road, looking north to east.

Figure 4.1-3

NOT TO SCALE

SITE PHOTOGRAPHS 4-6

- Site Photograph #2 (Figure 4.1-2): Site Photograph #2 was taken from the southeast corner of the Project site along Maryknoll Drive, looking toward the east and south. This photograph shows this portion of the Project site is generally flat and devoid of notable features. On the left side of the photograph, the portion of the Project site that fronts Maryknoll Drive is visible, while on the right side of the photograph, the existing drive entrance to the site from Maryknoll Drive is visible. Existing intervening trees and shrubbery on the southeastern boundary of the site impede views of La Cadena Drive just beyond.

- Site Photograph #3 (Figure 4.1-2): Site Photograph #3 was taken from the eastern boundary of the Project site along Lark Street looking toward the west and north. A portion of the existing residential neighborhood that abuts the Project site to the east is visible on the left side of the photograph. The prominent ridgeline within the eastern portion of the Project site spans the majority of the photograph. In the foreground of the photograph, the Project site appears as vacant land sloping toward the west with sporadic low-lying shrubs and other vegetation visible. Existing off-site residential homes to the immediate east of the site are visible on the right side of the photograph.

- Site Photograph #4 (Figure 4.1-3): Site Photograph #4 was taken from the southeast corner of the Project site along La Cadena Drive, looking toward the south and north. Sparse trees, shrubs, and other sporadic low-lying vegetation are shown throughout the visible portions of the Project site. The existing on-site electrical transmission lines are visible in the photograph.

- Site Photograph #5 (Figure 4.1-3): Site Photograph #5 was taken from the southern boundary of the Project site along Graymoor Avenue, looking toward the east and west. This photograph depicts the vacant, undeveloped nature of the southern portion of the Project site showing only minimal amounts of low-lying vegetation. The southernmost portion of the prominent ridgeline is visible in the center of the photograph. The existing on-site transmission lines are visible in the photograph as well.

- Site Photograph #6 (Figure 4.1-3): Site Photograph #6 was taken from the southwest portion of the Project site along Old Pellisier Road, looking toward the north and east. This photograph depicts the vacant, undeveloped nature of the Project site with minimal amounts of sparse, low-lying vegetation. The hilly terrain of the Project site can be seen in the distance toward the north. The existing residential homes that abut the Project site to the south/southeast are visible on the right side of the photograph.

B. Light and Glare

Under existing conditions, the Project site is undeveloped and contains no artificial lighting, except for nighttime security lighting that is emitted from the existing Roquet Paving Company facility located on the southeastern area of the Project site. In the surrounding area, artificial lighting sources

include illumination along the surrounding roadways to the south and east of the Project site from street lights and vehicle headlights, as well as artificial lighting sources from residential, commercial, and industrial land uses to the east and south of the Project site. Additional streetlight and vehicle headlight illumination occurs along La Cadena Drive to the immediate east of the Project site, as well as along the I-215 freeway further to the east (approximately 400 feet). No land uses within the immediate vicinity of the Project site generate substantial sources of nighttime lighting.

The Project site is predominantly undeveloped and as such, there are no existing sources of glare within the Project site other than from windows at the Roquet Paving Company facility. Sources of glare in the surrounding area include reflective surfaces associated with residences located immediately east and southeast of the Project site, industrial operations to the south of the Project site, and from vehicles traveling along local roadways to the east and south of the Project site.

C. Scenic Resources

The City of Colton General Plan and City's General Plan Update EIR do not explicitly designate any scenic resources at the Project site. The City's General Plan Update EIR defines scenic resources as "…isolated occurrences of aesthetically pleasing natural or man-made forms" (City of Colton, 2013c, p. 4.1-2). The General Plan Update EIR goes on to state: "Typical examples of natural scenic resources include rock outcroppings, trees, and prominent ridgelines" (City of Colton, 2013c, p. 4.1-2). Under existing conditions, the Project site includes rock outcroppings and a prominent ridgeline, both of which would be considered scenic resources under the definition provided in the City's General Plan Update EIR. The City's General Plan Update EIR identifies the Santa Ana River and surrounding natural areas as scenic resources within the Colton, views of which are accessible from the surrounding area and recreational use of the Santa Ana River Trail. As depicted on Exhibit 4.1-2, *Focus Areas*, of the City's General Plan Update EIR, the Project site is located within the Pellissier Ranch Focus Area (City of Colton, 2013c, Exhibit 4.1-2).

D. Scenic Vistas

The City of Colton General Plan does not designate any scenic vistas within the City. Scenic vistas are generally defined as unobstructed views of unique natural features (i.e., mountains, hills, open spaces, and waterbodies). Views of the San Bernardino and San Gabriel Mountains form a scenic backdrop for the northern portion of the City of Colton, as well as the surrounding cities and communities. (City of Colton, 2013c, p. 4.1-2)

E. Scenic Highways

The Caltrans Scenic Highway Mapping System indicates that there are no officially designated State or County Scenic Highways in the vicinity of the Project site (Caltrans, 2011). Additionally, the City of Colton General Plan Update EIR states that there are no officially designated or eligible scenic routes or highways within the City (City of Colton, 2013c, p. 4.1-2).

F. Scenic Routes

The City of Colton General Plan Update EIR states that there are no officially designated or eligible scenic highways within the City (City of Colton, 2013c, p. 4.1-2). Additionally, the City of Colton General Plan Update EIR does not identify any designated or eligible scenic routes within the City.

4.1.2 APPLICABLE ENVIRONMENTAL REGULATIONS

B. City of Colton Municipal Code

Title 15 Chapter 15.06 Building Code, of the City of Colton Municipal Code is the presiding building code within the City for purposes of regulating construction, demolition, occupancy, height, and area maintenance of all structures (City of Colton, 2016a, Ch. 15.06).

C. City of Colton Zoning Code

Lighting and glare is regulated within the City of Colton in Chapter 18.42, Performance Standards, § 18.42.090, Light, which allows lighting in a manner that provides for proper illumination without producing an adverse impact on neighboring property. Additionally, § 18.42.100, Glare, of the City's Zoning Code prohibits direct or reflected glare that is visible from the boundary line of the property on which the glare is produced (City of Colton, 2016a, Ch. 18.42). Additional lighting standards are specified in the Section IV, *Design Guidelines*, of the proposed Roquet Ranch Specific Plan in order to ensure architectural compatibility as well as safety within the community (T&B Planning, Inc., 2016, p. IV-18).

4.1.3 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to aesthetics if the Project or any Project-related component would:

a. *Have a substantial adverse effect on a scenic vista?*
b. *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*
c. *Substantially degrade the existing visual character or quality of the site and its surroundings?*
d. *Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?*

4.1.4 IMPACT ANALYSIS

Threshold a) Would the Project have a substantial adverse effect on a scenic vista?

The City of Colton General Plan and City's General Plan Update EIR do not explicitly designate any scenic vistas at the Project site. The City's General Plan Update EIR defines scenic vistas as "…natural landscapes that form views of unique flora, geologic, or other natural features that are

generally free from urban intrusions," which typically include views of mountains and hills, large, uninterrupted open spaces, and waterbodies (City of Colton, 2013c, p. 4.1-2). The Project site is located in the La Loma Hills, and contains large swaths of open space under existing conditions (refer to Figure 4.1-2 and Figure 4.1-3); therefore, per the definition of *scenic vistas* provided in the City's General Plan Update EIR, this analysis assumes that the steep hillsides within the undeveloped portions of the Project include areas that are visible from scenic vistas. The proposed Project would develop the Project site with a master-planned community, which would result in a conversion of views onto portions of the Project site from the existing undeveloped visual character to a residential community. The proposed Project design would designate nearly 60% of the Project site (total of 199.7 acres) as "Open Space-Resource," which would preserve the prominent ridgeline that characterizes the eastern portion of the site and avoiding development of the natural hillsides at the site. Additionally, as shown on Figure 4.1-2 and Figure 4.1-3, public view points of the steep hillsides within the site are limited to the public roadways located to the east and south of the Project site. Through concentrating development within the flatter western portions of the Project site and ensuring development remains below the Project site's prominent ridgeline, the Project would effectively avoid any adverse effects to scenic vistas enjoyed from the public view points to the east of the Project site.

Figure 4.1-4, *Miguel Bustamante Parkway Visual Simulation (Before & After)*, and Figure 4.1-5, *Orange Street Visual Simulation (Before & After)*, depict the Project's proposed improvements and provide visual representations of the expected appearance of the master-planned community from various locational perspectives that offer a public view from the west (looking in a northeasterly direction from Miguel Bustamante Parkway) and the south (looking in a northeasterly direction from Orange Street), respectively. These view simulation exhibits represent simulated views that would be experienced by a pedestrian looking toward the Project site in daytime hours at 6 feet above the ground surface from the aforementioned view points along Miguel Bustamante Parkway and Orange Street. These simulated views are described as follows:

- View from Miguel Bustamante Parkway (Figure 4.1-4): This view depicts the Project site from a viewpoint along Miguel Bustamante Parkway looking east/southeast toward the Project site. As shown in the *before* image, the Project site in the existing condition appears as a vacant site, with no development on-site visible within this viewshed. In the foreground, flat lowland areas associated with an off-site vacant property contains non-native grass, small shrubs, and larger trees. The hilly portions of the Project site are visible in the background, though some portions of the hillsides are partially screened by intervening trees. The *after* image provides a visual simulation of the completed Project, which shows single-family hillside residences within Planning Area 1 and Planning Area 5 visible in the central portion of the viewshed. The homes are partially visible from this perspective, with some of the development areas screened from view by intervening vegetation. Portions of the westernmost row of single-family structures within Planning Area 1 and portions of the manufactured slopes between Planning Area 1 and the western Project boundary would be visible from this perspective. The second floors of several of the single-family residences

and small portions of landscaping and manufactured slopes within Planning Area 5 would also be visible from this perspective. The steeper hills within the Project site (left side of the photo) are shown in their natural form, with no development visible from the viewing point.

- View from Orange Street (Figure 4.1-5): This view depicts the Project site from a viewpoint along Orange Street at the southernmost boundary of the site looking north/northeast toward the Project site. As shown in the before image, the Project site appears as a mostly vacant field with remnants of concrete barricades, chain link fencing, and other concrete infrastructure improvements visible in the immediate foreground, and the hilly portions of the Project site visible in the background. An unimproved/unpaved section of Orange Street is shown traversing the Project site. Scattered small shrubs are visible near the viewing location and vegetation is visible among the rocky outcrops on the steeper portions of the hills in the background. The remaining portions of the Project site (shown in the central portion of the image) that are visible appear to have been subject to weed abatement measures, with only nominal vegetation occurring throughout these areas. The *after* image provides a visual simulation of the completed Project. In the visual simulation, the former unpaved section of Orange Street would be improved as a four-lane arterial roadway and associated improvements (landscaped center median; northbound and southbound bike lanes; and a pedestrian easement consisting of a 6-foot wide curb-adjacent parkway lined with street trees, 8-foot wide decomposed granite multi-use trail separated from the road by a three-rail fence, and 5-foot wide parkway). The right side of the *after* visual simulation depicts the southwest portion of Planning Area 10 consisting of landscaping, a community theme wall, and a two-story multi-family residential structure that is representative of the type of residential buildings that are proposed within Planning Area 10. Beyond and to the left of the multi-family residential structure, a manufactured slope is depicted which is proposed along the southern boundary of Planning Area 3, above which two-story single-family residences (also within Planning Area 3) are shown. On the right side of the *after* visual simulation panel, portions of the prominent ridgeline that traverses the majority of the eastern portion of the Project site in a north-south orientation is visible above the homes.

As demonstrated in Figure 4.1-4, the Project has been designed to concentrate development in the flatter portions of the western area of the Project site, and generally preserves the prominent ridgelines, hillsides, and rock outcroppings that currently exist on-site. As such, public views of the Project site from the west (i.e., along Miguel Bustamante Parkway) that may be considered scenic vistas would not be adversely affected by the Project. Figure 4.1-5 illustrates that some views of the on-site prominent ridgeline and rock outcroppings from the south would be preserved, with the exception of views of the portions of the hillsides that are at lower elevations that would be partially obscured by intervening residential structures proposed by the Project. Figure 4.1-6, *Grading Cross-Sections (1 of 2)*, and Figure 4.1-7, *Grading Cross-Sections (2 of 2)*, provide elevation views of the Project's proposed extent of grading. As shown on Figure 4.1-7, in order to construct the building pads and associated improvements within Planning Area 3, the Project proposes grading the hill on the southwest portion of the Project site. However, the relatively small hill that would be graded to

Visual Simulations - From Eye Level (6ft.) on Miguel Bustamante Parkway, looking Northeast.

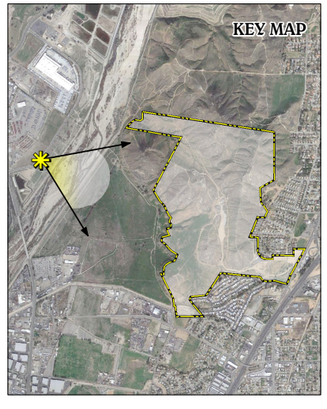


Figure 4.1-4

NOT TO SCALE

MIGUEL BUSTAMANTE PARKWAY VISUAL SIMULATION (BEFORE & AFTER)

Visual Simulations - From Eye Level (6ft.) on Orange Street, looking Northeast.

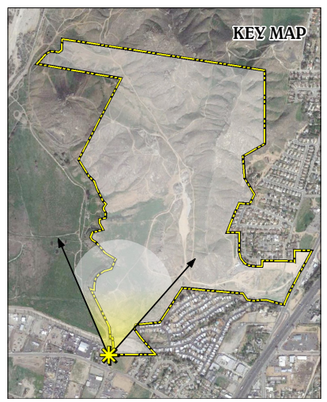
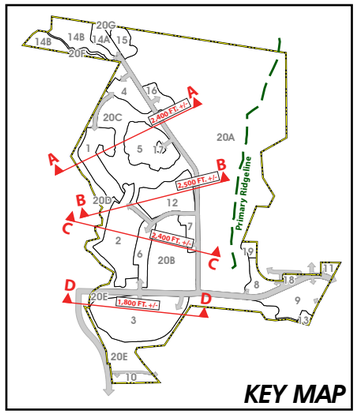


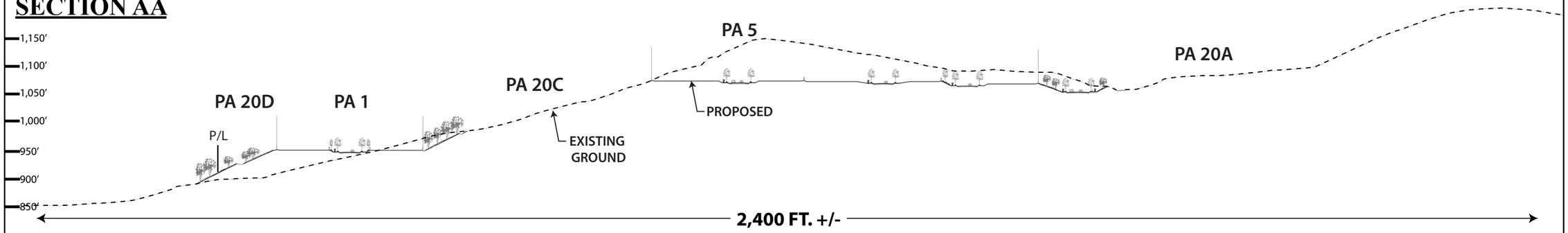
Figure 4.1-5

NOT TO SCALE

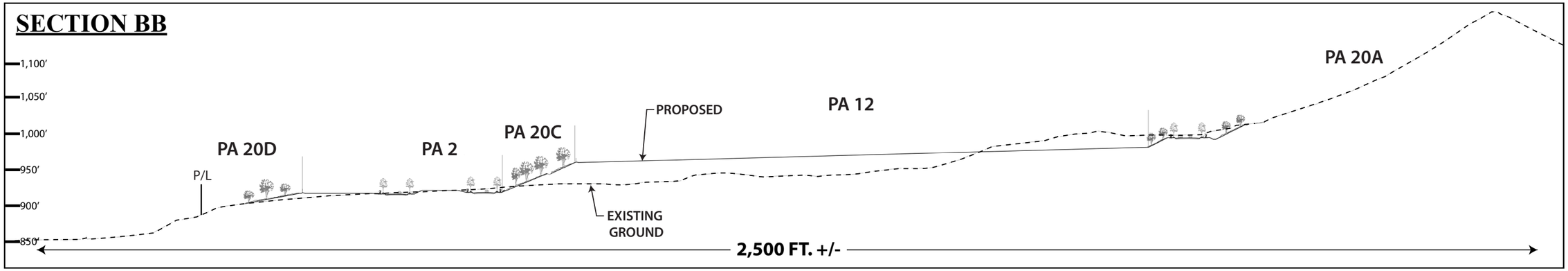
ORANGE STREET VISUAL SIMULATION (BEFORE & AFTER)



SECTION AA



SECTION BB

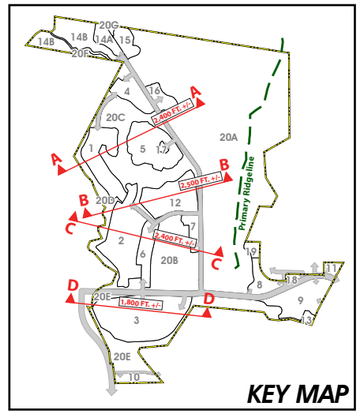


Source(s): SIA (06-16-2016)

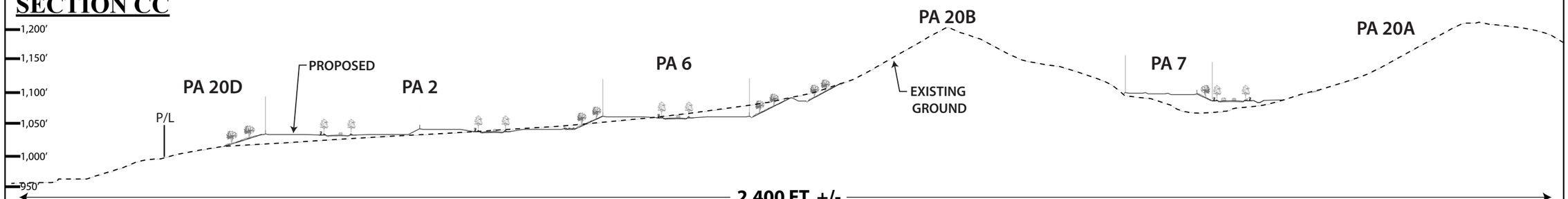
Figure 4.1-6

NOT TO SCALE

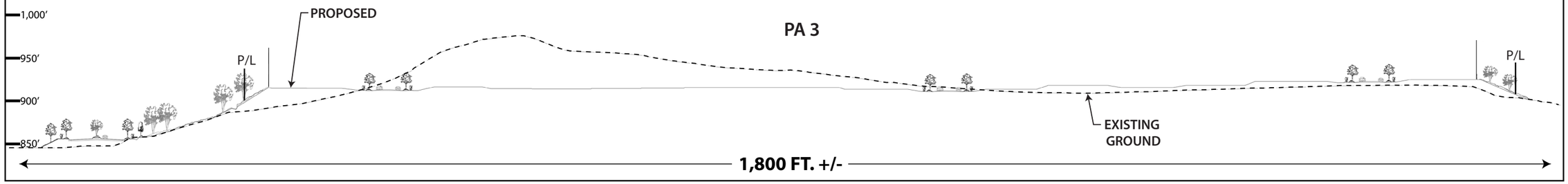
GRADING CROSS-SECTIONS (1 OF 2)



SECTION CC



SECTION DD



Source(s): SIA (06-16-2016 & 04-10-2017)

Figure 4.1-7

NOT TO SCALE

GRADING CROSS-SECTIONS (2 OF 2)

support development of Planning Area 3 is not a defining feature of the Project site in relation to the larger hills and prominent ridgeline that would be preserved through the Project's design. Accordingly, the Project site would not result in a substantial adverse effect on a scenic vista, and impacts would be less than significant from off-site viewing locations to the south and west of the Project site.

The proposed Project design generally avoids removal or alteration of existing rock outcroppings and prominent ridgelines at the Project site, primarily through its designation of 199.7 acres of the site as "Open Space-Resource" areas (refer to Figure 3-3, *Specific Plan Land Use Plan*), and avoiding siting of development within areas of the Project site characterized by high topographic relief. The proposed development of the Project site would likely result in removal of some rock outcroppings, including the hilly portion of the Project site where the water tank would be constructed. However, through siting development below the ridgeline and in the flatter western portions of the site, the design of the Project preserves the prominent ridgeline and most of the rock outcroppings that are prominently visible from the public viewpoints available to the east of the Project site. As discussed above, Figure 4.1-4 and Figure 4.1-5 (respectively) demonstrate that the Project would effectively preserve public views of the prominent rock outcroppings and ridgelines that are available from the west and the south. Accordingly, the Project would not result in substantial adverse effects to scenic resources, and impacts would be less than significant.

The City's General Plan Update EIR also states that the Santa Ana River and the surrounding natural areas are considered scenic resources within the City (City of Colton, 2013c, p. 4.1-2). The Santa Ana River abuts the northwest corner of the Project site (Planning Area 14B). The Project does not propose any large structural development within Planning Area 14B, which is the nearest planning area to the Santa Ana River, that would screen views of the Santa Ana River or the surrounding natural areas from public view. Accordingly, the Project would not result in substantial adverse effects on scenic vistas located off-site, and impacts would be less than significant.

Threshold b) Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Caltrans Scenic Highway Mapping System indicates that there are no officially designated State or County Scenic Highways in the vicinity of the Project site. The nearest State Designated Scenic Highway is Highway 38, located approximately 12 miles northeast of the Project site (Caltrans, 2011; Google Earth Pro, 2016). According to the Caltrans Scenic Highway Mapping System, a portion of Highway 38 provides views of forested mountainsides and far-off desert vistas (Caltrans, 2011). The Project site is not prominently visible from Highway 38 due to its distance from the Project site as well as due to intervening topography and development. Additionally, the General Plan Update EIR for the City of Colton states that there are no officially designated or eligible scenic routes or highways within the City (City of Colton, 2013c, p. 4.1-2). Thus, the Project site is not located within or adjacent to a scenic highway corridor, nor is it prominently visible from any state-

designated scenic highway corridor. Accordingly, the Project would have no impact with respect to damaging scenic resources within a state scenic highway.

Threshold c) Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?

During construction, the proposed Project would result in a change to the visual character of the Project site from a predominately undeveloped site (except for the Roquet Paving Company facility located on the southeastern portion of the site) to an active construction site with construction equipment, staging areas, and construction machinery. Following completion of the construction activities, all construction equipment would be removed from the site. Project-related changes to local visual character and quality during Project construction would be less than significant due to the temporary nature of construction activities. Further, the presence of construction equipment is common and not considered a degradation of the visual environment.

Following the completion of construction, the developed Project site would change from a predominantly undeveloped property to one with homes, parks, fire station, an elementary school, commercial retail buildings, and infrastructure. The proposed Roquet Ranch Specific Plan Section III, *Development Standards*, establishes a list of permitted uses and dimensional standards for development in each Planning Area within the Roquet Ranch Specific Plan. Specific Plan Section IV, *Design Guidelines*, addresses the community's proposed site planning, architecture, and landscaping themes, all of which would be intended to ensure continuity and compatibility throughout the Specific Plan. Adherence to the development standards and design guidelines contained in the Specific Plan would help to ensure that the master-planned community builds out as intended by the City of Colton General Plan. The proposed residential, commercial, and public institution buildings would feature contemporary architectural designs inspired by Colton's historical agricultural and railroad heritage, which is the community theme for Roquet Ranch. All components of the Project, including the design of the structures, signage, and fencing, would be subject to compliance with the Roquet Ranch Specific Plan.

As discussed under Threshold a), the proposed Project would avoid development within the prominent ridgeline that would meet the City's definition of a scenic vista. Figure 4.1-4 and Figure 4.1-5 provide visual simulations which show perspective views of the Roquet Ranch community from the west and south, respectively. As shown on Figure 4.1-4 and Figure 4.1-5, the Project would not result in substantial adverse effects to the prominent rock outcroppings and ridgelines at the Project site. However, because the proposed Project would result in grading within the lower hillsides within Planning Area 3 and along the base of the more prominent ridgelines in the central portions of the site (including Planning Areas 4, 5, 15, 16, and 17) the implementation of the Project would result in alteration of the visual quality of the hillsides. Section AA on Figure 4.1-6, *Grading Cross-Sections (1 of 2)*, reflects the Project's proposed grading in the north-central portion of the Project site. Additionally, Section DD on Figure 4.1-7, *Grading Cross-Sections (2 of 2)*, reflects the Project's proposed grading in the southwest portion of the Project site. Accordingly, because the

Project would alter the existing visual character of the site through its grading, it is conservatively assumed that the proposed Project would result in a significant impact with respect to Threshold c).

Threshold d) Would the Project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

The implementation of the proposed Project would introduce new sources of lighting at the Project site including street lighting, security lighting at the proposed parks, and light generated by individual residential, commercial, and public institution buildings. Chapter 18.42, Performance Standards, § 18.42.090, Light, and § 18.42.100, Glare, of the City's Zoning Code regulates lighting and glare within the City, and require that sites are properly illuminated without producing an adverse impact on neighboring property. The proposed Project would be required to conform to the design standards contained in the Roquet Ranch Specific Plan (see Section IV), which has been reviewed by City staff to ensure compliance with the applicable provisions of the City of Colton Municipal Code related to lighting standards (T&B Planning, Inc., 2016, p. IV-18). Required compliance with the City's nighttime lighting standards would ensure that the proposed Project would not produce substantial amounts of light from artificial lighting sources that would adversely affect the day or nighttime views of the surrounding area.

The proposed Project would introduce limited sources of glare at the Project site, including reflective building materials such as glass windows. However, the proposed Project does not include any components that would include large expanses of reflective materials that would result in the generation of substantial amounts of glare. Moreover, proposed walls, fences, and landscaping would screen some potential sources of glare from affecting nearby motorists or residents. Accordingly, a less-than-significant daytime glare impact would occur.

4.1.5 CUMULATIVE IMPACT ANALYSIS

For purposes of analysis herein, the Project's cumulative study area for aesthetics comprises all areas visible from and visible to the Project site. Existing and planned development located outside the Project's viewshed have no potential to cumulatively contribute to visual quality effects.

As noted under the discussion of Threshold a), the Project site contains areas that are subject to potential scenic vistas, including hills, a prominent ridgeline, and uninterrupted open spaces. Although the Project proposes to develop a master-planned community within the lower portions of the hills and uninterrupted open spaces located on the Project site, the design of the Project would preserve most of the site as "Open Space-Resource," and would concentrate development within the flatter portions of the Project site below the Project site's prominent ridgeline. Effectively, the Project would avoid adverse effects to scenic vistas enjoyed from the public view points to the east and south of the Project site, and therefore would have a less-than-significant impact. The City's General Plan EIR does not identify any scenic resources at the Project site; however, based on the discussion of scenic resources provided in City's General Plan EIR, the rock outcroppings and prominent ridgeline on the Project site are considered potential scenic resources. Although the

Project would alter or remove some of the existing rock outcroppings at the site, the proposed Project design generally avoids removal or alteration of existing rock outcroppings and preserves the existing prominent ridgeline through siting development in the flatter portions of the site and ensuring development remains below the ridgeline. Therefore, the Project would not result in substantial adverse effects to scenic resources. The nearest designated scenic resource to the Project site is the Santa Ana River and surrounding natural areas, which abut Planning Area 14B of the Project site to the west. The Project's contribution to the potential obstruction of public views to the Santa Ana River and environs would be less than cumulatively considerable because views of the Santa Ana River are already obscured by the existing topography of the Project site, and the Project proposes one-story and two-story structures and other low-stature features that would not further obstruct views of the Santa Ana River and environs. The areas adjacent to the eastern and southern portions of the Project site are mostly developed in the existing condition. No development projects are anticipated within the undeveloped open space north and west of the Project site.

As noted under the analysis of Threshold b), the Caltrans Scenic Highway Mapping System indicates that there are no officially designated State or County Scenic Highways in the vicinity of the Project site. According to the City's General Plan Update EIR, there are no designated scenic routes within Colton, thus the Project site and the anticipated cumulative project locations would not be visible from a designated scenic route (City of Colton, 2013c, p. 4.1-2). Accordingly, the project would not contribute to a cumulatively considerable impact associated with scenic resources within a state scenic highway or scenic route.

As noted under the analysis of Threshold c), the proposed Project would alter the character of the site through its proposed grading. Nevertheless, the Project would be visually compatible with the existing surrounding natural and built environment through its mandatory compliance with the community's proposed site planning, architecture, and landscaping themes contained with Section IV, *Design Guidelines* of the Roquet Ranch Specific Plan. No other development projects are proposed in the immediate vicinity of the Project site which could contribute toward a cumulative impact to the visual character of the Project site and surrounding area. The Project's significant impacts associated with its proposed grading are Project-specific, and would therefore not be cumulatively considerable because they would not affect any other properties. Thus, the Project would not result in a cumulatively considerable contribution toward a significant impact associated with impacts to visual character. Furthermore, the development of other cumulative projects within the Project area would also be subject to review by the City or other governing jurisdictions to ensure that the architectural design and other design features would not be degrading to the area. As such, a less-than-significant cumulative impact would occur.

As noted under the analysis of Threshold d), with respect to potential cumulative light impacts, City of Colton Municipal Code Chapter 18.42, Performance Standards, § 18.42.090, Light, of the City's Municipal Code regulates lighting such that sites are properly illuminated without producing an adverse impact on neighboring property. Additionally, City of Colton Municipal Code Chapter 18.42, Performance Standards, § 18.42.100, Glare, prohibits the production of glare on a property to

the extent that it is visible from adjacent properties. Cumulative development projects in the City would be required to comply with Municipal Code § 18.42.090 and § 18.42.100. Thus, the Project is not cumulatively considerable. Additionally, development projects with artificial light sources in surrounding jurisdictions would be required to comply with the light reduction requirements applicable in their respective jurisdiction. Therefore, the Project would have less-than-cumulatively-considerable light and glare impacts.

4.1.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a): Less-than-Significant Impact. The Project would not result in substantial adverse effects on scenic vistas or scenic resources. The Project site contains potential scenic vistas, including hills, a prominent ridgeline, and uninterrupted open spaces. Additionally, the Project site contains potential scenic resources, including rock outcroppings and a prominent ridgeline. The proposed design of the Project preserves the prominent ridgeline, concentrates development in the flatter portions of the Project site, and preserves most of the natural hillsides as "Open Space-Resources." Through these measures, the Project avoids substantial adverse effects to scenic vistas and resources at the site; therefore, impacts to scenic vistas and scenic resources would be less than significant.

Threshold b): No Impact. The Project has no potential to damage scenic resources within a scenic highway corridor, because the property is not visible from a designated scenic highway corridor.

Threshold c): Significant Direct Impact. The Project would develop the site in compliance with the site planning, architecture, and landscaping themes presented in Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan, which would ensure compatibility and continuity of development within the Roquet Ranch community and with the surrounding environs. However, the existing hillside setting that represents the visual character of the Project site would be permanently altered by the Project during its operation through its proposed grading of certain hillsides. Accordingly, the proposed Project would have a direct significant impact on the visual character of the Project site. Because the Project's effects to visual character are Project-specific, they would not be cumulatively considerable.

Threshold d): Less-than-Significant Impact. The Project would not create substantial amounts of light or glare. Compliance with the City of Colton Municipal Code § 18.42.090 and § 18.42.100 and the outdoor lighting standards defined in Section IV of the Roquet Ranch Specific Plan would ensure less-than-significant impacts associated with light and glare affecting day or nighttime views in the area.

4.1.7 MITIGATION

There are no feasible mitigation measures for the City to impose that would reduce the Project's impacts on the visual quality of the site and surroundings (as discussed under Threshold c)) to levels below significance.

4.1.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold c): Significant and Unavoidable Direct Impact. The Project would develop the site in compliance with the site planning, architecture, and landscaping themes presented in Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan, which would ensure compatibility and continuity of development within the Roquet Ranch community and with the surrounding environs. However, the existing hillside setting that characterizes the visual character of the Project site would be permanently altered by the Project during its operation through its proposed grading of some of certain on-site hillsides. Accordingly, the proposed Project would have direct significant impact on the visual character of the Project site. Because the Project's effects to visual character are Project-specific, they would not be cumulatively considerable. The Project's design has been developed to minimize Project-specific effects to visual character in a number of ways. It will place residential neighborhoods and community amenities in clusters design to preserve the vast majority of steep slopes and major ridgelines on the Project site. Proposed residences will not block the sightline of the ridge and their development will be concentrated on the flatter portions of the site to avoid, as much as possible, grading of steep hillsides. Proposed local streets will climb within the graded pads of residences to minimize hillside disturbance, with development "stair-stepped' into existing grades to reflect the existing topography. Further, where feasible, and particularly along the edge of the grading that would be visible from off-site, the Project will use contour grading to blend the natural topography with the manufactures slopes in an effort to create a natural looking hillside. The City has determined that there are no further feasible mitigation measures for the City to impose that would reduce the Project's impacts to the visual quality of the site to levels that are less than significant. As such, the Project would result in significant and unavoidable direct impacts associated with its permanent alteration of the existing visual character or quality of the site.

4.2 AIR QUALITY

The analysis in this Subsection is based in part on a technical report prepared for the proposed Project by Urban Crossroads, Inc. titled, "Roquet Ranch Specific Plan Air Quality Impact Analysis City of Colton," dated August 16, 2016 (Urban Crossroads, 2016a) and appended to this EIR as *Technical Appendix B*. All references used in this Subsection are listed in EIR Section 7.0, *References*.

4.2.1 EXISTING CONDITIONS

A. South Coast Air Basin

The Project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of South Coast Air Quality Management District (SCAQMD). Under the 1977 Lewis-Presley Air Quality Management Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. The SCAB is a 6,745-square mile subregion of the SCAQMD, which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. (Urban Crossroads, 2016a, p. 9)

The SCAB is bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Los Angeles County portion of the Mojave Desert Air Basin is bound by the San Gabriel Mountains to the south and west, the Los Angeles/Kern County border to the north, and the Los Angeles/San Bernardino County border to the east. The Riverside County portion of the Salton Sea Air Basin is bound by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. (Urban Crossroads, 2016a, p. 9)

B. Regional Climate and Meteorology

Air quality in the SCAB is significantly influenced by the regional climate, as well as temperature, wind, humidity, precipitation, and amount of sunshine. The annual average temperatures throughout the SCAB vary from the low to middle 60s (degrees Fahrenheit [°F]). The eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures due to a decreased marine influence. The lowest temperatures throughout the SCAB occur in January, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino during the month of January. All portions of the SCAB have recorded maximum temperatures above 100°F. (Urban Crossroads, 2016a, p. 9)

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air has a substantial effect on climate within the SCAB. Humidity restricts visibility in the SCAB and also heightens the conversion of sulfur dioxide to sulfates. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71 percent along the coast and 59 percent inland. Since the ocean effect is dominant near the coastal areas within the SCAB, periods of heavy early morning fog and the

presence of low stratus clouds are a frequent occurrence. These effects decrease with distance from the coast. (Urban Crossroads, 2016a, p. 9)

Monthly and yearly rainfall totals are highly variable. More than 90 percent of the SCAB's rainfall occurs between November and April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast. (Urban Crossroads, 2016a, p. 10)

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB, with the remaining one-quarter of available sunshine being absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14 1/2 hours of possible sunshine. (Urban Crossroads, 2016a, p. 10)

Wind has a potent effect on air pollution. Wind direction and speed determine the horizontal dispersion and transport of air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. Each year, this period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas." During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage commences with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections. (Urban Crossroads, 2016a, p. 10)

Wind patterns across the south coastal region are characterized by westerly and southwesterly on-shore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season. (Urban Crossroads, 2016a, p. 11)

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level. (Urban Crossroads, 2016a, p. 10)

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest, and typically occur only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides (NO_x) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Therefore, a period of high levels of primary pollutants along the coastline occurs in the winter. (Urban Crossroads, 2016a, p. 10)

C. *Existing Air Quality*

Air quality is measured at established SCAQMD air quality monitoring stations, and is monitored and evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect, as well health effects of each pollutant regulated under these standards are shown in Table 4.2-1, *Ambient Air Quality Standards*. (Urban Crossroads, 2016a, p. 11)

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards presented in Table 4.2-1. The state considers air quality in a region to be in attainment if the measured ambient air pollutant levels for ozone (O_3), CO, sulfur dioxide (SO_2), nitrogen dioxide (NO_2), particulate matter up to 10 microns in size (PM_{10}), and particulate matter up to 10 microns in size ($PM_{2.5}$) are not equaled or exceeded at any time in any consecutive three-year period; and the federal standards (other than O_3, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The O_3 standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. (Urban Crossroads, 2016a, p. 11)

1. *Regional Air Quality*

Criteria Air Pollutants

The federal government has designated seven (7) pollutants that are pervasive enough across the nation to warrant national health standards. Called "criteria pollutants," these are O_3, NO_2, PM_{10}, $PM_{2.5}$, CO, SO_2 and lead (Pb). The SCAQMD monitors levels of various criteria pollutants at 30 monitoring stations throughout the air district. In 2015, the ambient air quality standards (NAAQS and CAAQS) were exceeded on one or more days for O_3 (federal and state), PM_{10} (state), and $PM_{2.5}$ (state) at most monitoring stations. No areas of the SCAB exceeded federal or state standards for NO_2, SO_2, CO, sulfates or lead. The attainment status for criteria pollutants within the SCAB is summarized in Table 4.2-2, *Attainment Status of Criteria Pollutants in the SCAB*. Appendix 3.1 of the Project's air quality impact analysis (*Technical Appendix B*) provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB. (Urban Crossroads, 2016a, p. 14)

Table 4.2-1 Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: (Urban Crossroads, 2016a, Table 2-1)

Table 4.2-2 Attainment Status of Criteria Pollutants in the SCAB

Criteria Pollutant	State Designation	Federal Designation
Ozone - 1-hour standard	Nonattainment	No Standard
Ozone - 8-hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonnattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead[1]	Attainment	Attainment

[1] The Federal nonattainment designation for lead is only applicable towards the Los Angeles County portion of the SCAB.
Source: (Urban Crossroads, 2016a, Table 2-2)

2. Local Air Quality

Relative to the Project site, the nearest long-term air quality monitoring site for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ is the SCAQMD Central San Bernardino Valley 2 monitoring station, located approximately six miles northeast of the Project site in San Bernardino (SRA 34). (Urban Crossroads, 2016a, p. 14)

Table 4.2-3, *Project Area Air Quality Monitoring Summary 2013-2015*, depicts the most recent three years of data available at the time the NOP for this EIR was released (June 2016), and identifies the number of days that ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project site. Data for SO_2 has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO_2 concentrations. (Urban Crossroads, 2016a, p. 14)

The SCAB has experienced unhealthful air since World War II and is one of the most unhealthful air basins in the United States; however, as a result of the region's air pollution control efforts over the last 66 years, air pollution concentrations in the SCAB have been reduced dramatically. For example, peak ozone levels have been cut by almost three-fourths since air monitoring began in the 1950s and population exposure was cut in half during the 1980s alone (SCAQMD, 2015a, p. 2). Thus, overall air quality within the SCAB is dramatically improving as the result of regulatory programs and is expected to continue to improve in the future as government regulations become more stringent.

The SCAQMD's *Final 2012 Air Quality Management Plan* states, "the remarkable historical improvement in air quality since the 1970's is the direct result of Southern California's comprehensive, multiyear strategy of reducing air pollution from all sources as outlined in its AQMPs." Ozone, NO_X, VOCs, and CO have been decreasing in the Basin since 1975 and are projected to continue to decrease through 2020. These decreases result primarily from motor vehicle controls and reductions in

evaporative emissions. Although vehicle miles traveled in the Basin continue to increase, NO_X and VOC levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NOx emissions from electric utilities have also decreased due to use of cleaner fuels and renewable energy. Ozone contour maps show that the number of days exceeding the national 8-hour standard decreased between 1997 and 2007. The overall trends of PM_{10} and $PM_{2.5}$ in the air (not emissions) show an overall improvement since 1975. Direct emissions of PM_{10} have remained somewhat constant in the Basin and direct emissions of $PM_{2.5}$ have decreased slightly since 1975. Area wide sources (fugitive dust from roads, dust from construction and demolition, and other sources) contribute the greatest amount of direct particulate matter emissions. Ozone levels in the SCAB have decreased substantially over the last 30 years. Today, the maximum measured concentrations are approximately one-third of concentrations measured in the late 1970's.

D. Air Quality Pollutants and Associated Human Health Effects

The federal government and State of California have established maximum permissible concentrations for common air pollutants that may pose a risk to human health or would otherwise degrade air quality and adversely affect the environment. These regulated air pollutants are referred to as "criteria pollutants." Criteria pollutants are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and effects are identified below and in Section 2.6 of *Technical Appendix B*).

- **Carbon Monoxide (CO)** is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. Inhaled CO has no direct toxic effect on the lungs, but exerts its effect on tissues by interfering with oxygen transport and competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Therefore, human health conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. The most common symptoms associated with CO poisoning include headache, nausea, vomiting, dizziness, fatigue, and weakness. Individuals most at risk to the effects of CO include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic oxygen deficiency. (Urban Crossroads, 2016a, pp. 15-18)

- **Sulfur Dioxide (SO_2)** is a colorless, extremely irritating gas or liquid. SO_2 enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_X). SO_2 is a respiratory irritant to people afflicted with asthma. After a few

Table 4.2-3 Project Area Air Quality Monitoring Summary 2013-2015

POLLUTANT	STANDARD	YEAR		
		2013	2014	2015
Ozone (O_3)				
Maximum 1-Hour Concentration (ppm)		0.139	0.121	0.134
Maximum 8-Hour Concentration (ppm)		0.112	0.099	0.117
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	22	38	52
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	53	76	79
Number of Days Exceeding Federal 1-Hour Standard	> 0.12 ppm	2	0	6
Number of Days Exceeding Federal 8-Hour Standard	> 0.075 ppm	36	51	57
Number of Days Exceeding Health Advisory	≥ 0.15 ppm	0	0	0
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)		--	4.0	--
Maximum 8-Hour Concentration (ppm)		1.7	2.4	--
Number of Days Exceeding State 1-Hour Standard	> 20 ppm	0	0	--
Number of Days Exceeding Federal / State 8-Hour Standard	> 9.0 ppm	0	0	--
Number of Days Exceeding Federal 1-Hour Standard	35 ppm	0	0	--
Nitrogen Dioxide (NO_2)				
Maximum 1-Hour Concentration (ppm)		0.072	0.073	0.071
Annual Arithmetic Mean Concentration (ppm)		0.018	0.018	0.015
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
Particulate Matter ≤ 10 Microns (PM_{10})				
Maximum 24-Hour Concentration (µg/m^3)		177.3	157.2	187.0
Number of Samples		60	60	--
Number of Samples Exceeding State Standard	> 50 µg/m^3	2	2	3
Number of Samples Exceeding Federal Standard	> 150 µg/m^3	1	1	1
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)				
Maximum 24-Hour Concentration (µg/m^3)		55.3	32.2	53.5
Annual Arithmetic Mean (µg/m^3)		11.4	--	10.7
Number of Samples Exceeding Federal 24-Hour Standard	> 35 µg/m^3	1	0	2

-- = Data not available from SCAQMD or ARB
Source: (Urban Crossroads, 2016a, Table 2-3)

minutes' exposure to low levels of SO_2, asthma sufferers can experience breathing difficulties, including airway constriction and reduction in breathing capacity. Although healthy individuals do not exhibit similar acute breathing difficulties in response to SO^2 exposure at low levels, animal studies suggest that very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract. (Urban Crossroads, 2016a, pp. 16-19)

- **Nitrogen Oxides (NO_X)** consist of nitric oxide (NO), nitrogen dioxide (NO_2) and nitrous oxide (N_2O) and are formed when nitrogen (N_2) combines with oxygen (O_2). Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. Nitrogen oxides are typically created during combustion processes, and are major contributors to smog formation and acid deposition. NO_2 is a criteria air pollutant, and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere, and reduced visibility. Of the seven types of nitrogen oxide compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than those indicated by regional monitoring stations. Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO_2. Short-term exposure to NO_2 can result in resistance to air flow and airway contraction in healthy subjects. Exposure to NO_2 can result in larger decreases in lung functions in individuals with asthma or chronic obstructive pulmonary diseases (e.g., chronic bronchitis, emphysema), as these individuals are more susceptible to the effects of NO_X than healthy individuals. (Urban Crossroads, 2016a, p. 18)

- **Ozone (O_3)** is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_X), both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, warm temperatures, and light wind conditions are favorable to the formation of this pollutant. Short-term exposure (lasting for a few hours) to ozone at levels typically observed in southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible sub-groups for ozone effects. An increased risk for asthma has been found in children who participate in multiple sports and live in communities with high ozone levels. (Urban Crossroads, 2016a, pp. 16-17)

- **Particulate Matter less than 10 microns (PM_{10})** is a major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where

they may be deposited, resulting in the adverse health effects discussed below for $PM_{2.5}$. PM_{10} also causes air visibility reduction and is a criteria air pollutant. (Urban Crossroads, 2016a, pp. 16-18)

- **Particulate Matter less than 2.5 microns ($PM_{2.5}$)** is a similar air pollutant to PM_{10} consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include sulfates formed from SO_2 release from power plants and industrial facilities and nitrates that are formed from NO_X release from power plants, automobiles and other types of combustion sources. The chemical composition of fine particles is highly dependent on location, time of year, and weather conditions. $PM_{2.5}$ is a criteria air pollutant. Elevated ambient concentrations of fine particulate matter (PM_{10} and $PM_{2.5}$) have been linked to an increase in respiratory infections, the number and severity of asthma attacks, and increased hospital admissions. Some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life-span, and an increased mortality from lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease, and children, appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$. (Urban Crossroads, 2016a, pp. 16-18)

- **Volatile Organic Compounds (VOCs) and Reactive Organic Gasses (ROGs)** are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. Both VOCs and ROGs are precursors to ozone and contribute to the formation of smog through atmospheric photochemical reactions. VOCs and ROGs have different levels of reactivity; that is, they do not react at the same speed or do not form ozone to the same extent when exposed to photochemical processes. VOCs often have an odor, including such common VOCs as gasoline, alcohol, and the solvents used in paints. Odors generated by VOCs can irritate the eye, nose, and throat, which can reduce respiratory volume. Studies have shown that the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. VOCs and ROGs are precursors to O_3 which is a criteria pollutant. The SCAQMD uses the terms VOC and ROG interchangeably. (Urban Crossroads, 2016a, pp. 16-19)

- **Lead (Pb)** is a heavy metal that is highly persistent in the environment. Historically, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. Currently, emissions of lead are largely limited to stationary sources such as lead smelters. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple

commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure. Lead poisoning can cause anemia, lethargy, seizures, and death. Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. It is noted that the Project is not expected to generate a quantifiable amount of lead emissions. Lead is a criteria air pollutant. (Urban Crossroads, 2016a, pp. 17-19)

4.2.2 APPLICABLE ENVIRONMENTAL REGULATIONS

1. Federal Regulations

The U.S. Environmental Protection Agency (EPA) is responsible for setting and enforcing the NAAQS for O_3, CO, NO_X, SO_2, PM_{10}, and Pb. The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB. (Urban Crossroads, 2016a, pp. 19-20)

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years. The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance. The CAA also mandates that states submit and implement State Implementation Plans (SIPs) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met. (Urban Crossroads, 2016a, p. 20)

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants: O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. Table 4.2-1 provides the NAAQS within the SCAB. (Urban Crossroads, 2016a, p. 20)

Mobile source emissions are regulated in accordance with CAA Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_X, which is a collective term that includes all forms of nitrogen oxides (NO, NO_2, NO_3) which are emitted as byproducts of the combustion process. (Urban Crossroads, 2016a, p. 20)

2. State Regulations

The CARB which became part of the California EPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. The California CAA mandates

achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. The CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, established standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. At this time, however, hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS. (Urban Crossroads, 2016a, p. 20)

All air pollution control districts in California are formally designated as being in attainment or non-attainment for each CAAQS. Serious non-attainment areas are required to prepare air quality management plans that include specified emission reduction strategies in an effort to meet clean air goals. However, air basins may use alternative emission reduction strategies that achieve a reduction of less than 5 percent per year under certain circumstances. (Urban Crossroads, 2016a, p. 20)

CARB also has on- and off-road engine emission-reduction programs that would indirectly affect the Project's emissions through the phasing in of cleaner on- and off-road engines. In addition, CARB has a Portable Equipment Registration Program that allows owners or operators of portable engines and associated equipment to register their units under a statewide program, with specified emission requirements, without having to obtain individual permits from local air districts. The state recently enacted a new regulation for the reduction of diesel particulate matter and criteria pollutant emissions from in-use off-road diesel-fueled vehicles (13 CCR Article 4.8, Chapter 9, Section 2449). This regulation provides target emission rates for particulate matter and NO_X emissions for owners of fleets of diesel-fueled off-road vehicles. It applies to equipment fleets of three specific sizes, and the target emission rates are reduced over time.

3. Air Quality Management Planning

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In regards to the NAAQS, the Project region within the SCAB is in nonattainment for O_3 (8-hour standard) and $PM_{2.5}$. For the CAAQS, the Project region within the SCAB is in nonattainment for O_3 (1-hour and 8-hour standards), PM_{10}, and $PM_{2.5}$. (Urban Crossroads, 2016a, p. 14)

In response, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. The most recent AQMP was adopted by the AQMD Governing Board on December 7, 2012. The 2012 AQMP incorporates scientific and technological information and planning assumptions, including the Southern California Association of Governments' (SCAG's) *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* and updated emission inventory methodologies for various source categories. For example, the 2012 AQMP has assumed that development associated with general plans, specific plans, residential projects, and wastewater facilities will be constructed in accordance with population growth projections identified by SCAG in its 2012 RTP/SCS. The 2012 AQMP also has assumed that such development projects

will implement strategies to reduce emissions generated during the construction and operational phases of development. (Urban Crossroads, 2016a, p. 41)

The SCAQMD released the draft 2016 AQMP for public review in June 2016. The 2016 draft AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as, explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. As the draft 2016 AQMP had not been formally adopted by the SCAQMD at the time the NOP for this EIR was published (June 2016), the Project's consistency with the AQMP will be determined using the 2012 AQMP. (Urban Crossroads, 2016a, p. 42)

4. Local

The City of Colton General Plan also includes policies that are applicable to air quality. The Model Air Quality Element of the Colton General Plan identifies goals, policies, and programs pertaining to governmental programs and actions, air and vehicular transportation, land use, and energy. Additionally, the Land Use Element of the Colton General Plan contains policies intended to support compliance with state and regional air quality programs, ensure the protection of sensitive receptors, and require the evaluation of the air quality impacts from proposed developments. An analysis of the Project's consistency with the policies of the City of Colton General Plan is contained within Section 4.9, *Land Use and Planning*, of this EIR.

4.2.3 METHODOLOGY FOR ESTIMATING PROJECT-RELATED AIR QUALITY IMPACTS

On October 2, 2013, the SCAQMD released the California Emissions Estimator Model™ (CalEEMod™) v2013.2.2. CalEEMod 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 air pollutant emissions from land use projects. Urban Crossroads, Inc. used this model to calculate Project-construction-source and Project operational-source criteria pollutants NO_X, VOC, PM_{10}, $PM_{2.5}$, SO_X, and CO and greenhouse gas (GHG) emissions. (Urban Crossroads, 2016a, p. 24)

It should be noted that this air quality analysis is conservative as the Project emissions calculations discussed throughout this Subsection do not credit current emissions from operation of the existing on-site Roquet Paving Inc. facility, which the Project proposes to remove from the site.

A. Methodology for Calculating Project Construction Emissions

Construction activities associated with the Project would result in emissions of CO, VOCs, NO_X, SO_X, PM_{10}, and $PM_{2.5}$. The Project's construction activities are described in EIR Section 3.0, *Project Description*. The activities that would produce air pollutant emissions would include but not be limited to rough/fine grading, underground infrastructure (trenching) building construction, architectural coatings (painting), paving, and construction worker commuting.

The assumptions for each phase of Project construction were input by Urban Crossroads, Inc. into the CalEEMod model using anticipated construction characteristics. A list of the construction equipment and anticipated construction schedule (including overlapping construction activities) assumed in the analysis of Project-related construction emissions is provided in EIR Subsection 3.4.1, *Construction Details*. Refer to Section 3.4 of the Project's air quality impact analysis (*Technical Appendix B*) for more detail on the methodology utilized to calculate Project-related construction emissions. Refer to Appendix 3.2 of *Technical Appendix B* for specific detailed modeling inputs/outputs used in the analysis. (Urban Crossroads, 2016a, pp. 24-25)

Dust is typically a major concern during rough grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). The CalEEMod model was utilized by Urban Crossroads, Inc. to calculate fugitive dust emissions resulting from this phase of activity. (Urban Crossroads, 2016a, pp. 24-25)

Construction emissions for construction worker vehicles traveling to and from the Project site, as well as vendor trips (construction materials delivered to the Project site) were calculated by Urban Crossroads, Inc. based on information CalEEMod model defaults. (Urban Crossroads, 2016a, pp. 24-25)

B. Methodology for Calculating Project Operational Emissions

Operational activities associated with the proposed Project would result in emissions of ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. Operational emissions would be expected from the following primary sources.

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions

Architectural Coatings

Over a period of time, the buildings that are part of this Project will be subject to emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings as part of Project maintenance. The emissions associated with architectural coatings were calculated using the CalEEMod model. (Urban Crossroads, 2016a, p. 28)

Consumer Products

Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on the

Project's total building square footage (calculated as a function of the percentage of the land use type of the total Project size) and defaults provided within the CalEEMod model. (Urban Crossroads, 2016a, pp. 28-29)

Hearths/Fireplaces

The emissions associated with use of hearths/fireplaces were calculated based on assumptions provided in the CalEEMod model. However, in order to account for the requirements of the SCAQMD and local regulations, the unmitigated CalEEMod model estimates were adjusted to remove wood burning stoves and fireplaces. The Project would be required to comply with the proposed Roquet Ranch Specific Plan and SCAQMD Rule 445, which prohibits the use of wood burning stoves and fireplaces in new development. (Urban Crossroads, 2016a, p. 29)

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in the CalEEMod model. (Urban Crossroads, 2016a, p. 29)

Combustion Emissions Associated with Natural Gas and Electricity

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state), criteria pollutant emissions from offsite generation of electricity is generally excluded from the evaluation of significance and only natural gas use is considered. The emissions associated with natural gas use were calculated using the CalEEMod model. (Urban Crossroads, 2016a, p. 29)

Vehicles

Project-related vehicular air pollutant emissions are dependent on the Project's overall daily vehicle trip generation and the average trip length and purpose of each trip. Information related to the Project's vehicle trip characteristics was obtained from the Project's traffic impact analysis contained as *Technical Appendix L* to this EIR. (Urban Crossroads, 2016a, p. 29)

C. Methodology for Calculating Potential Overlapping Construction and Operational Emissions

The Roquet Ranch Specific Plan contains a Phasing Plan that anticipates of two development phases. The Phasing Plan conceptually illustrates how the Specific Plan envisions the Project to build out and timing for the development of the Project (T&B Planning, Inc., 2016, p. II-31). While the Project is

proposed to be built out by the end of 2020, the exact timing of implementation for any given phase may vary based on a number of factors, including market and economic demands, as well as physical constraints or timing of infrastructure improvements. As such, it is impossible to determine which portions of the Project site would be operational while other portions of the Project site would be under construction. Therefore, the Air Quality Impact Analysis (*Technical Appendix B*) included a conservative evaluation of a worst-case scenario that models air quality impacts of the Project if the construction and operational phases were to fully overlap. In reality, the overlap scenario modeled by the Project's Air Quality Impact Analysis would not occur, as it assumes the Project would be fully operational during construction activities. Thus, the analysis is conservative and overstates the Project's air quality impacts.

4.2.4 BASIS FOR DETERMINING SIGNIFICANCE

Appendix G, Environmental Checklist Form, Section III (Air Quality) of CEQA stipulates that where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make determinations of significance for the impacts of a land use project. The City of Colton is located in the SCAB, governed by the SCAQMD; therefore, this EIR relies on the SCAQMD's regional thresholds to determine the significance of air pollutant emissions, as discussed further below. The proposed Project would result in a significant impact to air quality if the Project or any Project-related component would:

a. *Conflict with or obstruct implementation of the applicable air quality plan?*
b. *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*
c. *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*
d. *Expose sensitive receptors to substantial pollutant concentrations?*
e. *Create objectionable odors affecting a substantial number of people?*

The SCAQMD has developed regional and localized significance thresholds for regulated pollutants, as summarized below in Table 4.2-4, *Maximum Daily Emissions Thresholds*. The SCAQMD's CEQA Air Quality Significance Thresholds (March 2015) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

Table 4.2-4 Maximum Daily Emissions Thresholds

Pollutant	Construction	Operations
Regional Thresholds		
NO_x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
So_x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Localized Thresholds		
CO (1-hour)	20.0 ppm	20.0 ppm
CO (8-hour)	9.0 ppm	9.0 ppm
NO_2	0.18 ppm	0.18 ppm
PM_{10}	10.4 µg/m^3	2.5 µg/m^3
$PM_{2.5}$	10.4 µg/m^3	2.5 µg/m^3

Source: (Urban Crossroads, 2016a, Table 3-1)

4.2.5 IMPACT ANALYSIS

Threshold a) Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The air quality management plan applicable to the Project site is the SCAQMD 2012 AQMP. Criteria for determining consistency with the 2012 AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook (1993). The Project's consistency with the 2012 AQMP based on these criteria is discussed below.

- *Consistency Criterion No. 1: The proposed Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.*

The violations that Consistency Criterion No. 1 refers to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if localized significance thresholds (LSTs) were exceeded. As evaluated as part of the Project's LST analysis (refer to Table 4.2-8, *Localized Significance Summary (Rough Grading without Mitigation)* and Table 4.2-9, *Localized Significance Summary (Fine Grading without Mitigation)*, under the discussion of Air Quality Threshold d), the Project's localized construction-source emissions of PM_{10} would exceed the applicable LST, and would therefore be inconsistent with the first criterion. Therefore, without mitigation, a potentially significant impact would occur associated with Consistency Criterion No. 1 during Project-related construction activities.

As shown in Table 4.2-13, *LST Summary (Rough Grading with Mitigation)*, and Table 4.2-14, *LST Summary (Fine Grading with Mitigation)*, implementation of MM 4.2-1 would reduce Project-related impacts associated with localized construction-source emissions of PM_{10} to a less-than-significant level.

According to SCAQMD LST methodology, LSTs apply to the operational phase of a proposed Project if the Project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed Project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term operational localized significance threshold analysis is needed. Therefore, the long-term operation of the Project would have no impact with respect to Consistency Criterion No. 1. (Urban Crossroads, 2016a, p. 38)

- *Consistency Criterion No. 2: The Project would not exceed the assumptions in the AQMP based on the years of Project build-out phase.*

Under existing conditions, the City of Colton General Plan Land Use Element designates the Project site as "Very Low Density Residential," "Low Density Residential", "Medium Density Residential", "High Density Residential", and "Light Industrial". The Project proposes to construct and operate a master-planned community consisting of up to 754 single-family residential units, 244 condo/townhomes, 52 active adult attached units, a 0.8-acre fire station site, 10.3-acre elementary school, 6,500 square feet of commercial retail use, a 1,500-square foot coffee shop with drive-thru window, a 4,000-square foot fast-food restaurant with drive-thru window, 19.3 acres of recreational open space, and 199.7 acres of preserved open space. The Project-specific air quality impact analysis (*Technical Appendix B*) conservatively assumed a development scenario whereby the proposed 0.8-acre fire station site and 10.3-acre elementary school site would not be constructed, and, alternatively, 1,050 dwelling units would be constructed at the Project site. The air quality impact analysis also used distinguished between the different types of residential units (single-family, condo/townhouse, and congregate care [assisted living]) when calculating Project-related air emissions. The Project's proposed land use designations would not materially increase the development intensities as reflected in the General Plan under existing conditions, and provide for substantially more open space (199.7 acres of preserved open space and 19.3 acres of recreational open space) than what was anticipated by existing General Plan land use designations. Thus, development proposed by the Project is substantially similar to the growth projections in the General Plan and is therefore considered to be consistent with the growth projection assumptions utilized by the AQMP.

The proposed changes to the land use designations applicable to the property would not intensify development to the extent that would result in air quality pollutant emission levels beyond those that would have been assumed for the site by the SCAQMD's 2012 AQMP. As such, the Project would result in a less-than-significant impact with respect to Consistency Criterion No. 2.

Threshold b)	***Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?***
Threshold c)	***Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?***

A. Construction Emissions Impact Analysis

The air quality impact analysis (*Technical Appendix B*) and the analysis herein assumes that construction of the Project would commence in October 2017 and last through December 2020. A detailed description of the Project's expected construction schedule and construction activities is provided in EIR Section 3.0, *Project Description*. If construction activities occur at a later date than assumed by the analysis presented in the air quality impact analysis (*Technical Appendix B*) and herein, emission quantities associated with construction equipment exhaust would be less than disclosed in *Technical Appendix B* and herein, due to the application of more restrictive regulatory requirements for construction equipment and on-going replacement of older construction fleet equipment with newer, lower emission equipment by construction contractors. Accordingly, the analysis provided in this EIR constitutes a worst-case scenario evaluation of construction-related impacts to air quality.

The estimated maximum daily construction emissions associated with the Project's construction phase are shown in Table 4.2-5, *Emissions Summary of Construction Without Mitigation*. Detailed construction-related emissions model inputs are provided in Appendix 3.2 of *Technical Appendix B* to this EIR. As identified in Table 4.2-5, Project-related construction emissions for VOCs, CO, SO_X, PM_{10}, and $PM_{2.5}$ would be below the daily criteria pollutant thresholds; however, Project-related construction emissions would exceed the criteria pollutant threshold established by the SCAQMD for daily emissions of NO_X. Accordingly, because the Project would result in construction source emissions of NO_X that exceed the applicable SCAQMD regional threshold for NO_X, a significant impact would occur absent mitigation. However, implementation of Mitigation Measure MM 4.2-1 would reduce the Project's impacts associated with construction-related emissions of NO_X to a less-than-significant level. Refer to Subsection 4.2.8 for mitigation measures that reduce the Project's construction-related emissions of NO_X.

Table 4.2-5 Emissions Summary of Construction Without Mitigation

Year	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
2017	14.52	168.92	109.67	0.15	17.49	11.05
2018	72.54	144.62	155.13	0.35	22.53	9.97
2019	11.77	132.12	112.78	0.28	17.78	9.44
2020	50.36	51.54	115.97	0.30	20.41	6.72
Maximum Daily Emissions	**72.54**	**168.92**	**155.13**	**0.35**	**22.53**	**11.05**

SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2016a, Table 3-4)

B. Operational Emissions Impact Analysis

Emissions associated with Project operations are presented in Table 4.2-6, *Summary of Peak Operational Emissions (Without Project Design Features and Mitigation)*. As shown in Table 4.2-6, Project operational-source emissions would exceed applicable SCAQMD regional thresholds of significance for VOCs and NO_x in the summer scenario and NO_x for the winter scenario. Implementation of Project design features (such as pedestrian features, mixed-use design, and energy/water efficiency) would reduce VOCs emissions to less-than-significant levels, but would not substantially reduce NO_x emissions to less-than-significant levels (refer to Table 4.2-11, *Summary of Peak Operational Emissions (With Project Design Features and Mitigation)*). Emissions of NO_x are primarily associated with mobile source emissions (i.e., tailpipe emissions from vehicles traveling to and from the Project site), which are regulated by state and federal emissions and fuel use standards, and are beyond the control of the proposed Project and the City of Colton. No feasible mitigation measures exist that would reduce NO_x emissions to levels that are less-than-significant. Project operational-source NO_x emissions exceedances of applicable SCAQMD regional thresholds are therefore considered significant and unavoidable.

Table 4.2-6 Summary of Peak Operational Emissions (Without Project Design Features and Mitigation)

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source	17.81	1.01	87.04	0.00	1.89	1.87
Energy Source	0.92	7.86	3.51	0.05	0.63	0.63
Mobile	36.60	98.41	395.03	1.14	75.66	21.24
Total Maximum Daily Emissions	**55.33**	**107.28**	**485.58**	**1.19**	**78.18**	**23.74**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**

Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source	17.81	1.01	87.04	0.00	1.89	1.87
Energy Source	0.92	7.86	3.51	0.05	0.63	0.63
Mobile	35.41	102.57	374.41	1.06	75.66	21.25
Total Maximum Daily Emissions	**54.14**	**111.44**	**464.96**	**1.11**	**78.18**	**23.75**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2016a, Table 3-6)

The Project site is located in the SCAB and the SCAB has a non-attainment status under both State and federal designations for O_3 and $PM_{2.5}$ and is considered non-attainment under State of California criteria for PM_{10} (refer to Table 4.2-2). As previously demonstrated in Table 4.2-5 and Table 4.2-6, construction-related emissions of NO_x and operational-related emissions of VOCs and NO_x (both of which are O_3 precursors) would exceed SCAQMD regional significance thresholds. Therefore, near-term construction emissions of NO_x and long-term operational emissions of VOCs and NO_x would contribute to a net increase of criteria pollutants for which the Project's region is in non-attainment, and impacts associated with this issue would be significant and cumulatively considerable. As discussed above, while implementation of Mitigation Measure MM 4.2-1 would reduce construction-related NO_x emissions to less than significant, and Project design features would reduce operational VOCs emissions to less-than-significant levels, no feasible mitigation measures exist that would reduce operational NO_x emissions to levels that are less than significant.

C. Potential Overlap of Construction and Operational Activity

As discussed in Subsection 4.2.3G, based on the assumed buildout and phasing of the proposed Project, there is a potential for construction activities in one or more of the Specific Plan's planning areas to occur simultaneously with operational activities in other planning areas that have already been constructed. Therefore, an overlap between construction and operational activity may occur during

the construction period. Because it would be speculative to assume exactly which planning areas would be under construction and which planning areas would already be built and operational at any time during the Project's buildout, the air quality analysis presented herein discloses a worst-case scenario of the entire Project's construction and operation overlapping. While this scenario would never materialize in a real-world situation, it is nonetheless disclosed herein to calculate worst-case daily air emissions to determine potential impacts and consider feasible mitigation. As shown on Table 4.2-7, *Potential Overlap of Project Construction and Operational Activities (Unmitigated)*, the Project would exceed the SCAQMD's regional criteria for VOCs, NO_X, and CO when it is assumed that construction and operational activities would fully overlap. Therefore, the Project's emissions of VOCs, NO_X, and CO would result in a significant impact to the environment on both a direct and cumulatively considerable basis when construction and operational activities are assumed to fully overlap. Mitigation Measure MM 4.2-1 would be required to reduce air quality impacts associated with the Project's construction-related and operational-related activities when the assumed buildout and phasing of the Project would fully overlap. However, even with implementation of Mitigation Measure MM 4.2-1, the Project would result in significant air quality impacts when construction-related and operational-related activities are assumed to fully overlap.

Table 4.2-7 Potential Overlap of Project Construction and Operational Activities (Unmitigated)

Summer Scenario- Maximum Daily Emissions	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Construction Peak Emissions	72.54	168.92	155.13	0.35	22.53	11.05
Operational Total Emissions	55.33	107.28	485.58	1.19	78.18	23.74
Total Maximum Daily Emissions	**127.87**	**276.20**	**640.71**	**1.54**	**100.71**	**34.79**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2016a, Table 3-8)

Winter Scenario- Maximum Daily Emissions	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Construction Peak Emissions	72.54	168.92	155.13	0.35	22.53	11.05
Operational Total Emissions	54.14	111.44	464.96	1.11	78.18	23.75
Total Maximum Daily Emissions	**126.68**	**280.36**	**620.09**	**1.46**	**100.71**	**34.80**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2016a, Table 3-8)

Threshold d) Would the Project expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors are land uses such as long-term health care facilities, rehabilitation centers, and retirement homes. In addition, residences, schools, playgrounds, child care centers, and athletic facilities can also be considered as sensitive receptors. The nearest sensitive receptor is a residence within the residential community located approximately 31 feet (9.5) meters east of the Project site, shown as location R3 on Exhibit 3-A of *Technical Appendix B*. The Project site is a 336.2-acre property that is currently undeveloped, with the exception of the Roquet Ranch Paving Company facility located on the southeast portion of the site. Thus, the Project site is not a sensitive receptor location under existing conditions.

A. Construction Impacts

Results of the localized significance threshold (LST) evaluation in the Air Quality Impact Analysis (*Technical Appendix B*) (refer to Table 4.2-8 and Table 4.2-9) indicate that the Project would exceed the SCAQMD localized significance thresholds during construction for PM_{10}. Therefore, absent mitigation, sensitive receptors in the Project area would be exposed to concentrations of PM_{10} that exceed the applicable SCAQMD LST during Project construction activities, and impacts associated with this issue would be significant. However, implementation of Mitigation Measure MM 4.2-1 would reduce Project construction-related emissions of PM_{10} to a level that is less than significant, as demonstrated in Table 4.2-13, *LST Summary (Rough Grading with Mitigation)* and Table 4.2-14, *LST Summary (Fine Grading with Mitigation)*.

Table 4.2-8 Localized Significance Summary (Rough Grading without Mitigation)

Grading-Mass Excavation	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Construction)	
Peak Day Localized Emissions	0.43	0.31	0.0232	11.9	6.25
Background Concentration[A]	2.0	1.9	0.06		
Total Concentration	**2.43**	**2.21**	**0.08**	**11.9**	**6.25**
SCAQMD Localized Significance Threshold	20	9.0	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**YES**	**NO**

[A] Highest concentration from the last three years of available data
Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm.
Source: (Urban Crossroads, 2016a, Table 3-11)

Table 4.2-9 Localized Significance Summary (Fine Grading without Mitigation)

Grading-Rough-Fine	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Construction)	
Peak Day Localized Emissions	0.37	0.27	0.02	11.6	6.33
Background Concentration[A]	2.0	1.9	0.06		
Total Concentration	**2.37**	**2.17**	**0.08**	**11.6**	**6.33**
SCAQMD Localized Significance Threshold	20	9.0	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**YES**	**NO**

[A] Highest concentration from the last three years of available data
Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm.
Source: (Urban Crossroads, 2016a, Table 3-12)

B. Operational Emissions Impact Analysis

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed Project does not include such uses, and thus, due to the lack of substantial stationary source emissions, no long-term localized significance threshold analysis is warranted (Urban Crossroads, 2016a, p. 38). Accordingly, the Project's long-term operational emissions would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant and no mitigation is required.

C. CO Hot Spot Impact Analysis

A CO "hot spot" would occur if an exceedance of the State one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur. A CO "hot spot" technical analysis was not performed by Urban Crossroads, Inc. to evaluate the effect of Project-related vehicular emissions of CO because CO attainment was thoroughly analyzed as part of SCAQMD's 2003 AQMP and the 1992 Federal Attainment for Carbon Monoxide (1992 CO Plan). As identified in the SCAQMD's 2003 AQMP and the 1992 CO Plan, peak CO concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection. To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO "hot spot" analysis was conducted in 2003 at four busy intersections in Los Angeles at the peak morning and afternoon periods. The busiest intersection had a daily traffic volume of 100,000 vehicles per day. The 2003 AQMP estimated that the CO 1-hour concentration for this intersection was 4.6 ppm, which indicates that the most stringent CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day. In comparison, at buildout of the proposed Project, the highest average daily trips on a segment of road in the Project's study area would be 24,900 daily trips on Barton Road west of Michigan Avenue, which is substantially lower than the daily trip volumes studied by SCAQMD that had no impact. (Urban Crossroads, 2016a, pp. 39-40)

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. The Bay Area Air Quality Management District (BAAQMD) concluded that in order to generate a significant CO impact under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and or horizontal air does not mix. The proposed Project would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the Los Angeles "hot spot" study or based on representative BAAQMD CO threshold considerations (Urban Crossroads, 2016a, p. 40). Accordingly, Project-related vehicular emissions would not result in a substantial contribution of CO concentrations at intersections in the vicinity of the Project site and sensitive receptors would not be exposed to substantial CO concentrations generated by the Project's vehicular traffic.

Threshold e) Would the Project create objectionable odors affecting a substantial number of people?

Under existing conditions, the Project site does not contain land uses typically associated with emitting objectionable odors. The Project could produce odors during proposed construction activities resulting from construction equipment exhaust, application of asphalt, and/or the application of architectural coatings; however, standard construction practices would minimize odor emissions and their associated impacts. Furthermore, any odors emitted during construction activities would be temporary, short-term, and intermittent in nature, and would cease upon completion of construction activities. Odors associated with VOC emissions during the architectural coating phase of construction (painting, sealing caulks, solvents, etc.) has the potential to affect nearby sensitive receptors, but VOC odors dissipate quickly outdoors and would not affect a substantial number of people. In addition, construction activities on the Project site would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous air contaminants that would create a public nuisance. Accordingly, the proposed Project would not create objectionable odors affecting a substantial number of people during construction activities. (Urban Crossroads, 2016a, p. 34). Therefore, implementation of the Project would result in less-than-significant odor impacts during short-term construction activities. Thus, no mitigation is required.

Under long-term operational conditions, the Project would include residential land uses, neighborhood-oriented commercial retail, public institutions (elementary school, fire station, and recreational vehicle parking area), and recreational facilities, which are not typically associated with objectionable odors. The temporary storage of refuse associated with the Project's long-term operational use could be a potential source of odor; however, residents, businesses, and agencies would be required to store refuse in covered containers and comply with solid waste collection and disposal requirements in accordance with the City's solid waste regulations, thereby precluding any significant odor impact. Furthermore, compliance with SCAQMD Rule 402 is mandatory, which prohibits the discharge of odorous emissions that would create a public nuisance during long-term operation of the Project. As such, long-term operation of the proposed Project would not create objectionable odors affecting a substantial amount of people. Thus, a less-than-significant impact would occur.

4.2.6 CUMULATIVE IMPACT ANALYSIS

The Project site is located in the SCAB, and as such, all existing and reasonably foreseeable development with the potential to emit air pollutants in the SCAB is pertinent to a discussion of cumulative effects. Overall air quality within the SCAB is dramatically improving as the result of regulatory programs and is expected to continue to improve in the future as government regulations become more stringent. The SCAQMD expects continued decreases in concentrations of NO_X, PM_{10}, $PM_{2.5}$, and CO even as population increases, primarily because of the mandated controls on motor vehicles, the replacement of older polluting vehicles with lower-emitting vehicles, and the use of cleaner fuels and renewable energy. (SCAQMD, 2015a, p. 2)

According to the AQMD's *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*, projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant. Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the SCAB is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable. The following cumulative impact analysis follows the AQMD's methodology as described above. (Urban Crossroads, 2016a, p. 45)

As discussed in the impact analysis for Threshold a) above, the Project's localized construction-source emissions of PM_{10} would exceed the applicable LST, and would therefore be inconsistent with Consistency Criterion No. 1 regarding consistency with the 2012 AQMP and result in a significant impact prior to implementation of Mitigation Measure MM 4.2-1. Because the Project would cumulatively contribute to PM_{10} emissions within Project area and consequently conflict with or obstruct implementation of the 2012 AQMP, the Project's construction phase emissions of PM_{10} would be cumulatively considerable. Due to the nature of the Project (a proposed master-planned community that would not entail stationary sources or attract mobile sources that may spend long periods queuing and idling at the site), no LST analysis was necessary for emissions related to long-term Project operations. Accordingly, air quality impacts to sensitive receptors associated with long-term operation of the Project would be less than cumulatively considerable.

As discussed in the impact analysis for Thresholds b) and c), above, Project-related construction emissions would exceed the daily criteria pollutant threshold established by the SCAQMD for emissions of NO_x. Additionally, NO_x is a precursor for O_3, a pollutant for which the SCAB is nonattainment under both federal and State criteria; therefore, the Project's short-term NO_x construction emissions would also cumulatively contribute a criteria pollutant for which the SCAB is nonattainment (i.e., O_3). Accordingly, the Project's short-term NO_x emissions during the Project's

construction phase would be cumulatively considerable absent mitigation. As discussed in the impact analysis for Thresholds b) and c), Project operational-source emissions would exceed applicable SCAQMD regional thresholds of significance for VOCs and NO_x; therefore, the Project's contribution of air quality emissions to the SCAB would be cumulatively considerable as a result of long-term Project-related operational-source emissions absent design features and mitigation. Other cumulative projects in the SCAB could also result in a cumulatively considerable impact regarding short-term NO_x emissions during construction. However, similar to the proposed Project, other cumulative projects throughout the SCAB would be required to implement mandatory regulatory requirements and feasible mitigation measures to reduce the potential air quality impacts. While implementation of Mitigation Measure MM 4.2-1 would reduce construction-related NO_x emissions to less than significant, and Project design features would reduce operational VOCs emissions to less-than-significant levels, no feasible mitigation measures exist that would reduce operational NO_x emissions to levels that are less than significant. Thus, the Project would result in a cumulatively considerable operational NO_x emissions impact. As also indicated in the analysis of Thresholds b) and c), the Project's emissions of VOCs, NO_X, and CO would result in a significant impact to the environment on both a direct and cumulatively considerable basis in the event that on-site construction and operational activities overlap.

With regard to potential pollutant concentrations associated with CO hotspots generated by vehicular traffic, as discussed under Threshold d), cumulative impacts would be less than significant because no intersection in the study area is calculated to carry more than 24,000 vehicles per hour, which is the volume of traffic that would be needed to create a CO hotspot in areas where vertical and horizontal air do not mix. At locations where mixing occurs, more than 44,000 vehicles per hour are necessary to generate a hotspot. Thus, the Project would not expose sensitive receptors to substantial pollutant concentrations associated with a CO hotspot and the Project's impacts are less than cumulatively considerable.

Regarding odors (as discussed under Threshold e)), the smell of architectural coating products is not generally considered objectionable, and because such odors dissipate quickly outdoors, the Project's contribution of potential odor impacts is less than cumulatively considerable. In the long-term, sources of odor would be limited to potential odors associated with refuse storage. Impacts would be less than cumulatively considerable, because residences, businesses and public institutions would be required to store refuse in covered containers and comply with all regulations regarding refuse storage and collection.

4.2.7 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a): Significant Direct and Cumulatively Considerable Short-Term Impact. Emissions of PM_{10} during the construction phase of the Project would exceed the applicable SCAQMD LST for PM_{10}; therefore, without mitigation, the Project would conflict with Consistency Criterion No. 1 of the SCAQMD's AQMP, which is the air quality plan applicable to the South Coast Air Basin within which the Project site is located.

Threshold b) and c): Significant Direct and Cumulatively Considerable Impact. Without mitigation, Project-related construction emissions would exceed the daily criteria pollutant threshold established by the SCAQMD for emissions of NO_x. Additionally, long-term operation of the Project would result in emissions of VOCs and NO_x that exceed the SCAQMD regional thresholds for both pollutants absent mitigation. Both VOCs and NO_x are a precursor for ozone (O_3), a pollutant for which the SCAB is nonattainment under both federal and State criteria. Therefore, absent mitigation, the Project's short-term construction emissions of NO_x and long-term operational emission of NO_x and VOCs would cumulatively contribute a criteria pollutant for which the Project region is nonattainment (i.e., O_3). Because construction of the proposed Project would occur in phases, there is a potential that operational and construction activities could overlap. If there is overlap, the Project would result in short-term VOC, NO_X, and CO emissions during the overlapping activities. As such, absent mitigation, Project-related air emissions would violate the SCAQMD air quality standards and contribute to the non-attainment of criteria pollutants, which is a significant direct and cumulatively considerable impact.

Threshold d): Significant Direct and Cumulatively Considerable Short-Term Impact. Absent mitigation, Project-related construction emissions would exceed the SCAQMD LST for emissions of PM_{10}, which has the potential to expose sensitive receptors to a substantial pollutant concentration.

Threshold e): Less-than-Significant Impact. The Project would not produce unusual or substantial construction-related odors that would be objectionable and affect a substantial number of people. Odors associated with the long-term operation of the Project would be minimal and less than significant.

4.2.8 MITIGATION

MM 4.2-1 Prior to issuance of grading permits, the City of Colton Building Official or his/her designee shall ensure that grading plans include a note that specifies that that all construction equipment greater than 150 horsepower is California Air Resources Board (CARB) Tier 3 Certified or better. The Grading Contractor shall be responsible for ensuring compliance with this note throughout the duration of grading activities.

4.2.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a): Less-than-Significant Impact. As shown in Table 4.2-10, *Emissions Summary of Overall Construction (With Mitigation)*, and Table 4.2-14, *LST Summary (Fine Grading with Mitigation)*, implementation of Mitigation Measure MM 4.2-1 would reduce emissions of PM_{10} associated with Project construction to levels that are below the applicable SCAQMD LST for PM_{10}. As such, with implementation of Mitigation Measure MM 4.2-1, the Project would not conflict with Consistency Criterion No. 1 of the SCAQMD's AQMP, and impacts would be reduced to less-than-significant levels. Furthermore, with implementation of Mitigation Measure MM 4.2-1, the Project's impacts would be less than cumulatively considerable.

Threshold b) and c): Significant and Unavoidable Direct and Cumulatively Considerable Impact. With implementation of Mitigation Measure MM 4.2-1, construction emissions of NO_x would be reduced to a level that does not exceed the daily criteria pollutant threshold established by the SCAQMD (refer to Table 4.2-10, *Emissions Summary of Overall Construction (With Mitigation)*, below). As shown below in Table 4.2-11, *Summary of Peak Operational Emissions (With Project Design Features and Mitigation)*, incorporation of Project design features (i.e., pedestrian features, mixed-use design, and energy/water efficiency) would reduce emissions of VOCs from long-term operation of the Project to a level that does not exceed the SCAQMD regional threshold. However, even with incorporation of Project design features, operation of the Project would still result in emissions of NO_x that exceed the SCAQMD regional threshold. NO_x is a precursor for ozone (O_3), a pollutant for which the SCAB is in nonattainment under both federal and State criteria. Therefore, emissions of NO_x associated with long-term operation of the Project would be a significant and unavoidable impact, and is cumulatively considerable.

Table 4.2-10 Emissions Summary of Overall Construction (With Mitigation)

Year	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
2017	4.78	78.17	83.79	0.15	13.40	7.48
2018	71.70	83.26	156.20	0.35	22.15	8.38
2019	8.56	75.36	113.55	0.28	17.63	7.31
2020	50.06	49.83	121.56	0.32	20.29	6.62
Maximum Daily Emissions	**71.70**	**83.26**	**156.20**	**0.35**	**22.15**	**8.38**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2016a, Table 3-5)

Table 4.2-11 Summary of Peak Operational Emissions (With Project Design Features and Mitigation)

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source	17.81	1.01	87.04	0.00	1.89	1.87
Energy Source	0.80	6.92	3.10	0.04	0.56	0.56
Mobile	35.87	92.84	375.06	1.06	70.44	19.78
Total Maximum Daily Emissions	**54.48**	**100.77**	**465.20**	**1.10**	**72.89**	**22.21**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source	17.81	1.01	87.04	0.00	1.89	1.87
Energy Source	0.81	6.92	3.10	0.04	0.56	0.56
Mobile	34.72	96.71	357.64	0.99	70.45	19.79
Total Maximum Daily Emissions	**53.34**	**104.64**	**447.78**	**1.03**	**72.90**	**22.22**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2016a, Table 3-7)

As indicated on Table 4.2-12, *Potential Overlap of Project Construction and Operational Activities (with Mitigation)*, implementation of Mitigation Measure MM 4.2-1 would reduce the Project's overlapping short-term construction and long-term operational emissions of VOCs, NO_x, and CO, but not to below a level of significance. Therefore, in the event that short-term construction activity and long-term operational activities overlap, impacts would be significant, unavoidable direct and cumulatively considerable for emissions of VOCs, NO_x, and CO. This EIR recommends all feasible mitigation to reduce VOCs, NO_x, and CO emissions and no additional feasible mitigation is available to reduce emissions to below a level of significance. No other mitigation measures are available that are feasible for the Project Applicant to implement and for the City of Colton to enforce that have a proportional nexus to the Project's level of impact. A majority of the overlapping air emissions are from mobile sources (vehicle tailpipe exhaust) that are regulated by federal and state agencies and beyond the control of local governments. As such, it is concluded that if the Project's short-term construction and long-term operational activities overlap, VOCs, NO_x, and CO emissions would violate the SCAQMD air quality standards.

Table 4.2-12 Potential Overlap of Project Construction and Operational Activities (with Mitigation)

Summer Scenario- Maximum Daily Emissions	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Construction Peak Emissions	71.70	83.26	156.20	0.35	22.15	8.38
Operational Total Emissions	54.48	100.77	465.20	1.10	72.89	22.21
Total Maximum Daily Emissions	**126.18**	**184.03**	**621.40**	**1.45**	**95.04**	**30.59**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**NO**	**NO**

Winter Scenario- Maximum Daily Emissions	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Construction Peak Emissions	71.70	79.15	147.96	0.32	21.07	7.54
Operational Total Emissions	53.34	104.64	447.78	1.03	72.90	22.22
Total Maximum Daily Emissions	**125.04**	**183.79**	**595.74**	**1.35**	**93.97**	**29.76**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2016a, Table 3-9)

Threshold d): Less-Than-Significant Impact. With implementation of Mitigation Measure MM 4.2-1, Project-related construction emissions of PM_{10} would be reduced to the extent that they would no longer exceed the SCQAMD LST for emissions of PM_{10}. This is demonstrated below in Table 4.2-13 and Table 4.2-14. Accordingly, with implementation of Mitigation Measure MM 4.2-1, sensitive receptors would not be exposed to emissions of PM_{10} that exceed the SCAQMD LST for emissions of PM_{10}. As such, impacts associated with Threshold d) would be reduced to a level that is less than significant, and are not cumulatively considerable.

Table 4.2-13 LST Summary (Rough Grading with Mitigation)

Grading-Mass Excavation	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Construction)	
Peak Day Localized Emissions	0.34	0.25	0.01	4.56	2.44
Background Concentration[A]	2.0	1.9	0.06		
Total Concentration	**2.34**	**2.15**	**0.07**	**4.56**	**2.44**
SCAQMD Localized Significance Threshold	20	9.0	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data
Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm.
Source: (Urban Crossroads, 2016a, Table 3-13)

Table 4.2-14 LST Summary (Fine Grading with Mitigation)

Grading-Rough/Fine	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Construction)	
Peak Day Localized Emissions	0.31	0.23	0.01	1.72	0.96
Background Concentration[A]	2.0	1.9	0.06		
Total Concentration	**2.31**	**2.13**	**0.07**	**1.72**	**0.96**
SCAQMD Localized Significance Threshold	20	9.0	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data
Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm.
Source: (Urban Crossroads, 2016a, Table 3-14)

4.3 BIOLOGICAL RESOURCES

This Subsection assesses the proposed Project's potential to impact sensitive biological resources that may be present within the Project site and the offsite impact areas. The information and analysis presented in this Subsection is based in part on the technical report prepared by ESA PCR titled "Biological Resources Assessment," dated August 2016, and appended to this EIR as *Technical Appendix D* (ESA PCR, 2016). ESA PCR conducted a site-specific evaluation of biological resources present or potentially present on the Project site. ESA PCR's biological resources assessment included general biological survey and vegetation mapping conducted on November 26, 2013; a jurisdictional waters and wetlands delineation; focused surveys for special-status plant species conducted on April 16 and 29, and August 10, 2015; focused surveys for burrowing owl (*Athene cunicularia*) conducted from March to June 2014; and focused surveys for coastal California gnatcatcher (*Polioptila californica californica*) conducted by Leatherman Bioconsulting, Inc. from April to June 2014 and from May to June 2015. (ESA PCR, 2016, p. 10)

4.3.1 EXISTING CONDITIONS

A. *Plant Communities*

The Project site and off-site areas within the Project's disturbance footprint consists primarily of native brittle bush scrub, which is dominated by brittle bush (*Encelia farinosa*), as well as smaller scattered patches of other native plant communities, such as California buckwheat scrub, California sagebrush scrub, and black willow thicket (intermixed with some ornamental vegetation). A large portion of the site is composed of disturbed areas, consisting of dirt roads, disced fields comprised of non-native species, and areas with little to no vegetation that exhibit signs of previous human disturbance. Other non-native plant communities present include non-native grassland, ruderal vegetation, and ornamental species. There are also scattered areas of rock outcrops along the steep hillsides, wash areas, and unvegetated developed areas on the Project site. The Project site and off-site areas support nine drainages referred to in the biological resources assessment report (*Technical Appendix D*) report as Drainages A, A1, B, C, D, D1, E, E1, and E2. Drainages A and A1 are located in southeastern corner of the Project site; Drainage B is in the southwestern portion of the Project site; Drainages C and D occur near the western Project boundary; and Drainages E, E1, and E2 are in the northwestern corner of the Project site.

Descriptions of the plant communities observed at the Project site and off-site improvement areas during the field surveys conducted by ESA PCR are provided below. A full list of all plant species observed during the surveys is included in Appendix A of the Biological Resources Assessment (*Technical Appendix D*).

1. *Brittle Bush Scrub*

Brittle bush scrub encompasses the majority of the Project site with approximately 149.2 acres within the Project site, and 2.5 acres within the off-site improvement areas (primarily adjacent to the central portion of the Project site), for a total of 151.7 acres. Brittle bush scrub is dominated by an almost

monotypic community of brittle bush. Associated species observed within this community include sparse amounts of California buckwheat (*Eriogonum fasciculatum*), California sagebrush, common sandaster (*Corethrogyne filaginifolia*), pinebush (*Ericameria pinifolia*), desert brickellbush (*Brickellia desertorum*), wishbone bush (*Mirabilis laevis*), bush monkeyflower (*Diplacus longiflorus*), wild cucumber (*Marah macrocarpus*), wild canterbury-bells (*Phacelia minor*), valley cholla (*Cylindropuntia parryi*), linear-leaved stillingia (*Stillingia linearifolia*), blue elderberry (*Sambucus nigra ssp. caerulea*), and Sahara mustard (*Brassica tournefortii*). (ESA PCR, 2016, p. 16)

2. Brittle Bush Scrub/Rock Outcrop

Brittle bush scrub/rock outcrop comprises approximately 0.02 acre in the western portion of the Project site. Brittle bush scrub/rock outcrop is dominated by the species within the brittle bush scrub community with rock outcroppings interspersed within the brittle bush scrub vegetation. (ESA PCR, 2016, p. 16)

3. Brittle Bush Scrub/Ruderal

Brittle bush scrub/ruderal comprises approximately 1.2 acres in the northeastern portion of the Project site. Brittle bush scrub/ruderal is dominated by the species within the brittle bush scrub community (primarily brittle bush) with ruderal species interspersed throughout the brittle bush scrub community. Species observed within the ruderal community include shortpod mustard (*Hirschfeldia incana*), common fiddleneck (*Amsinckia intermedia*), London rocket (*Sisymbrium irio*), tocalote (*Centaurea melitensis*), ripgut grass (*Bromus diandrus*), western ragweed (*Ambrosia psilostachya*), cheeseweed (*Malva parviflora*), wild radish (*Raphanus raphanistrum*), foxtail chess (*Bromus madritensis ssp. rubens*), wild oat (*Avena sp.*), gum tree (*Eucalyptus sp.*), mule fat (*Baccharis salicifolia*), blue elderberry, pinebush, Mexican palo verde (*Parkinsonia aculeata*), tree tobacco (*Nicotiana glauca*), vetch (*Astragalus sp.*), and dove weed (*Croton setigerus*). (ESA PCR, 2016, p. 16)

4. California Buckwheat Scrub

California buckwheat scrub comprises approximately 1.0 acres in the northwestern portion of the Project site. California buckwheat scrub is dominated by California buckwheat with a subdominance of brittle bush. Other associated species observed within this community include California sagebrush, redstem stork's bill (*Erodium cicutarium*), tocalote, and shortpod mustard. (ESA PCR, 2016, p. 16)

5. California Sagebrush Scrub

California sagebrush scrub comprises approximately 1.9 acres in the northern portion of the Project site, and 0.1-acre within the northwestern portion of the off-site improvement areas, for a total of 2.0 acres. California sagebrush scrub is dominated by almost monotypic stands of California sagebrush. Other native species observed within this community include brittle bush, California buckwheat, and non-native species including shortpod mustard. (ESA PCR, 2016, p. 21)

6. California Sagebrush Scrub/Ruderal

California sagebrush scrub/ruderal comprises approximately 0.2-acre in the northwestern portion of the Project site. California sagebrush scrub/ruderal is dominated by the species within the California sagebrush community with ruderal, weedy vegetation interspersed throughout. (ESA PCR, 2016, p. 21)

7. Black Willow Thicket

Black willow thicket comprises approximately 0.5-acre in the western portion of the off-site improvement area where Riverside Avenue crosses the Santa Ana River. A portion of the off-site improvement area crosses the Santa Ana River via the Riverside Avenue bridge. A 40-foot buffer surrounding the bridge was added to define this portion of the off-site improvement area and the vegetation community underneath the bridge within the Santa Ana River was mapped as black willow thicket. This black willow thicket community is dominated by black willow (*Salix gooddingii*). Other associated species observed within this community include native Fremont's cottonwood (*Populus fremontii*), red willow (*Salix laevigata*), mule fat, brittle bush, horseweed (*Conyza canadensis*), and non-native Mexican palo verde, shortpod mustard, castor bean (*Ricinus communis*), and London rocket. (ESA PCR, 2016, p. 22)

8. Black Willow Thicket/Ornamental

Black willow thicket/ornamental comprises approximately 0.3-acre in the southeastern corner of the Project site, adjacent to South La Cadena Drive. Black willow thicket/ornamental community is dominated by black willow (*Salix gooddingii*). Other associated species observed within this community include ornamental vegetation such as shamel ash (*Fraxinus uhdei*) and castor bean. (ESA PCR, 2016, p. 22)

9. Non-Native Grassland

Non-native grassland comprises approximately 0.5-acre in the southeastern portion of the Project site. The non-native grassland community is dominated by jungle rice grass (*Echinochloa colona*). Associated species found within this community include umbrella sedge (*Cyperus eragrostis*), smilo grass (*Piptatherum miliaceum*), tree tobacco, western ragweed, jimson weed (*Datura wrightii*), watercress (*Nasturtium officinale*), and common plantain (*Plantago major*). (ESA PCR, 2016, p. 22)

10. Non-Native Grassland/Ruderal

Nonnative grassland/ruderal comprises approximately 0.3-acre in the southeastern portion of the Project site. This community is dominated by Mexican sprangletop (*Leptochloa uninervia*) and wild radish, with a subdominance of jimson weed and native umbrella sedge. Associated species found within this community include black willow, western ragweed, jungle rice grass, Fremont's cottonwood, horseweed, Peruvian peppertree (*Schinus molle*), cheeseweed, curly dock (*Rumex crispus*), castor bean, nettle-leaved goosefoot (*Chenopodium murale*), fragrant everlasting (*Pseudognaphalium beneolens*), cocklebur (*Xanthium strumarium*), watercress, Douglas' nightshade

(*Solanum douglasii*), fountain grass (*Pennisetum setaceum*), tree tobacco, rice flat sedge (*Cyperus difformis*), common plantain, Mexican palo verde, common sunflower (*Helianthus annuus*), willow-weed (*Polygonum lapathifolium*), Mediterranean tamarisk (*Tamarixramosissima*), water speedwell (*Veronica anagallis- aquatica*), and Johnson grass (*Sorghum halepense*). (ESA PCR, 2016, p. 22)

11. Ornamental

Ornamental vegetation comprises approximately 1.7 acres in the southeastern portion of the Project site, and 0.7-acre within the western portion of the off-site improvement area, for a total of 2.3 acres. The ornamental area within the Project site is comprised of a community dominated by a few large ornamental ash trees (*Fraxinus sp.*). Other associated species found in this community include umbrella sedge, rice flat sedge, Mexican palo verde, watercress, horseweed, and fireweed (*Epilobium angustifolium*). (ESA PCR, 2016, p. 22)

12. Disturbed Areas

Disturbed areas comprise approximately 97.6 acres of the Project site, and 9.7 acres within the southern and southeastern portions of the off-site improvement areas, for a total of 107.3 acres. Disturbed areas consist of dirt road, maintained right-of-ways, disced fields, and areas with little to no vegetation that exhibited signs of previous human disturbance (e.g., associated with previous agricultural practices). Sparse densities of species that were observed within this community include shortpod mustard, fiddleneck, London rocket, prickly pear (*Opuntia littoralis*), dove weed, Mexican palo verde, redstem stork's bill, brittle bush, Peruvian peppertree, horehound (*Marrubium vulgare*), and purple nightshade (*Solanum xanti*). (ESA PCR, 2016, p. 23)

13. Disturbed/Brittle Bush Scrub

Disturbed/brittle bush scrub comprises approximately 1.1 acres mainly in the central portion of the site and a small patch in the northwestern portion of the Project site, and 0.1-acre within the western portion of the off-site improvement areas, for a total of 1.2 acres. Disturbed/brittle bush scrub is dominated by primarily bare ground with species associated with the brittle bush scrub interspersed throughout the disturbed areas. (ESA PCR, 2016, p. 23)

14. Disturbed/California Buckwheat Scrub

Disturbed/California buckwheat scrub comprises approximately 1.0 acre in the central portion of the Project site. Disturbed/California buckwheat scrub is dominated by primarily bare ground and interspersed with California buckwheat scrub species. (ESA PCR, 2016, p. 23)

15. Disturbed/California Sagebrush Scrub

Disturbed/California sagebrush scrub comprises less than approximately 0.04-acre of the Project site. Disturbed/California sagebrush scrub is dominated by primarily bare ground with California sagebrush scrub species interspersed throughout. (ESA PCR, 2016, p. 23)

16. Rock Outcrop

Rock outcrop areas comprise approximately 0.5-acre of the Project site. Rock outcrop areas are primarily rocky, sparsely vegetated areas typically found along the steep hillsides throughout the Project site. (ESA PCR, 2016, p. 23)

17. Rock Outcrop/Brittle Bush Scrub

Rock outcrop/brittle bush scrub comprises approximately 35.0 acres primarily along the ridgelines within the Project site. Rock outcrop/brittle bush scrub consists of rock outcrop areas that are interspersed with vegetation that is characteristic of the brittle bush scrub community within the Project site. (ESA PCR, 2016, p. 23)

18. Ruderal

Ruderal areas comprise approximately 39.5 acres throughout the Project site, and 10.0 acres adjacent to the Project site and within the southwestern portion of the off-site improvement areas, for a total of 49.5 acres. Ruderal areas are dominated by Ta. Species observed within this community include shortpod mustard, fiddleneck, London rocket, tocalote, ripgut grass, western ragweed, cheeseweed, wild radish, foxtail chess, wild oat, gum tree, mule fat, blue elderberry, pinebush, Mexican palo verde, tree tobacco, vetch, and dove weed. (ESA PCR, 2016, p. 23)

19. Ruderal/Brittle Bush Scrub

Ruderal/brittle bush scrub comprises approximately 2.0 acres, the largest area being in the southern portion of the Project site, and 0.5-acre within the off-site improvement areas adjacent to the Project site, for a total of 2.5 acres. Ruderal/brittle bush scrub is dominated by ruderal, weedy species but exhibit sparse, remnant species associated with the brittle bush scrub community, mainly consisting of brittle bush. (ESA PCR, 2016, p. 24)

20. Ruderal/California Sagebrush Scrub

Ruderal/California sagebrush scrub comprises approximately 0.1-acre in the northwestern portion of the Project site. Ruderal/California sagebrush scrub is dominated by ruderal, weedy species but exhibit sparse, remnant species associated with the California sagebrush community, including California sagebrush, California buckwheat, and brittle bush, interspersed throughout the community. (ESA PCR, 2016, p. 24)

21. Wash

Wash areas comprise approximately 0.2-acre in the northwestern portion of the Project site. Wash areas consist of prevailingly coarse-textured but variable material, ranging from sand to gravel. Wash areas range from unvegetated within portions of the drainage to dominated by ruderal vegetation. (ESA PCR, 2016, p. 24)

B. *Special-Status Plants*

Special-status plant species were not observed on the Project site during biological surveys conducted by ESA PCR during surveys conducted on April 16, 29, and August 10, 2015. (ESA PCR, 2016, p. 47)

No focused surveys for special-status plant species were conducted within the off-site improvement areas. However, the majority of the off-site improvement areas are comprised of developed areas (i.e., within existing paved roadways), disturbed areas (i.e., areas that are generally devoid of vegetation within the existing, maintained right-of-ways along the paved roads and Highgrove Channel), ruderal areas (i.e., which are dominated by weedy, non-native plant species), and ornamental vegetation (i.e., comprised of non-native landscaping species), which do not support suitable habitat for potential special-status plants. Portions of the off-site improvement areas that support native habitat include brittle bush scrub, California sagebrush scrub, disturbed/brittle bush scrub, ruderal/brittle bush scrub, and black willow thicket. However, due to the negative findings of focused surveys on the Project site, special-status plants are not expected to occur within the brittle bush scrub, California sagebrush scrub, and ruderal/brittle bush scrub that occur within the off-site improvement areas. As previously mentioned, 0.5-acre of black willow thicket occurs within the western portion of the off-site improvement area where the Riverside Avenue bridge crosses over the Santa Ana River. Within the westernmost portion of the off-site improvement areas, there is also 0.1-acre of disturbed/brittle bush scrub immediately adjacent to the bridge, which is a primarily disturbed community, but has a component of native brittle bush scrub. The proposed hanging of power lines would be confined to the Riverside Avenue bridge (i.e., installation of a conduit via equipment to be staged solely on the bridge), and no access into the Santa Ana River or the disturbed/brittle bush scrub is proposed as part of the Project. The Project proposes trimming of trees only for installation of the conduit, and there are no special-status tree species with potential to occur within this area. It should be noted that the Santa Ana River supports suitable habitat for special-status plant species; however, since all work would be confined to the bridge and out of any potential habitat, no special-status plants have been found to occur within the Project's development footprint/areas of physical disturbance. (ESA PCR, 2016, pp. 47-48)

Additionally, Southern California black walnut, which is considered a California Rare Plant Ranks (CRPR) 4.2 species ("Watch List" plants of limited distribution; fairly endangered in California [20-80% occurrences threatened]), was observed within the Project site and off-site improvement areas. A total of 37 southern California black walnuts were identified within the southeastern portion of the Project site and off-site improvement areas (24 within the Project site, 13 within the off-site improvement areas). However, because this species is a CRPR 4.2, which is a "watch list" species and no official protection is provided under this ranking, it is not considered special-status.

C. *Special-Status Animals*

Special-status animals include those species listed as Endangered or Threatened under the FESA or CESA, candidates for listing by the United States Fish and Wildlife Service (USFWS) or California

Department of Fish and Wildlife (CDFW), and species of special concern to the CDFW. Several special-status wildlife species were reported in the Project vicinity based the information ESA PCR obtained from the California Natural Diversity Database (CNDDB), totaling 40 species within the 9-quadrangle search (for the complete listing, refer to Appendix C of *Technical Appendix D*). A total of 18 of these species were identified as having a potential to occur within the Project site and off-site improvement areas based on the ESA PCR's literature review and habitat observations within these areas (for the complete listing, refer to Appendix C of *Technical Appendix D*). In addition, ESA PCR conducted focused surveys for the burrowing owl and coastal California gnatcatcher in accordance with recommended protocols, and also analyzed the potential for foraging and nesting migratory bird and raptor species. The species with a potential to occur on the Project site and off-site improvement areas are identified and discussed below. The results of the focused burrowing owl and coastal California gnatcatcher surveys are also described below, and the migratory birds and raptors assessment are discussed below. (ESA PCR, 2016, pp. 48-51)

1. Species with the Potential to Occur On-Site

Coast horned lizard (*Phrynosoma blainvillii*). This reptile species is a state species of special concern. This species prefers sandy riparian and sage scrub habitats, but also occurs in valley-foothill, hardwood, conifer, pine-cypress, juniper and annual grassland habitats below 6,000 feet. Habitats include open country, especially sandy areas, washes, flood plains, and windblown deposits. Coast horned lizard was determined to have a potential to occur within the Project site based on the presence of potentially suitable scrub habitat, including brittle bush scrub, California buckwheat scrub, and California sagebrush scrub. Although suitable habitat exists on the Project site, the potential was considered moderate since much of the habitat is isolated either by disturbed areas, which are primarily unvegetated and lack suitable cover, or by existing development, mainly to the east of the Project site. No incidental sightings of this species were made during site surveys conducted by ESA PCR in 2013, 2014, or 2015. (ESA PCR, 2016, p. 51)

Orange-throated whiptail (*Aspidoscelis hyperythra*): This reptile species is a state species of special concern. This species prefers chaparral, non-native grassland, Riversidean sage scrub, and juniper and oak woodlands. It is often associated with riparian areas and alluvial fan sage scrub habitats. Suitable habitat on the Project site for this species includes brittle bush scrub, California buckwheat scrub, and California sagebrush scrub, and orange-throated whiptail was observed within the Project site during the site survey conducted by ESA PCR in 2015. (ESA PCR, 2016, p. 51)

Red diamond rattlesnake (*Crotalus ruber*): This reptile species is a state species of special concern. This species prefers chaparral, woodland, and arid desert habitats in rocky areas with dense vegetation. Suitable habitat on the Project site includes rocky areas interspersed with brittle bush scrub, California buckwheat scrub, and California sagebrush scrub, and this species was observed within the Project site during a focused plant survey conducted by ESA PCR in 2015. (ESA PCR, 2016, p. 51)

Swainson's hawk (*Buteo swainsoni*). Swainson's hawk is a bird species that is listed as a state threatened species. It prefers Great Basin grasslands, riparian forests, riparian woodlands, and valley and foothill grasslands. Swainson's hawk was determined to have a potential to forage within the Project site and a few fossorial burrows were observed on-site, suggesting the presence of small mammals that could provide a possible food source. This species has a very low potential to nest within the Project site, since there are some scattered trees (e.g., a few sparse eucalyptus trees in the western portion of the Project site and a few riparian trees present in the southern portion of the Project site) that provide marginal nesting habitat (due to the sparse, limited cover and proximity to development). This species was observed flying over the Project site on two separate occasions during a coastal California gnatcatcher survey and a burrowing owl survey in 2014. (ESA PCR, 2016, p. 51)

Burrowing owl (*Athene cunicularia*). This bird species is a state species of special concern and is known to occur in the Project vicinity based on CNDDB occurrence records reviewed by ESA PCR. This species prefers coastal prairie, coastal scrub, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, valley and foothill grassland and disturbed habitats. Burrowing owl was determined to have potential to occur within the Project site based on the presence of suitable habitat observed at the site during ESA PCR's field survey, including disturbed, low-growing vegetation, bare ground, and a few small fossorial mammal burrows. The subsequent focused Burrowing Owl surveys conducted within the Project site in 2014 (and for a portion of the Project site in 2015) did not identify burrowing owls, burrows, or sign on the Project site or within an approximately 500-foot buffer. Therefore, the Project site and adjacent area do not currently support burrow owls. The results of the 2014 Focused Burrowing Owl Survey Report is included as Appendix D to *Technical Appendix D*, and the 2015 Focused Burrowing Owl Survey Report is included as Appendix E to *Technical Appendix D*. No focused surveys were conducted within the off-site improvement areas. (ESA PCR, 2016, pp. 51-52)

Southwestern willow flycatcher (*Empidonax traillii extimus*). This bird species is a federal and state endangered species. This species prefers wet meadows and riparian woodlands that contain water and low growing willow thickets. The Santa Ana River is designated critical habitat for southwestern willow flycatcher. Although the Project site does not support suitable habitat for this species, since the black willow thicket/ornamental is isolated and limited in acreage (0.3-acre), the portion of the off-site improvement areas that includes the Riverside Avenue bridge over the Santa Ana River contains suitable habitat within the black willow thicket habitat immediately adjacent to the bridge. No focused surveys were conducted within the off-site improvement areas. It should also be noted that the State endangered willow flycatcher (*Empidonax traillii*) was observed during focused surveys conducted for coastal California gnatcatcher. One individual was observed in elderberry trees growing in Drainage E1 during a field survey conducted by ESA PCR. However, ESA PCR determined this individual was a migrant due to lake of suitable habitat (dense willow thickets) and the timing of the observation (during peak migration season). (ESA PCR, 2016, p. 52)

Loggerhead shrike (*Lanius ludovicianus*). This bird species is a state species of special concern. This species prefers broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands; desert oases, scrub, and washes; and open country with perches for hunting and relatively dense shrubs for nesting. This species has a moderate potential to occur on the Project site due to the presence of brittlebush scrub, California buckwheat scrub, and California sagebrush scrub. No incidental sightings of this species were made at the Project site during site surveys conducted by ESA PCR in 2013, 2014, or 2015. (ESA PCR, 2016, p. 52)

Least Bell's vireo (*Vireo bellii pusillus*). This bird species is a federal and state endangered species. This species prefers riparian forest, riparian scrub, and riparian woodland. Although the Project site does not support suitable habitat for this species, since the black willow thicket/ornamental is isolated and limited in acreage (0.3-acre), the portion of the off-site improvement areas that includes the Riverside Avenue bridge over the Santa Ana River contains suitable habitat within the black willow thicket habitat immediately adjacent to the bridge. No focused surveys were conducted within the off-site improvement areas. This species was observed immediately adjacent to the northwestern portion of the Project site as documented by USFWS and CNDDB occurrences in 2005, 2007, 2008, and 2015, and around and immediately adjacent to the Riverside Avenue bridge per USFWS occurrences in 2004, 2005, 2007, and 2008. This species was not observed on-site during site surveys conducted by ESA PCR in 2013, 2014, or 2015. (ESA PCR, 2016, p. 52)

Yellow-breasted chat (*Icteria virens*). This bird species is a state species of special concern. This species prefers to nest in low, dense riparian willow thickets and other brushy tangles (e.g., blackberry, wild grape) near water, and forages and nests within 10 feet of ground. Although the Project site does not support suitable habitat for this species, since the black willow thicket/ornamental is isolated and limited in acreage (0.3-acre), the portion of the off-site improvement areas that includes the Riverside Avenue bridge over the Santa Ana River contains suitable habitat within the black willow thicket habitat immediately adjacent to the bridge. No focused surveys were conducted within the off-site improvement areas. A CNDDB occurrence of this species was recorded 6 miles to the southwest in 2015. (ESA PCR, 2016, p. 52)

Yellow warbler (*Setophaga petechia*). This bird species is a state species of special concern. This species prefers riparian woodlands, montane chaparral, open ponderosa pine and mixed coniferous habitat with significant brush. Although the Project site does not support suitable habitat for this species, since the black willow thicket/ornamental is isolated and limited in acreage (0.3-acre), the portion of the off-site improvement areas that includes the Riverside Avenue bridge over the Santa Ana River contains suitable habitat within the black willow thicket habitat immediately adjacent to the bridge. This species was not observed on-site during site surveys conducted by ESA PCR in 2013, 2014, or 2015. No focused surveys were conducted within the off-site improvement areas. A CNDDB occurrence of this species was recorded 6 miles to the southwest in 2015. Based on the presence of suitable habitat for the

yellow warbler within the off-site improvement areas (within the black willow thicket habitat immediately adjacent to the Riverside Avenue bridge), the potential for yellow warbler species to occur at the Project site is considered high. (ESA PCR, 2016, p. 55)

Coastal California gnatcatcher (*Polioptila californica californica*). This bird species is listed as federally threatened and is a state species of special concern and is known to occur in the Project vicinity based on CNDDB occurrence records. This species prefers coastal bluff scrub and coastal scrub habitats where coastal sage scrub is the dominant plant. Coastal California gnatcatcher was determined to have potential to occur within the Project site based on the presence of suitable habitat on-site, including brittle bush scrub, brittle bush scrub/rock outcrop, brittle bush scrub/ruderal, California buckwheat scrub, California sagebrush scrub, California sagebrush scrub/ruderal, disturbed/brittle bush scrub, disturbed/California sagebrush scrub, rock outcrop/brittle bush scrub, ruderal/brittle bush scrub, and ruderal/California sagebrush scrub. Additionally, the Project site and off-site improvement areas are within designated critical habitat mapped by USFWS (refer to Figure 11 of *Technical Appendix D* for a depiction of the extent of Coastal California gnatcatcher habitat on-site and in the vicinity). According to the Biological Resources Assessment, this species was recorded in an USFWS occurrence from 1995 within the northwestern portion of the Project site. However, no coastal California gnatcatchers were detected on the Project site during the focused surveys conducted in 2014 and 2015 by ESA PCR. Therefore, it is reasonably concluded that the Project site does not currently support coastal California gnatcatchers. The results of the 2014 Focused Coastal California Gnatcatcher Survey Report is included in Appendix F of *Technical Appendix D*, and 2015 Focused Coastal California Gnatcatcher Survey Report is included in Appendix G of *Technical Appendix D*. Additionally, the majority of the scrub habitat on the Project site is comprised of monotypic brittle bush that is marginal habitat to support the gnatcatcher. Although there are some patches of scrub on the Project site that contain California sagebrush, which are slightly more suitable since California sagebrush is preferred by this species, these patches are small, isolated patches within the overall marginal habitat. Furthermore, there is no contiguous high quality suitable habitat within the immediately surrounding vicinity to support this species. (ESA PCR, 2016, p. 55)

Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*). This mammal species is listed as a state species of special concern. This species prefers chaparral and coastal sage scrub habitats, in addition to grassland and Riversidean alluvial fan sage scrub habitats. Northwestern San Diego pocket mouse was determined to have a moderate potential to occur within the Project site based on the presence of suitable habitat, including brittle bush scrub, California buckwheat scrub, and California sagebrush scrub, and a few fossorial burrows. The nearest CNDDB occurrence record is from 2001, roughly four miles east of the Project site; however, the I-215 separates this record location from the Project site. No incidental sightings of this species were made during site surveys conducted in 2013, 2014, or 2015. (ESA PCR, 2016, p. 55)

Los Angeles pocket mouse (*Perognathus longimembris brevinasus*). This mammal species is listed as a state species of special concern. It prefers sparsely vegetated habitat areas in patches of fine sandy soils associated with washes. Los Angeles pocket mouse was determined to have a potential to occur within the Project site based on the presence of potentially suitable wash habitat near Drainage E and fossorial burrows that were observed on-site. However, the potential was considered low since the habitat on the Project site is not optimal (wash habitat patch is isolated and only 0.2-acre). Additionally, the majority of the site is surrounded by development and a large portion of suitable habitat is disturbed. No incidental sightings of this species were made during site surveys conducted in 2013, 2014, or 2015 by ESA PCR. (ESA PCR, 2016, p. 55)

San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). This mammal species is a California Species of Special Concern. This species prefers open brushlands and scrub habitats. San Diego black-tailed jackrabbit was determined to have a potential to occur within the Project site based on the presence of some potentially suitable habitat, including short grasses with some shrub cover. This species was observed during a general biological survey conducted in 2013 by ESA PCR. (ESA PCR, 2016, p. 56)

Western mastiff bat (*Eumops perotis californicus*). This mammal species is a state species of special concern. This species prefers chaparral, cismontane woodlands, coastal scrub, and valley and foothill grassland habitats, roosting in crevices in cliff faces, high buildings, trees, and tunnels. Western mastiff bat was determined to have a low potential to occur for foraging only within the Project site. Although bats in this family are known to be strong fliers and can fly long distances to forage, there is no suitable roosting habitat present on the Project site, and the majority of the Project site is surrounded by development and a large portion of existing habitat is disturbed. The nearest CNDDB occurrence record is from 1908, roughly 2.5 miles north of the Project site, and no incidental sightings of this species were made during site surveys conducted in 2013, 2014, or 2015 by ESA PCR. (ESA PCR, 2016, p. 56)

San Diego desert wood rat (*Neotoma lepida intermedia*). This mammal is a state species of special concern and occurs in coastal scrub and chaparral habitats. San Diego desert wood rat was determined to have a moderate potential to occur within the Project site based on the presence of suitable habitat, including brittlebrush scrub, California buckwheat scrub, California sagebrush scrub, and rock outcrops. Nearest CNDDB occurrence record is from 1994 roughly 7 miles north of the Project site near Lytle Creek, and no incidental sightings of this species were made during site surveys. (ESA PCR, 2016, p. 56)

Southern grasshopper mouse (*Onychomys torridus ramona*). This mammal species is a state species of special concern. This species prefers grasslands, desert areas, and especially scrub with friable soils. Southern grasshopper mouse was determined to have a low potential to occur within the Project site based on the presence of potential habitat, including brittle bush scrub, California buckwheat scrub, and California sage scrub, and a few fossorial burrows

observed on-site. The nearest CNDDB occurrence record is from 1923, roughly 3 miles east of the Project site. No signs of this species were observed during any site surveys conducted in 2013, 2014, or 2015. (ESA PCR, 2016, p. 56)

American badger (*Taxidea taxus*). This mammal species is a state species of special concern. This species prefers open shrub, forest and herbaceous habitats with friable soils. American badger was determined to have a low potential to occur within the Project site based on the presence of shrub habitat and a few fossorial burrows on-site, suggesting the presence of small mammals that could provide a possible food source. However, the potential was considered low since the majority of the Project site is surrounded by development and a large portion of suitable habitat is disturbed. The nearest CNDDB occurrence record is from 1908, roughly 4 miles east of the Project site. The Project site and CNDDB record location are separated by the I-215 freeway. No incidental sightings of this species were made during site surveys conducted in 2013, 2014, or 2015. (ESA PCR, 2016, p. 56)

Pallid bat (*Antrozous pallidus*). This bat species is a state species of special concern and occurs in chaparral, scrub, riparian woodland, montane coniferous forests, and grasslands. This species prefers roosting in rock outcrops and cliffs near open areas that provide foraging opportunities and is very sensitive to disturbance. Pallid bat was determined to have a very low potential to occur for roosting and foraging within the Project site. Although rock outcrops may provide roosting opportunities and scrub habitat present for potential foraging, the majority of the Project site is surrounded by development and a large portion of existing habitat is disturbed. Because this species is extremely sensitive to disturbance, the potential was considered very low. There is only one CNDDB occurrence record from 1929, approximately 9 miles northeast of the Project site and no signs of this species were observed during any surveys conducted in 2013, 2014, or 2015. (ESA PCR, 2016, p. 56)

In summary, and as noted above, the following special status species were observed at the Project site during the surveys conducted by ESA PCR: Orange-throated whiptail (*Aspidoscelis hyperythra*); Red diamond rattlesnake (*Crotalus ruber*), Swainson's hawk (*Buteo swainsoni*) (observed flying over the Project site during the 2014 focused coastal California gnatcatcher survey and the 2014 focused burrowing owl survey); Southwestern willow flycatcher (*Empidonax traillii extimus*); and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*).

2. Migratory Birds and Raptors Assessment

The Project site and off-site improvement areas support some potential nesting and foraging habitat for migratory birds and raptors. During the field surveys conducted by ESA PCR, several species of birds were observed on-site, including raptor species (e.g. Cooper's hawk [*Accipiter cooperii*], red-shouldered hawk [*Buteo lineatus*], red-tailed hawk [*Buteo jamaicensis*], and [Swainson's hawk]) and songbird species (e.g. blue-gray gnatcatcher [*Polioptila caerulea*], Say's phoebe [*Sayornis saya*], and Townsend's warbler [*Dendroica townsendi*]). A complete list of bird species observed on the Project site is listed in Appendix A of *Technical Appendix D*. Additionally, 10 special-status bird species were

identified by CNDDB as potentially occurring within the 9-quadrangle search area, one of which was observed on the Project site (Swainson's hawk) (see Appendix C). (ESA PCR, 2016, p. 57)

D. Jurisdictional Waters

The jurisdictional delineation conducted by ESA PCR on November 26, 2013, and April 29, 2015, identified nine natural drainage features at the Project site and off-site improvement areas, identified as Drainages A, A1, B, C, D, D1, E, E1, and E2. In total, the Project site supports approximately 0.7-acre of USACE/Regional Water Quality Control Board (RWQCB) "waters of the U.S." and 1.9 acres of CDFW jurisdictional streambed and riparian vegetation. The off-site improvement area contains approximately 0.04-acre of USACE/RWQCB waters and 0.6-acre of CDFW jurisdictional streambed which includes approximately 0.5-acre of CDFW jurisdictional tree canopy estimated due to the proposed trimming of streambed-associated vegetation within the river for hanging of a proposed power line on the downstream side of the Riverside Avenue bridge that spans the river. Jurisdictional features are depicted in Figure 8 of *Technical Appendix D*. No impacts to USACE/RWQCB jurisdiction within the Santa Ana River and/or the physical streambed of the river would occur as part of the proposed Project. No wetlands or other special aquatic sites where observed on the Project site or off-site improvement areas during the jurisdictional delineation conducted by ESA PCR. (ESA PCR, 2016, p. 30)

Drainage A enters the Project site in the east and runs southwest through the eastern corner of the site before exiting the site. Drainage A continues off-site for approximately 2,000 feet, flowing through the Cadena Creek mobile home community before it returns, bisecting the southern portion of the Project site. After passing through the southern portion of the site, Drainage A then exits the site via a box culvert once off-site Drainage A transitions to a concrete trapezoidal channel that is known as Highgrove channel. Drainage A1 is a less prominent drainage feature that predominately conveys urban runoff from a storm drain along Maryknoll Drive near the easternmost corner of the site. Drainages B, C, D, D1, E, E1 and E2 all originate onsite at topographic low points where flows coalesce and form jurisdictional indicators such as ordinary high water mark (OHWM) which include: 1) impressions on the bank, 2) sediment deposits/sorting, and 3) the presence of wracking, a defined bank and associated riparian vegetation. Representative photographs of the drainage features are provided in Figures 9a, 9b, and 9c of *Technical Appendix D*. Refer to Table 2 of *Technical Appendix D* for a summary of all the jurisdictional features assessed as part of the jurisdictional delineation conducted by ESA PCR. (ESA PCR, 2016, pp. 30-33)

4.3.2 APPLICABLE ENVIRONMENTAL REGULATIONS

A. State and/or Federally Listed Plants and Animals

1. Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (MBTA) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal

regulations. Applied to development projects, the MBTA prohibits the impact to the active nests of birds protected by the MBTA.

2. State of California Endangered Species Act

California's Endangered Species Act (CESA) provides definitions for endangered species, threatened species, and candidate species of California. Listed endangered and threatened species are protected by the CESA and candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Article 3, Sections 2080 through 2085, of the CESA address the taking of threatened, endangered or candidate species by stating "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under the CESA, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

3. Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) provides definitions for endangered species and threatened species of the U.S. Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to "take" any listed species. "Take" is defined in Section 3(18) of FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the United States Fish and Wildlife Service (USFWS), through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification that result in injury to, or death of species as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

4. State and Federal Take Authorizations for Listed Species

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7(a)(2) of the FESA of 1973, as amended (16 U.S.C. 1536(a)(2) stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat.

- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCPs) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.

Sections 2090-2097 of the California Endangered Species Act (CESA) require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

B. Regulations Related to Jurisdictional Waters and Wetlands

1. United States Army Corps of Engineers

Pursuant to Section 404 of the Federal Clean Water Act (CWA), the U.S Army Corps of Engineers (ACOE) regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in ACOE regulations at 33 CFR Part 328.3(a) and generally includes waters used in interstate or foreign commerce; all interstate waters and interstate wetlands; waters that would adversely affect foreign commerce in the instance of their destruction; impoundments of waters of the United States; or tributaries of the aforementioned waters. The term "wetlands" (a subset of "waters of the United States") is defined in 33 CFR 328.3(b) as that inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. In the absence of wetlands, the limits of ACOE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high water mark (OHWM) which is defined in 33 CFR 328.3(e). Two legal decisions that clarified the definition of USACE jurisdiction are "Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al." and "Rapanos v. United States and Carabell v. United States."

2. State Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Section 1602 of the California Fish and Wildlife Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. CDFW requires an entity to notify CDFW of any proposed activity that may modify a river, stream, or lake if the activity will:

- Substantially divert or obstruct the natural flow of any river, stream, or lake;
- Substantially change or use any material from the bed, channel, or bank if, any river, stream or lake; or

- Deposit or dispose of debris, waste, or other material containing crumbled, flakes, or ground pavement where it may pass into any river, stream, or lake.

This notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. It may also apply to work undertaken within the floodplain of a body of water.

3. *Regional Water Quality Control Board*

The Clean Water Act (CWA) Section 401 requires federal agencies to obtain a Water Quality Certification from the RWQCB before issuing permits that would result in increased pollutant loads to a water body. A Section 401 certification can be issued only if increased pollutant loads would not cause or contribute to exceedances of water quality standards. Subsequent to the legal decision in "Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.," the Chief Counsel for the State Water Resources Control Board issued a memorandum that addressed the effects of that decision on the Section 401 Water Quality Certification Program.

"California's right and duty to evaluate certification requests under section 401 is pendent to (or dependent upon) a valid application for a section 404 permit from the Corps, or another application for a federal license or permit. Thus if the Corps determines that the water body in question is not subject to regulation under the COE's 404 program, for instance, no application for 401 certification will be required…"

C. *Local and Regional Regulations and Plans*

1. *Colton General Plan Open Space and Conservation Element*

As part of the City of Colton's General Plan, the general objective of the Open Space and Conservation Element is to establish and maintain an open space and conservation system which will ensure the conservation and wise utilization of valuable resources and will meet local and regional open space needs. The Open Space and Conservation Element outlines the Principles and Standards by which the City intends to meet this objective, which include the following related to biological resources (City of Colton, 1987b, pp. 6-6 - 6-7):

Principles

- *Principle 1:* Preserve and protect hillside and environmentally sensitive areas designated for growth through the use of strict hillside development standards.

- *Principle 2:* Ensure a wide range of active and passive recreational uses through the promotion of a coordinated system of open space areas and linkages directed to scenic, scientific, cultural, and nature-oriented uses.

- *Principle 5:* Establish education and incentive programs for energy and resource conservation.

- *Principle 6:* Restrict development in canyons and hillsides and control the plan of development to prevent obstruction of natural runoff or water courses and to prevent unwarranted scarring of hillsides.

Standards

- *Standard 2:* Intensive human uses, such as residential development or major vehicular traffic improvements, shall be prohibited in areas of documented ecological significance.

- *Standard 3:* The use of natural and drought-tolerant vegetation shall be encouraged for landscaping in order that maintenance and water consumption are minimized.

- *Standard 5:* Hillside development standards shall be adopted.

2. Colton Municipal Code

Section 12.20.040 of the City of Colton Municipal Code includes a Street Tree Ordinance (Chapter 12.20, *Trees and Shrubs*) which requires permission from the Recreation and Parks Director be obtained to disturb or modify any tree, shrub or plant within a public street, planting strip, parkway or alley in the City (City of Colton, 2016a, Section 12.20.040).

4.3.3 BASIS FOR DETERMINING SIGNIFICANCE

Environmental impacts to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, § 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California to:

> *"Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities..."*

In the development of thresholds of significance for impacts to biological resources, CEQA provides guidance primarily in § 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. CEQA Guidelines § 15065(a) states that a project may have a significant effect where:

> *"The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species…"*

Therefore, for the purpose of analysis in this EIR, the proposed Project would result in a significant impact to biological resources if the Project or any Project-related component would:

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

b. *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

c. *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

d. *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?*

e. *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

f. *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

For the purposes of this impact analysis the following definitions apply:

- "Substantial adverse effect" means loss or harm of a magnitude which, based on current scientific data and knowledge would: (1) substantially reduce population numbers of a listed, candidate, sensitive, rare, or otherwise special status species; (2) substantially reduce the distribution of a sensitive plant community/habitat type; or (3) eliminate or substantially impair the functions and values of a biological resource (e.g., streams, wetlands, or woodlands) in a geographical area defined by interrelated biological components and systems. In the case of this analysis, the prescribed geographical area is considered to be the region that includes the USGS topographic quadrangle for the Project site, namely San Bernardino South. For some species, the geographic area may extend to the vicinity of the Project site based on known distributions of the species. The vicinity of the Project site is considered to comprise the following USGS topographic quadrangles: Devore, Fontana, Harrison Mountain, Redlands, Riverside East, Riverside West, San Bernardino North, and Sunnymead.

- "Conflict" means contradiction of a magnitude, which based on foreseeable circumstances, would preclude or prevent substantial compliance.

- "Rare" means: (1) that the species exists in such small numbers throughout all, or a significant portion of, its range that it may become endangered if its environment worsens; or (2) the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the FESA. (ESA PCR, 2016, p. 60)

4.3.4 IMPACT ANALYSIS

Threshold a)	***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 California Department of Fish and Game or U.S. Fish and Wildlife Service?***

A. Special-Status Plant Species

Development of the Project site and off-site improvement areas as described in EIR Section 3.0, *Project Description*, would result in the direct removal of numerous common plant species; a list of plant species observed within the Project site and off-site improvement areas is included in Appendix A of *Technical Appendix D*. Common plant species present within the Project site and off-site improvement areas occur in large numbers throughout the region and their removal does not meet the significance thresholds defined in Subsection 4.3.3, *Basis for Determining Significance*, above. Therefore, the Project would result in less-than-significant impacts to common plant species, and no mitigation measures are required (ESA PCR, 2016, p. 63).

A total of 28 special-status plant species of the 47 species identified as occurring in the Project vicinity in available databases (see Section 4.8.5 above) are not expected to occur within the Project site or off-site improvement areas due to the lack of suitable habitat or because the Project site or off-site improvement areas are outside the known distribution or elevation range for the species. These species are listed in Appendix B of *Technical Appendix D*. As discussed in Subsection 4.3.1 above, the remaining 19 sensitive plant species were determined to have a potential to occur on-site. However, no special-status plant species were observed on the Project site during focused surveys conducted by ESA PCR. No focused surveys were conducted within the off-site improvement areas; however, based on existing disturbance within these areas, lack of suitable habitat, and/or the proximity of the off-site improvement areas (immediately adjacent) to the areas of the Project site where focused surveys were conducted with negative results, there is no potential for these offsite improvement areas to support special-status species. As such, the Project would have no impact on special-status plant species, and no mitigation measures are required (ESA PCR, 2016, p. 63).

B. Special-Status Wildlife Species

Development of the Project would result in the disruption and removal of habitat and the loss and displacement of non-sensitive common wildlife species. A list of wildlife species observed within the Project site during the field surveys conducted by ESA PCR is included in Appendix A of *Technical Appendix D*. Due to the large acreage of disturbed areas and the level of existing human activity within

the vicinity (e.g., nearby development), these impacts would not be expected to reduce the general common wildlife populations below self-sustaining levels within the region and impacts to non-sensitive wildlife species do not meet the significance thresholds defined in 4.3.3, *Basis for Determining Significance*, above. Therefore, the Project would result in less-than-significant impacts to common wildlife species, and no mitigation measures are required. (ESA PCR, 2016, p. 64)

A total of 22 special-status wildlife species of the 40 species identified as occurring in the Project vicinity in available databases (see Subsection 4.3.1 above) are not considered to have a potential to occur within the Project site due to the lack of suitable habitat or because the site is outside the known distribution range for the species. These species are listed in Appendix C of *Technical Appendix D*. Since these species are not expected to be present on the Project site, no impacts would occur as a result of Project development and no mitigation measures are required. As discussed in Subsection 4.3.1 and Appendix C of *Technical Appendix D*, the remaining 18 special-status wildlife species were determined to have a potential to occur on-site based on the presence of suitable habitat. Potential impacts to these species are discussed in further detail below. (ESA PCR, 2016, p. 64)

1. Threatened and Endangered Species

*Swainson's hawk (*Buteo swainsoni*)*

During the field surveys conducted at the Project site, the State-threatened Swainson's hawk was observed flying over the Project site on two occasions. Swainson's hawks are known to breed within arid regions within the Central Valley and Mojave Desert, with very limited breeding reported in Antelope Valley. The Swainson's hawk is a long-distance migrator that travels from breeding grounds in North America to austral summer grounds in Central America. Migrating individuals move toward the south through the southern and central interior of California in September and October, and toward the north March through May. Based on a review of the CNDDB, the nearest documented occurrence of Swainson's hawk was observed nesting within the Santa Ana River approximately 13 miles southwest of the Project site in 1917. As Swainson's hawks are currently known to breed much farther north, this early 1917 occurrence was likely due to the expansive agriculture that previously existed within the area, which has since been replaced by development. The Project site does not support nesting habitat for the Swainson's hawk and is located outside of the species' current breeding range. The Swainson's hawks observed flying over the Project site during the spring were likely migrants. Therefore, because the Project site does not contain suitable habitat for nesting, the proposed Project would not result in significant impacts to nesting habitat for this species. (ESA PCR, 2016, pp. 52-65)

Swainson's hawks require open habitats, typically grasslands, to forage. As Swainson's hawks migrate through the southern and central interior of California on their way to and from Central America, the species can forage opportunistically within open or vacant properties. The Project site does support some limited potential foraging habitat; however, it is considered marginal due to its distance from suitable nesting habitat and because it is partially surrounded by development. The proposed Project would permanently impact approximately 184.71 acres of marginal foraging habitat (i.e., consisting of scrub, non-native grassland, disturbed, rock outcrop, and wash communities). The proposed Project

may also temporarily impact approximately 18.55 acres of marginal foraging habitat from the 20-foot construction buffer around the grading footprint. Although migrant Swainson's hawks could opportunistically forage on the Project site while migrating through, they would not be dependent on the Project site for foraging habitat. Migrating Swainson's hawks passing through Southern California have the opportunity to forage on much higher quality areas, such as agricultural fields, pastures, open desert, and grasslands throughout their migratory route. In addition, the proposed Project would avoid and preserve as open space approximately 150.92 acres within the Project site, the majority of which is comprised of native plant communities (e.g., brittle bush scrub, rock outcrop/brittle bush scrub). Furthermore, open space areas still remain within the vicinity of the Santa Ana River to the west, and within the undeveloped area to the north and to the southwest of the Project site that provide foraging habitat similar or superior to the marginal foraging habitat found on-site for migrants that may opportunistically forage within the area. Additionally, agricultural fields similar to their Central Valley foraging grounds are still prevalent along the species' migratory route within the cities of Riverside, Redlands, Hemet, and Mentone. As such, impacts to Swainson's hawk foraging habitat as a result of the proposed Project would be less than significant, and would not require mitigation. (ESA PCR, 2016, pp. 64-65)

*Southwestern willow flycatcher (*Empidonax traillii extimus*)*

The federally and state endangered southwestern willow flycatcher has potential to occur within the Santa Ana River (north and west of the Project site). Although the Project site does not support suitable habitat for this species, since the on-site black willow thicket/ornamental in Drainage A is isolated and limited in acreage (0.3-acre), the portion of the off-site improvement areas that includes the Riverside Avenue bridge over the Santa Ana River contains potentially suitable habitat within the black willow thicket habitat immediately adjacent to the bridge. Additionally, the state endangered willow flycatcher (*Empidonax traillii*) was observed during the focused surveys conducted by ESA PCR for coastal California gnatcatcher. One individual willow flycatcher was observed in elderberry trees growing in Drainage E1. However, ESA PCR determined that this individual was a migrant due to lack of suitable habitat (dense willow thickets) and the timing of the observation (during peak migration season). (ESA PCR, 2016, pp. 64-65)

The reach of Santa Ana River adjacent to the Project site (to the north and west) is also designated critical habitat for the southwestern willow flycatcher, as shown in Figure 12 of *Technical Appendix D*. The off-site improvement areas include 1.1 acres of critical habitat, and the proposed Project would impact up to 0.5-acre of critical habitat within the off-site improvement areas (as shown in Figure 12 of *Technical Appendix D*). The Project would be confined to the Riverside Avenue bridge (i.e., installation of a conduit via equipment to be staged on the bridge), and no access into the Santa Ana River is proposed. The Project would include trimming of trees for installation of the electrical conduit, and up to 0.5-acre of temporary impacts would likely occur to vegetation in order to trim back large trees from the work area. No impacts are proposed within the Santa Ana River streambed. Any vegetation trimmed is expected to re-establish following completion of the installation work. Furthermore, evidence indicates that vegetation is already trimmed along the bridge, suggesting that it

may currently be regularly maintained (e.g., due to the existing electrical easement for overhead power lines along the bridge). The actual limits of trimming would be evaluated and minimized to the greatest feasible extent prior to processing of regulatory permits by the resource agencies. The need for federal regulatory permits (i.e., CWA Section 404 permit issued by the USACE) provides a "federal nexus" by which a Section 7 consultation can occur. This statute imposes the obligation on federal agencies to ensure that their actions (such as issuing federal CWA permits for this Project) are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its designated critical habitat. This obligation is enforced through the mandatory procedural requirement that agencies, such as the USACE, initiate consultation with USFWS on any actions that may affect a threatened or endangered species. During the FESA Section 7 consultation required for this Project, USFWS would gather all relevant information concerning the proposed Project and the potential Project-related impacts on the southwestern willow flycatcher (i.e., the Project Applicant would be required to submit a species-specific Biological Assessment), prepare its opinion with respect to whether the Project is likely to jeopardize the continued existence of the species (i.e., the USFWS would issue a Biological Opinion), and recommend mitigation/conservation measures, where appropriate. Due to the minimal impacts proposed, which are temporary in nature, it is anticipated that at least informal consultation with the USFWS regarding the southwestern willow flycatcher would be necessary. Additionally, the need for state regulatory permits (i.e., Fish and Wildlife Code Section 1602 Streambed Alteration Agreement issued by the CDFW) would require a Consistency Determination from the CDFW for the state-listed southwestern willow flycatcher under CESA. Regardless, the removal of suitable habitat that has the potential to support the southwestern willow flycatcher (designated as critical habitat) would be a potentially significant impact prior to mitigation. (ESA PCR, 2016, pp. 64-65)

Prior to issuance of grading permits, the Project Applicant must obtain federal and state take authorizations via regulatory permits (including a CWA Section 404 permit issued by the USACE) through consulting with the USFWS as provided for by Section 7 of the FESA (i.e., for permanent impacts to coastal California gnatcatcher designated critical habitat and temporary impacts to southwestern willow flycatcher designated critical habitat). Implementation of Mitigation Measure MM 4.3-1 would require that prior to any tree-trimming or other work (e.g., utility conduit installation) occurring during the breeding season for southwestern willow flycatcher (typically May 15 through August 31), focused surveys shall be conducted in accordance with USGS guidelines to determine the presence/absence of southwestern willow flycatcher within the off-site improvement areas. If the species is present, Mitigation Measure MM 4.3-1 imposes specified requirements to ensure that potential impacts to the species are avoided. With implementation of Mitigation Measure MM 4.3-1, the Project's potential impacts to the southwestern willow flycatcher would be reduced to less than significant.

*Least Bell's vireo (*Vireo bellii pusillus)

The federally and state endangered least Bell's vireo has potential to occur within the Santa Ana River. Although the Project site does not support suitable habitat for this species, since the black willow

thicket/ornamental in on-site Drainage A is isolated and limited in acreage (0.3-acre), the portion of the off-site improvement areas that includes the Riverside Avenue bridge over the Santa Ana River contains potentially suitable habitat within the black willow thicket habitat immediately adjacent to the bridge. However, this species was observed immediately adjacent to the northwestern portion of the Project site as documented by USFWS and CNDDB occurrences in 2005, 2007, 2008, and 2015, and around and immediately adjacent to the Riverside Avenue bridge per USFWS occurrences in 2004, 2005, 2007, and 2008. The Project would be confined to the Riverside Avenue bridge (i.e., installation of a conduit via equipment to be staged on the bridge; no access into the Santa Ana River is proposed). However, the Project only proposes trimming of trees to allow for installation of the conduit, and up to 0.5-acre of temporary impacts may occur to vegetation in order to trim back large trees from the proposed work area. No impacts are proposed within the Santa Ana River streambed. Furthermore, evidence indicates that vegetation is already trimmed along the bridge, suggesting that it may currently be regularly maintained (e.g., due to the existing electrical easement for overhead power lines along the bridge). The actual limits of trimming would be evaluated and minimized to the greatest feasible extent prior to processing of regulatory permits by the resource agencies. The need for federal regulatory permits (i.e., CWA Section 404 permit issued by the USACE) provides a "federal nexus" by which a Section 7 consultation can occur. This statute imposes the obligation on federal agencies to ensure that their actions (such as issuing federal CWA permits for this Project) are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its designated critical habitat. This obligation is enforced through the mandatory procedural requirement that agencies, such as the USACE, initiate consultation with USFWS on any actions that may affect a threatened or endangered species. During the FESA Section 7 consultation required for this Project, USFWS would gather all relevant information concerning the proposed Project and the potential Project-related impacts on the southwestern willow flycatcher (i.e., the Project Applicant would submit a species-specific Biological Assessment), prepare its opinion with respect to whether the Project is likely to jeopardize the continued existence of the species (i.e., the USFWS would issue a Biological Opinion), and recommend mitigation/conservation measures where appropriate. Due to the minimal impacts proposed (which are temporary in nature), it is anticipated that at least informal consultation with the USFWS regarding the least Bell's vireo would be necessary. Additionally, the need for state regulatory permits (i.e., Fish and Wildlife Code Section 1602 Streambed Alteration Agreement issued by the CDFW) would require a Consistency Determination from the CDFW for the state-listed least Bell's vireo under CESA. Regardless, the removal of suitable habitat that has the potential to support the least Bell's vireo would be considered potentially significant prior to mitigation.

Prior to the issuance of any grading permit for the Project, the Project Applicant must obtain federal and state take authorizations via regulatory permits which would require that the USFWS be consulted, as provided for by Section 7 of the FESA. Due to the minimal temporary impacts proposed, it is anticipated that informal consultation with the USFWS regarding the least Bell's vireo would be necessary. Additionally, the need for state regulatory permits (i.e., Fish and Wildlife Code Section 1602 Streambed Alteration Agreement issued by the CDFW) would require a Consistency Determination from the CDFW for the state-listed least Bell's vireo under CESA. Additionally, implementation of Mitigation Measure MM 4.3-2 would require that prior to any tree-trimming or

other work (e.g., utility conduit installation) occurring during the breeding season for least Bell's vireo (typically March 15 through July 31), focused surveys shall be conducted in accordance with USFWS's *Least Bell's Vireo Survey Guidelines* (2001) to determine the presence/absence of least Bell's vireo within the off-site improvement areas. If the species is present, Mitigation Measure MM 4.3-2 imposes requirements to ensure that potential impacts to the species are avoided. With implementation of Mitigation Measure MM 4.3-2, the Project's potential impacts to the least Bell's vireo would be reduced to less than significant.

Coastal California gnatcatcher

The coastal California gnatcatcher is a federally threatened and state species of special concern, and was recorded in an USFWS occurrence from 1995 within the northwestern portion of the Project site. However, no coastal California gnatcatchers were detected on the Project site during the focused surveys conducted in 2014 and 2015 by ESA PCR. Therefore, it is reasonably concluded that the Project site does not currently support coastal California gnatcatchers and no impacts to coastal California gnatcatcher individuals are anticipated as a result of Project implementation. Additionally, the majority of the scrub habitat on the Project site is comprised of monotypic brittle bush that is marginal habitat to support the gnatcatcher. Although there are some patches of scrub on the Project site that contain California sagebrush, which are slightly more suitable since California sagebrush is preferred by this species, these patches are small, isolated patches within the overall marginal habitat. Furthermore, there is no contiguous high-quality suitable habitat within the immediately surrounding vicinity to support this species. The Project site and off-site improvement areas are within designated critical habitat mapped by USFWS, and include 313.7 acres of critical habitat within the Project site and 15.6 acres within the off-site improvement areas. The proposed Project would impact 167.1 acres of critical habitat within the Project site, and 15.62 acres within the off-site improvement areas, as shown in Figure 12 of *Technical Appendix D*. However, because the scrub habitat on the Project site is marginal habitat to support the gnatcatcher and this species was not found during focused surveys conducted in 2014 and 2015, the scrub habitat within the designated critical habitat on the Project site is not expected to be critical for the long-term conservation of the species. In addition, a total of 146.7 acres of unoccupied designated coastal California gnatcatcher critical habitat within the Project site would be avoided by the Project, the majority of which is comprised of native habitat (e.g., brittle bush scrub and rock outcrop/brittle bush scrub) within the La Loma Hills. Nevertheless, because the Project would cause impacts to designated critical habitat that has the potential to support the coastal California gnatcatcher would result in a potentially significant impact without mitigation.

Because the Project would permanently impact critical California gnatcatcher habitat, the Project Applicant would be required to obtain mandatory federal and state take authorizations via regulatory permits which would require that the USFWS be consulted as provided for by Section 7 of the FESA. During the FESA Section 7 consultation, USFWS would gather all relevant information concerning the proposed Project and the potential Project-related impacts on the coastal California gnatcatcher (i.e., the Project Applicant would be required to submit a species-specific Biological Assessment), prepare its opinion with respect to whether the Project is likely to jeopardize the continued existence of the species (i.e., the USFWS would issue a Biological Opinion), and require conservation measures

if deemed appropriate. With implementation of Mitigation Measure MM 4.3-3, impacts to critical California gnatcatcher habitat would be reduced to less than significant.

None of the other threatened and endangered wildlife species listed in Appendix C of *Technical Appendix D* are expected to occur within the Project site or off-site improvement areas due to failure to observe their absence during surveys and because the proposed Project footprint does not encompass suitable habitat. Accordingly, impacts associated with these species would be less than significant.

2. Species of Special Concern

Three species of special concern (orange-throated whiptail, red-diamond rattlesnake and San Diego black-tailed jackrabbit) were observed on-site during the field surveys conducted by ESA PCR. Several other species were considered to have potential to occur on-site, including a high potential for three species (coast horned lizard, yellow-breasted chat, and yellow warbler); a moderate potential for three species (loggerhead shrike, northwestern San Diego pocket mouse, and San Diego desert wood rat); a low potential for four species (Los Angeles pocket mouse, western mastiff bat, southern grasshopper mouse, and American badger); and a very low potential for one species (pallid bat). Of those special-status species that have the potential to occur, only three species were observed on-site, while the remaining special-status species were never encountered. Thus, the remaining species discussed above would be expected to occur in only limited numbers based on the lack of sightings during three years of surveys on the site and the quality of the isolated habitat, a large portion of which is disturbed (e.g., due to discing, being dominated by non-native species) and is surrounded by development to the immediate east and south, as well as to the north and west beyond the Santa Ana River. The Project would permanently impact a total of 176.6 acres of the Project site and 12.6 acres of the off-site traffic mitigation improvement areas (the majority of which is in disturbed and ruderal communities). Therefore, a total of 159.4 acres of the Project site would be temporarily impacted or avoided by the Project, and are comprised of native plant communities (e.g., brittle bush scrub, rock outcrop/brittle bush scrub). These avoidance areas would be preserved on-site and would continue to provide habitat for any special-status species that occur. As such, the loss of any individuals due to Project development would not be expected to reduce regional population numbers of these species, and would be considered less than significant; thus, no mitigation is required.

Due to the presence of suitable habitat, focused surveys were conducted within the Project site for burrowing owls in 2014 (and for a portion of the Project site in 2015). No burrowing owls, burrows, or sign of the species were detected during the focused surveys. No focused surveys were conducted within the off-site improvement areas. Although the previous focused surveys conducted at the Project site concluded that no species were present on-site, the species may migrate to the site in the future. Due to the presence of suitable habitat for burrowing owls at the Project site and the off-site improvement areas, a potentially significant impact would occur during Project construction absent mitigation. However, with implementation of Mitigation Measure MM 4.3-4, potential Project impacts to burrowing owls during construction would be reduced to levels that are less than significant.

With incorporation of MMs 4.3-1 through 4.3-4, the Project would not have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Threshold b)	***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 California Department of Fish and Game or U.S. Fish and Wildlife Service?***

A. Sensitive Plant Communities

The Project site and off-site improvement areas support two sensitive plant communities, black willow thicket and black willow thicket/ornamental, which are considered habitats that are high priority for inventory by CDFW.

The 0.46-acre of black willow thicket that occurs within the off-site traffic mitigation improvement areas would be temporarily impacted by the vegetation trimming proposed by the Project along the Riverside Avenue bridge where it crosses over the Santa Ana River. Although the Project would be confined to the Riverside Avenue bridge, and no access into the Santa Ana River is proposed, the vegetation trimming is needed to allow for conduit installation. Furthermore, evidence indicates that vegetation is already trimmed along the bridge, suggesting that it may currently be regularly maintained (e.g., due to the existing electrical easement along the bridge). Moreover, the final extent of tree trimming would be determined closer to processing of regulatory permits for the Project in conjunction with State and federal resource agency consultations and may be measurably reduced in size and scope. As this impact would be temporary in nature, and vegetation trimmed would be minimal and is expected to re-establish, impacts are considered to be less than significant, and no mitigation specifically for impacts to the 0.46-acre black willow thicket sensitive plant communities is recommended.

The Project would permanently impact 0.26-acre of black willow thicket/ornamental that occurs within the Project site. The black willow thicket/ornamental that would be impacted by the Project are associated with Drainage A, and are not considered high-quality due to the disturbed/non-contiguous composition, including the presence of nonnative and ornamental species, and the lack of vegetation structure and density. In particular, the black willow thicket/ornamental is re-establishing following historical disturbance and currently lacks the vegetation structure and density that typically supports protected plant or animal species. As a result, impacts to this lower quality sensitive community would not threaten the existence of high-quality stands of this community type. Nevertheless, impacts to these sensitive vegetation communities would be considered potentially significant without mitigation due to ground disturbance of this vegetation. Accordingly, implementation of Mitigation Measure MM 4.3-5 would require the Project Applicant to provide compensatory mitigation for impacts to black willow thicket/ornamental at a ratio no less than 1:1 by on- and/or off-site creation, restoration,

enhancement, and or preservation. Implementation of Mitigation Measure MM 4.3-5 would reduce the Project's impacts to the 0.26-acre black willow thicket/ornamental sensitive plant communities to less than significant.

The remaining native communities (brittle bush scrub, brittle bush scrub/rock outcrop, brittle bush scrub/ruderal, California buckwheat scrub, California sagebrush scrub, California sagebrush scrub/ruderal, rock outcrop, rock outcrop/brittle bush scrub, and wash), and non-native dominated communities (nonnative grassland, non-native grassland/ruderal, ornamental, disturbed, disturbed/brittle bush scrub, disturbed/California buckwheat scrub, disturbed/California sagebrush scrub, ruderal, ruderal brittle bush scrub, ruderal/California sagebrush scrub, and developed areas) are not considered sensitive habitats. Therefore, with the exception of impacts to black willow thicket/ornamental (discussed above), the Project would have no impacts on other sensitive plant communities.

B. Impacts to CDFW Jurisdiction

The Project site and off-site improvement areas support drainages that are considered jurisdictional streambed pursuant to Section 1602 of the California Fish and Game Code, as regulated by CDFW, that would be permanently impacted by the proposed Project. Approximately 1.2 acres of on-site, and approximately 0.5-acre of off-site non-wetland streambeds and riparian vegetation under CDFW jurisdiction would be permanently impacted by the Project. Accordingly, the Project would result in potentially significant impacts to streambeds and riparian vegetation under CDFW jurisdiction prior to mitigation. Implementation of Mitigation Measures MM 4.3-5 and MM 4.3-6 would reduce impacts to levels that are less than significant.

Threhsold c)	***Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

The Project site and off-site improvement areas do not have USACE/CDFW jurisdictional wetlands but do have non-wetland "waters of the U.S." regulated under Sections 404/401 of the Clean Water Act, and corresponding state laws, which would be permanently impacted. Implementation of the Project is anticipated to result in permanent impacts to approximately 0.4-acre of USACE/RWQCB jurisdictional waters located on-site, and approximately 0.03-acre of permanent impacts to off-site USACE/RWQCB jurisdictional waters. The 404 Permit Process also includes a final agency determination of the quantity of jurisdictional waters affected to assure that the final design of improvements does not exceed the Section 404 Nationwide acreage and linear foot eligibility criteria. For purposes of this EIR, any impacts to jurisdictional waters is considered to result in a significant impact warranting mitigation.

For impacts to USACE and/or RWQCB jurisdictional features, the Project applicant would be required to comply with Sections 404 and 401 of the CWA, respectively, through issuance of corresponding

permits. The proposed Project has been designed to require no more than minimal adverse impacts to USACE/RWQCB jurisdictional waters as required to qualify for a USACE Section 404 Nationwide Permit, which would require adequate on-site and/or off-site compensatory mitigation prior to issuance. Similarly, the off-site traffic mitigation improvement area impacts of approximately 0.4-acre of USACE/RWQCB jurisdictional waters would qualify for a 404 Nationwide Permit. The 404 Nationwide Permit includes a limitation on total acres, and total linear feet, of jurisdictional waters and wetlands. As discussed under Threshold b) above, mandatory compliance with Sections 404 and 401 of the CWA would reduce the Project's impacts to jurisdictional feastures to less than significant.

Threshold d) ***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?***

A. Wildlife Movement

As described in Subsection 4.3.1 above, the Project site and off-site traffic mitigation improvement areas support potential live-in and movement habitat for species on a local scale (e.g., for reptile, bird, and mammal species), but it likely provides little to no function to facilitate wildlife movement for species on a regional scale, and is not identified as a regionally important dispersal or seasonal migration corridor. Movement on a local scale likely occurs with species adapted to urban environments due to the development and disturbances in the vicinity of the Project site. Although implementation of the Project would result in disturbances to local wildlife movement within the Project site, those species adapted to urban areas would be expected to persist on-site following construction, particularly within the open space areas containing native habitat that will be avoided by the proposed Project. Furthermore, the majority of Drainage E would be avoided by the proposed Project aside from temporary impacts that would return the streambed to pre-Project conditions following the completion of construction. As such, Drainage E avoidance efforts are expected to preserve the existing streambed habitat that may be utilized by wildlife for local movement within these areas. As such, impacts to local movement would be less than significant and no mitigation measures would be required. Since the Project site does not function as a regional wildlife corridor and is not known to support wildlife nursery area(s), no impacts would occur and no mitigation measures are warranted.

B. Migratory Birds and Raptors

As previously discussed in Subsection 4.3.1 above, the Project site and off-site improvement areas support potential nesting and foraging habitat for migratory birds and raptors. Based on the disturbed nature of the majority of the Project site and the surrounding development, the quality of foraging habitat is considered to be low. Higher quality foraging habitat is considered to occur in less developed areas with larger expanses of open space, and within the adjacent Santa Ana River corridor. The loss of a relatively small acreage of low-quality foraging habitat as a result of the Project would not be expected to impact the foraging of these species. In addition the Project proposes avoidance of open space areas that could provide potential foraging and nesting areas. Therefore, impacts to foraging

habitat would be considered less than significant and no mitigation measures are required. The Project site and off-site improvement areas have the potential to support songbird and raptor nests due to the presence of shrubs, ground cover, and limited trees. Nesting activity typically occurs from February 15 to August 31. Disturbing or destroying active nests would be a violation of the MBTA (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Wildlife Code Section 3503. As such direct impacts to breeding birds (e.g., through nest removal) or indirect impacts (e.g., by noise causing abandonment of the nest) would result in a potentially significant impact without mitigation. As such, the Project will require implementation of Mitigation Measure MM 4.3-7, which would require vegetation removal activities be scheduled outside the nesting season (September 21 to February 14 for songbirds; Septmeber 1 to January 14 for raptors) and that pre-construction surveys be conducted before commencement of any construction activities during nesting season. With implementation of Mitigation Measure MM 4.3-7, Project impacts to migratory birds and raptors would be reduced to less than significant.

Threshold e)	***Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

The Project site does not contain any street trees regulated under the City's ordinance. However, the off-site improvement areas include trees along City streets that may be subject to the Street Tree Ordinance of the City of Colton. In accordance with the City of Colton Street Tree Ordinance (City of Colton Municipal Code, Chapter 12.20 Trees and Shrubs), a permit is required from the Recreation and Parks Director for trimming or removal of any street trees (refer to Section 4.8.3 above). Accordingly, the removal of street trees would result in a potentially significant impact.

Implementation of Mitigation Measure MM 4.3-8 would require a tree inventory be conducted for any street trees which may potentially be trimmed or removed by the proposed Project, and permit(s) obtained from the City of Colton's Recreation and Parks Director for trimming or removal of any street trees. With implementation of Mitigation Measure MM 4.3-8, the Project would not conflict with the Street Tree Ordinance of the City of Colton, and Project impacts would be less than significant.

Threshold f)	***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?***

There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan applicable to the Project site. Accordingly, the Project would not confict with any such plan, and would result in no imapct with respect to Threshold f).

4.3.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis for biological resources considers development of the proposed Project in conjunction with other development projects in the vicinity of the Project site.

Special-Status Wildlife Species: As discussed in the impact analysis for Threshold a), before mitigation, the proposed Project would result in potentially significant impacts to the southwestern willow flycatcher and least Bell's vireo. The proposed Project could therefore result in a cumulatively considerable contribution toward a significant impact to these special-status wildlife species when the Project is considered in conjunction with the development of other properties in the Project vicinity that contain habitat for these species. For potential impacts to southwestern willow flycatcher and least Bell's vireo, USFWS would be consulted and avoidance and minimization measures are proposed to avoid impacts to the birds. For impact to coastal California gnatcatcher critical habitat, USFWS would be consulted and a legal protection mechanism (e.g., conservation easement, deed restriction, etc.) would be required to ensure undeveloped, avoided areas are conserved for the benefit of the coastal California gnatcatcher. If any burrowing owls are observed within the Project site or off-site improvement areas in the future, mitigation is proposed that would avoid direct impacts in compliance with the CDFW Staff Report on Burrowing Owl Mitigation. Even with implementation of Mitigation Measures MM 4.3-1 through MM 4.3-4, impacts would not be reduced to less than cumulatively significant.

Prior to mitigation, the proposed Project would result in a potentially significant direct impact associated with raptors and migratory birds. Similar to the proposed Project, other projects within the Project vicinity would be required to comply with the MBTA and/or implement mitigation measures to reduce their respective potential to result in significant impact to migratory birds. Accordingly, with the implementation of the mitigation measures identified for the proposed Project, impacts to special-status wildlife species would not be considered cumulatively significant.

Sensitive Plant Communities: Without mitigation, the proposed Project would result in potentially significant impacts associated with the loss of the black willow thicket/ornamental plant community within the Project site. When considered in the context of other development projects, this impact could result in cumulatively considerable significant impacts. With implementation of Mitigation Measure MM 4.3-5, there would be no net loss to sensitive plant communities, and impacts related to sensitive plant communities would not be considered cumulatively significant.

Jurisdictional Drainages: Without mitigation, the proposed Project would result in potentially significant impacts to wetlands and riparian habitat, which would result in cumulatively considerable impacts when considered in the context of other development projects within the Project vicinity. Similar to the proposed Project, impacts to jurisdictional features within other properties would be subject to permitting with the relevant regulatory agencies, including USACE, RWQCB and/or CDFW. Accordingly, with implementation of Mitigation Measure MM 4.3-6 and compliance with existing regulations, the proposed Project would not result in a net loss of drainages and would therefore would not result in a cumulatively significant impact.

Regulated Trees: Impacts to trees regulated through the City of Colton tree ordinance would require a permit from the Recreation and Parks Director for trimming or removal of any street trees. Similarly, impacts to regulated trees within other properties would be subject to the same regulations. With the

proposed compliance with this ordinance through implementation of Mitigation Measure MM 4.3-8, impacts would not be considered cumulatively significant.

4.3.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a): Significant Direct and Cumulatively Considerable Impact. The Project would temporarily impact designated critical habitat for the southwestern willow flycatcher through trimming of vegetation along the Riverside Avenue bridge during construction activities. The temporary impacts to this critical habitat is considered a potentially significant direct and cumulatively considerable impact. The Project would also remove suitable habitat that has the potential to support the least Bell's vireo, which would be considered a significant direct and cumulatively considerable impact. The proposed Project would impact 167.1 acres of critical habitat for the coastal California gnatcatcher within the Project site, and 15.6 acres of critical habitat for the coastal California gnatcatcher in the off-site improvement areas. Project-related impacts to critical habitat for the coastal California gnatcatcher are considered significant direct and cumulatively considerable. The Project would likely impact suitable habitat for burrowing owls within the off-site improvement areas, which is considered a significant direct and cumulatively considerable impact.

Threshold b): Significant Direct and Cumulatively Considerable Impact. The Project would temporarily impact approximately 0.5-acre of black willow thicket (considered habitats that are high priority for inventory by CDFW) that occurs within the off-site improvement areas through the trimming of vegetation along the Riverside Avenue bridge where it crosses over the Santa Ana River. The Project would also permanently impact 0.3-acre of black willow thicket/ornamental that occurs within the Project site associated with Drainage A. Project-related impacts to black willow thicket are considered significant direct and cumulatively considerable. Approximately 1.2 acres of on-site, and approximately 0.5-acre of off-site non-wetland streambeds and riparian vegetation under CDFW jurisdiction would be permanently impacted by the Project. Project-related impacts to non-wetland streambeds and riparian vegetation under CDFW jurisdiction are considered significant direct and cumulatively considerable.

Threshold c): No Impact. The Project site does not include any federally protected wetlands as defined by the Section 404 of the Clean Water Act (CWA).

Threshold d): Significant Direct and Cumulatively Considerable Impact. The Project has the potential to impact nesting birds protected by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code, which is a potentially significant direct and cumulatively considerable impact absent mitigation.

Threshold e): Significant Direct and Cumulatively Considerable Impact. The Project proposes removal of street trees, and thus has the potential to conflict with the City of Colton Street Tree Ordinance (City of Colton Municipal Code, Chapter 12.20 Trees and Shrubs), which is a potentially significant direct and cumulatively considerable impact absent mitigation.

Threshold f): No Impact. The Project site is not located within a Significant Ecological Area (SEA) or an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan. Therefore, the Project has no potential to conflict with such plans, which would not result in a cumulatively considerable impact.

4.3.7 MITIGATION

MM 4.3-1 Prior to the issuance of a demolition permit or grading permit for the off-site traffic mitigation improvements to the portion of the Riverside Avenue bridge over the Santa Ana River, the City of Colton Public Works Director or City Engineer (or their designee) and the Development Services Director shall ensure that plans include the following measures to address impacts to southwestern willow flycatcher:

1. Vegetation clearing and trimming within the off-site improvement areas that includes the Riverside Avenue bridge over the Santa Ana River shall be conducted outside of the breeding season for southwestern willow flycatcher (May 15 through August 31).

2. If vegetation clearing and trimming or work within the off-site improvement areas that include the Riverside Avenue bridge over the Santa Ana River must be conducted within the breeding season for southwestern willow flycatcher (May 15 through August 31), then focused surveys should be conducted in accordance with USGS guidelines in A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher (2010) to determine the presence/absence of southwestern willow flycatcher within the off-site study areas. If southwestern willow flycatcher are present, the following shall be required:

    a. A qualified biologist shall identify a 300-foot avoidance buffer from any occupied habitat if construction occurs during the breeding season. If work is required within 300-feet buffer during the breeding season, the biologist shall monitor all work to ensure no impacts occur to the southwestern willow flycatcher. Written documentation shall be prepared and submitted to USFWS and CDFW on completion of construction during the breeding season to outline any monitoring activities.
    b. Construction limits in and around any occupied southwestern willow flycatcher habitat shall be delineated with flags and/or fencing prior to the initiation of any grading or construction activities to clearly identify the limits of the habitat and/or the 300-foot avoidance buffer during the breeding season.
    c. Prior to construction, a worker awareness program should be developed and implemented to inform all workers on the project about listed species, sensitive habitats, and the importance of complying with avoidance and minimization measures.

d. All construction work shall occur during daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours determined by the City of Colton.
e. During any construction within or immediately adjacent to the 300-foot avoidance buffer, the construction contractors shall install properly operating and maintained mufflers on all construction equipment, fixed or mobile, to reduce construction equipment noise to the maximum extent possible. The mufflers shall be installed consistent with manufacturers' standards. The construction contractor shall also place all stationary construction equipment so that emitted noise is directed away from the occupied southwestern willow flycatcher habitat.
f. The construction contractor shall stage equipment in areas that will create the greatest distance between construction-related noise sources and occupied habitat during all project construction occurring during the breeding season.
g. If the monitoring biologist determines that noise from the construction activities may be affecting the normal expected breeding behavior of the birds, the construction supervisor shall be informed and work within no less than 300 feet of construction areas shall be ceased until appropriate measures as identified by the biologist are implemented. Such measures may include monitoring by a qualified acoustician to verify noise levels are below 60 dBA within the occupied southwestern willow flycatcher habitat. If the 60 dBA requirement is exceeded the acoustician shall make operational changes, utilize technology to reduce construction noise such as mufflers, and/or install a barrier to alleviate noise levels during the breeding season. Installation of noise barriers and any other corrective actions taken to mitigate noise during the construction period shall be communicated to the USFWS and CDFW.
h. If after all corrective actions are implemented the monitoring biologists determines that the normal expected breeding behavior of the birds is being affected, work within no less than 300 feet shall be ceased and the USFWS and CDFW shall be contacted to determine the appropriate course of action.
i. On- and/or off-site restoration and/or enhancement of southwestern willow flycatcher habitat at a ratio no less than 0.5:1 for temporary impacts is required. Off-site restoration and/or enhancement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program supporting southwestern willow flycatcher.

MM 4.3-2 Prior to the issuance of a demolition permit or grading permit for the portion of the off-site improvement areas that include the Riverside Avenue bridge over the Santa Ana

River, the City of Colton Public Works Director or City Engineer (or their designee) and the Development Services Director shall ensure that plans include the following measures to address impacts to least Bell's vireo:

1. Vegetation clearing and trimming within the off-site improvement areas that include the Riverside Avenue bridge over the Santa Ana River shall be conducted outside of the breeding season for least Bell's vireo (March 15 through July 31).

2. If vegetation trimming or work must be conducted within the breeding season for least Bell's vireo (March 15 through July 31), then focused surveys shall be conducted in accordance with USFWS's Least Bell's Vireo Survey Guidelines (2001) to determine the presence/absence of least Bell's vireo within the off-site improvement areas that include the Riverside Avenue bridge over the Santa Ana River. If least Bell's vireo are present, the following would be required:
    a. A qualified biologist shall identify a 300-foot avoidance buffer from any occupied habitat if construction occurs during the breeding season. If work is required within 300-feet during the breeding season, the biologist shall monitor all work to ensure no impacts occur to the least Bell's vireo. Written documentation shall be prepared and submitted to USFWS and CDFW on completion of construction during the breeding season to outline any monitoring activities.
    b. Construction limits in and around any occupied least Bell's vireo habitat shall be delineated with flags and/or fencing prior to the initiation of any grading or construction activities to clearly identify the limits of the habitat and/or the 300-foot avoidance buffer during the breeding season.
    c. Prior to construction, a worker awareness program should be developed and implemented to inform all workers on the project about listed species, sensitive habitats, and the importance of complying with avoidance and minimization measures.
    d. All construction work shall occur during daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours determined by the City of Colton.
    e. During any construction within or immediately adjacent to the 300-foot avoidance buffer, the construction contractors shall install properly operating and maintained mufflers on all construction equipment, fixed or mobile, to reduce construction equipment noise to the maximum extent possible. The mufflers shall be installed consistent with manufacturers' standards. The construction contractor shall also place all stationary construction equipment so that emitted noise is directed away from the occupied least Bell's vireo habitat.
    f. The construction contractor shall stage equipment in areas that will create the greatest distance between construction-related noise sources and

occupied habitat during all project construction occurring during the breeding season.

g. If the monitoring biologist determines that noise from the construction activities may be affecting the normal expected breeding behavior of the birds, the construction supervisor shall be informed and work within no less than 300 feet of construction areas shall be ceased until appropriate measures are implemented. This may include monitoring by a qualified acoustician to verify noise levels are below 60 dBA within the occupied least Bell's vireo habitat. If the 60 dBA requirement is exceeded the acoustician shall make operational changes, utilize technology to reduce construction noise such as mufflers, and/or install a barrier to alleviate noise levels during the breeding season. Installation of noise barriers and any other corrective actions taken to mitigate noise during the construction period shall be communicated to the USFWS and CDFW.

h. If after all corrective actions are implemented the monitoring biologists determines that the normal expected breeding behavior of the birds is being affected, work within no less than 300 feet shall be ceased and the USFWS and CDFW shall be contacted to discuss the appropriate course of action.

i. On- and/or off-site restoration and/or enhancement of least Bell's vireo habitat at a ratio no less than 0.5:1 for temporary impacts. Off-site restoration and/or enhancement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program supporting least Bell's vireo.

MM 4.3-3 Prior to the approval of a Final Map for the Project, the Project Applicant shall provide evidence to the Public Works Director or City Engineer or their designee and the Development Services Director that the following actions shall be implemented to mitigate potential impacts to coastal California gnatcatcher critical habitat:

1. For areas of the Project site located within designated critical habitat which would be avoided, a legal protection mechanism (such as a conservation easement, deed restriction, etc.) shall be implemented to ensure these areas are conserved for the benefit of the coastal California gnatcatcher and would not be developed or disturbed in the future.

2. An environmental awareness display, which shall include up to two informative kiosks, shall be installed in areas of the Project site that are located adjacent to the conserved open space. Additionally, the Homeowners Association shall distribute information brochures to individual homeowners upon purchase of a home to educate them about the sensitive biological resources within the conserved areas.

MM 4.3-4 Prior to issuance of any grading permits, the Project Applicant shall provide evidence to the Public Works Director or City Engineer or their designee and the Development

Services Director that the following actions shall be implemented to address potential impacts to burrowing owl:

1. A pre-construction take avoidance survey for burrowing owls shall be conducted within the Project site and off-site study areas no less than 14 days prior to initiating ground disturbance activities. The survey shall be conducted in accordance with the guidelines in the 2012 CDFW Staff Report on Burrowing Owl Mitigation to determine the presence of burrowing owls and avoid potential direct take of burrowing owls if present.

2. In the case that the qualified biologist determines that burrowing owls are present during the focused survey, occupied burrows and habitat shall be avoided in accordance with the guidelines in the Staff Report on Burrowing Owl Mitigation published by CDFW dated March 7, 2012. Avoidance measures shall include, but are not limited to: avoiding direct or indirect destruction of burrows, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. The Project Applicant shall retain a qualified biologist to supervise the implementation of the avoidance measures. If occupied burrows or habitat cannot be avoided, appropriate compensation measures shall be determined by the qualified biologist in accordance with the guidelines detailed in the 2012 CDFW staff report and subject to approval by CDFW. This includes a Burrowing Owl Exclusion Plan for temporary or permanent exclusion of owls from occupied burrows, and/or a Mitigation Land Management Plan for permanent conservation of similar vegetation communities to provide for burrowing owl nesting, foraging, wintering and dispersal comparable to or of higher quality than the impact area.

MM 4.3-5 Prior to issuance of grading permits, the Project Applicant shall provide evidence to the satisfaction of the Public Works Director or City Engineer or their designee and the Development Services Director that compensatory mitigation has been confirmed for impacts to black willow thicket/ornamental at a ratio no less than 1:1 by on- and/or off-site creation, restoration, enhancement, and/or preservation.

Purchase of any mitigation credits through an agency-approved mitigation bank or in-lieu fee program shall occur prior to any activities that would impact sensitive plant communities. Any mitigation proposed on-site, or on land acquired for the purpose of in-perpetuity mitigation that is not part of an agency-approved mitigation bank or in-lieu fee program, shall include the creation, restoration, enhancement, and/or preservation of similar habitat pursuant to a Habitat Mitigation and Monitoring Plan (HMMP). Prior to the issuance of grading permits, the Project Applicant shall provide the City of Colton Building Official or their designee with a HMMP which provides details regarding the implementation of the mitigation, performance standards, maintenance, and future monitoring. The goal of the mitigation shall be to preserve, create, restore, and/or enhance similar habitat with equal or greater function and value

than the impacted habitat. The HMMP shall describe the offset of impacts to these habitats, and the on-site and/or off-site mitigation shall be preserved in perpetuity pursuant to City-approved legal protection mechanism.

MM 4.3-6 Prior to the issuance of any grading permit that would disturb a jurisdictional area, the Project Applicant shall provide evidence to the Public Works Director or City Engineer or their designee that it has obtained regulatory permits from the USACE, RWQCB, and CDFW. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:

1. On-site and/or off-site creation, restoration, enhancement, and/or preservation of USACE/RWQCB jurisdictional "waters of the U.S." within the watershed at a ratio no less than 1:1 or within an adjacent watershed at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate where applicable). Off-site mitigation may occur on land acquired for the purpose of in-perpetuity preservation, or through the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program.
2. On-site and/or off-site creation, restoration, enhancement, and/or preservation of CDFW jurisdictional streambed and associated riparian habitat within the watershed at a ratio no less than 2:1 or within an adjacent watershed at a ratio no less than 3:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate where applicable). Off-site mitigation may occur on land acquired for the purpose of in-perpetuity preservation, or through the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program.

The Project Applicant shall demonstrate to the City of Colton that purchase of any mitigation credits through an agency-approved mitigation bank or in-lieu fee program occurred prior to any impacts to jurisdictional drainages. Any mitigation proposed on land acquired for the purpose of in-perpetuity mitigation that is not part of an agency-approved mitigation bank or in-lieu fee program shall include the creation, restoration, enhancement, and/or preservation of similar habitat pursuant to a Habitat Mitigation and Monitoring Plan (HMMP) prepared by a qualified biologist on behalf of the Project Applicant. The HMMP shall be prepared prior to any impacts to jurisdictional features, and shall provide details as to the implementation of the mitigation, performance standards, maintenance, and future monitoring.

MM 4.3-7 Prior to the issuance of any grading permit that would remove potentially suitable nesting habitat for raptors or songbirds, the Project Applicant shall demonstrate to the satisfaction of the City of Colton Public Works Director or City Engineer or their

designee and the Development Services Director that either of the following have been or would be implemented.

1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.
2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) shall require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of vegetation removal activities. If any active nests are detected, a buffer of 300 feet (500 feet for raptors) around the nest would be delineated, flagged, and avoided until the nesting cycle is complete (e.g., it is determined by a qualified biologist that the nestlings have fledged, or the nest has failed). The buffer may be modified and/or other recommendations proposed as determined appropriate by the biological monitor to minimize impacts.

MM 4.3-8 Prior to the issuance of any grading permit, the Project Applicant shall provide evidence to the Public Works Director or City Engineer or their designee and the Development Services Director that it has conducted a tree inventory for any street trees which may potentially be trimmed or removed by the proposed Project. The Project Applicant shall also provide evidence that it has obtained a permit for trimming or removal of any street trees in accordance with the Street Tree Ordinance of the City of Colton (City of Colton Municipal Code, Chapter 12.20 Trees and Shrubs).

4.3.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a): Less-than-Significant-Impact with Mitigation. With implementation of Mitigation Measures MM 4.3-1 through MM 4.3-4, the Project's impacts to southwestern willow flycatcher and its critical habitat, least Bell's vireo, coastal California gnatcatcher critical habitat, and burrowing owl would be reduced to less than significant. These mitigation measures require consultation with USFWS; implementation of a legal protection mechanisms; and conducting pre-construction focused surveys for southwestern willow flycatcher, least Bell's vireo, and burrowing owls within the proposed off-site improvement areas. Because only minimal vegetation is proposed to be trimmed and is expected to re-establish, Mitigation Measures MM 4.3-1 and MM 4.3-2 require compensatory mitigation at a ratio of 0.5:1 to address the Project's temporary impacts to southwestern willow flycatcher habitat and least Bell's vireo habitat. Additional mitigation measures may be required pending the results of the USFWS consultation and the pre-construction focused surveys.

Threshold b): Less-than-Significant-Impact with Mitigation. Implementation of Mitigation Measures MM 4.3-5 and MM 4.3-6 would reduce Project-related impacts to black willow thicket (considered habitats that are high priority for inventory by CDFW) and non-wetland streambeds and riparian vegetation under CDFW jurisdiction to less-than-significant levels. Mitigation Measure MM 4.3-5

requires the Project Applicant implement compensatory mitigation for impacts to black willow thicket/ornamental at a ratio no less than 1:1 by on- and/or off-site creation, restoration, enhancement, and/or preservation. With implementation of the compensatory Mitigation Measure MM 4.3-5 at a 1:1 ratio, there would be no net loss to sensitive plant communities with respect to the Project's impacts to black willow thicket, and impacts would be considered less than cumulatively considerable. Mitigation Measure MM 4.3-6 would require the Project Applicant to demonstrate to the City of Colton that compensatory mitigation has been completed with regard to the Project's impacts to USACE/RWQCB jurisdictional waters and CDFW jurisdictional streambed and associated riparian habitat. In order to ensure there would be no net loss of drainages and to reduce the Project's impacts to jurisdictional features to levels that are less than cumulatively considerable, Mitigation Measure MM 4.3-6 requires compensatory mitigation at a ratio of 1:1 for impacts to USACE/RWQCB jurisdictional drainages within the watershed, compensatory mitigation at a ratio of 2:1 for impacts to USACE/RWQCB jurisdictional drainages within an adjacent watershed, compensatory mitigation at a ratio of 2:1 for impacts to CDFW jurisdictional drainages within the watershed, and compensatory mitigation at a ratio of 3:1 for impacts to CDFW jurisdictional waters within an adjacent watershed.

Threshold d): Less-than-Significant-Impact with Mitigation. Implementation of Mitigation Measure MM 4.3-7 would ensure that vegetation removal would occur outside of the nesting season, and that pre-construction surveys are conducted for nesting migratory birds to determine the presence or absence on the Project site and offsite areas prior to construction activities occurring during the nesting season. If nesting birds are determined to be present, the mitigation requires avoidance of bird nests during the breeding season in conformance with accepted protocols and regulatory requirements. With implementation of the required mitigation, potential direct and cumulatively considerable impacts to nesting migratory birds would be reduced to below a level of significance.

Threshold e): Less-than-Significant-Impact with Mitigation. Implementation of Mitigation Measure MM 4.3-8 would require the Project Applicant to conduct a tree inventory for any street trees to be removed by the Project, and to obtain a permit from trimming or removal of any street trees from the City of Colton's Recreation and Parks Department in accordance with the City of Colton Street Tree Ordinance (City of Colton Municipal Code, Chapter 12.20 Trees and Shrubs). With implementation of Mitigation Measure MM 4.3-8, the Project's would not conflict with the City of Colton Street Tree Ordinance, and Project-related impacts would be reduced to less than significant.

4.4 CULTURAL RESOURCES

The analysis in this Subsection is based in part on the site-specific cultural resources assessment titled, "A Cultural Resources Assessment for the Roquet Ranch Project" prepared by Brian F. Smith and Associates, Inc. (hereafter, BFSA), August 5, 2016 and appended to this EIR as *Technical Appendix F1* (BFSA, 2017a). The analysis in this Subsection also is based on the site-specific paleontological assessment titled, "Paleontological Resource and Mitigation Monitoring Assessment" prepared by BFSA, dated June 15, 2016, and appended to this EIR as *Technical Appendix F2* (BFSA, 2017b). All references used in this Subsection are listed in EIR Section 7.0, *References*. Both on-site and off-site physical disturbance areas were studied.

All references used in this Subsection are included in EIR Section 7.0, *References*. Confidential information has been redacted from *Technical Appendices F1* and *F2* for purposes of public review. In addition, much of the written and oral communication between Native American tribes, the City of Colton, and BSFA is considered confidential in respect to places that have traditional tribal cultural significance (Gov. Code § 65352.4), and although relied upon in part to inform the preparation of this EIR Subsection, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (Cal. Code Regs. § 15120(d)).

4.4.1 EXISTING CONDITIONS

A. *Cultural Setting of the Project Site*

1. *Prehistory*

The Project site is located in the southwestern foothills of San Bernardino County. This region is close to the traditional territory of multiple Native American groups, including the Serrano, the Cahuilla, and the Luiseño. Evidence of villages and camps, burials, quarries, rock features, and bedrock mortars has been documented at archaeological sites across the desert and within the foothills, some of which contain evidence of a lengthy prehistoric time span. As discussed below, the general cultural chronology sequence of the region includes the Paleo Indian Period, the Pinto Period, the Gypsum Period, the Saratoga Springs Period, and the Ethnohistoric Period. (BFSA, 2017a, p. 3.0-2)

❑ Paleo Indian Period (12,000 to 7,000 Years before Present [YBP])

The earliest documented evidence of human occupation in the Mojave Desert and San Bernardino Mountains comes from the Paleo Indian Period, a cultural expression referred to as the Western Pluvial Lakes Tradition (WPLT). The WPLT occurred in the western Great Basin and covered an area that stretched from the now arid lands of southern California to Oregon. A cultural adaptation to pluvial conditions (e.g., lakes, marshes, and grasslands) flourished for thousands of years after approximately 9000 B.C., but it disappeared in response to warming and drying trends. One of the most well-known expressions of the WPLT is the Lake Mojave Complex which is thought to have covered a vast area including parts of the southwestern Great Basin and the Mojave Desert, and may have reached as far

south as the San Diego area. Artifacts indicative of the Lake Mojave Complex include foliated points and knives, Lake Mojave points, Silver Lake points, and flaked-stone crescents. Similar artifacts have been subsequently recorded along the shoreline of many other pluvial lakes in the Mojave Desert. (BFSA, 2017a, p. 3.0-2)

❑ Pinto Period (7,000 to 4,000 YBP)

The Pinto Period dates to the end of the Pleistocene, when the severe and dramatic environmental change from pluvial to arid conditions began. Pinto Period sites are found mostly near ephemeral lakes and now dry streams and springs, suggesting a wetter climate than the present. Projectile points associated with the Pinto Period are characterized as larger atlatl dart points, as opposed to arrowhead points, which were introduced later. This period has been described as a highly mobile desert economy, with an emphasis on hunting, supplemented by the use of processed seeds. Pinto Period artifacts have been interpreted as indications of temporary or seasonal occupations by small groups of people. (BFSA, 2017a, pp. 3.0-2 - 3.0-3)

❑ Gypsum Period (4,000 to 1,500 YBP)

The presence of the Humboldt Concave Base, Gypsum Cave, Elko Eared, or Elko Corner-Notched points is believed to be indicative of the Gypsum Period (radiocarbon dated from 4,000 to 1,500 years ago). The Gypsum Period reflects a more intensive desert occupation. Indications of trade with coastal populations are evidenced by the shell beads in the archaeological record. An increase in milling stones and manos has been found in association with this period, which indicates an increased use of hard seeds. Several scholars associate this period with the division of the Uto-Aztecan language, approximately 3,000 to 2,500 years ago. The major language groups that emerged from this division are Numic, spoken by the Kawaiisu and Piute; Takic, spoken by the Kitanemuk, Serrano, Gabrielino, and other southern California Shoshonean speakers; Hopic, spoken in the southwest; and Tubatulabalic, spoken by the Tubatulabal in the southern Sierra Nevada Mountains. A shift in settlement patterns toward a more sedentary lifestyle occurred during this period, characterized by the emergence of large permanent or semi-permanent village sites and associated cemeteries. (BFSA, 2017a, p. 3.0-3)

❑ Saratoga Springs Period (1,500 to 800 YBP)

The Saratoga Springs Period is characterized by a transition from larger dart points to smaller arrow points. Coupled with evidence from rock art motifs, this has led scholars to argue for a shift from atlatls to use of the bow and arrow either during the end of the Gypsum Period or the beginning of the Saratoga Springs Period. This period saw an increase in trade with Arizona and other areas of the Southwest. Evidence in the archaeological record shows that Brown and Buff wares (pottery styles) characteristic of Arizona made their way to the California desert by A.D. 900. It is also believed that the Anasazi mined turquoise in the eastern California desert about this time. (BFSA, 2017a, p. 3.0-3)

❑ **Ethnohistoric Period (800 YBP to European Contact)**

During the Ethnohistoric Period, the Serrano occupied the Project area and surrounding areas east of present-day Los Angeles. Definitive boundaries are difficult to place for the Serrano due to their sociopolitical organization and a lack of reliable data. However, researchers place the Serrano in the San Bernardino Mountains east of Cajon Pass and at the base of and north of the mountains near Victorville, east to Twentynine Palms, and south to the Yucaipa Valley. Serrano has been used broadly for languages in the Takic family including Serrano, Kitanemuk, Vanyume, and Tataviam. (BFSA, 2017a, p. 3.0-4)

2. History

❑ **Exploration Period (1530 to 1769)**

European exploration began along the California coast began in 1542 with the landing of Rodriguez Cabrillo and his crew at San Diego Bay. Subsequently in 1602 to 1603, Sebastian Vizcaíno made an extensive and thorough exploration of the Pacific coast, which did not extend beyond the northern limits of the Cabrillo track. The early European voyages observed Native Americans living in villages along the coast, but did not make substantial impact upon them. At the time of contact, the Serrano population was estimated to have ranged from approximately 1,500 to 2,500 individuals. (BFSA, 2017a, p. 3.0-5)

❑ **Spanish Colonial Period (1769 to 1821)**

The Spanish occupation of the claimed territory of Alta California took place during the reign of King Carlos III of Spain, marking the beginning of Spanish colonization in California. The effort to colonize Alta California involved both military and religious contingents, where the overall intent of establishing forts and missions was to gain control of the land and the native inhabitants through conversion. Following colonization of San Diego in the late 1760s, Pedro Fages, the Spanish Military Commander of California, made his way north and east, reaching the area now known as San Bernardino County in 1772. Fages was closely followed by Father Francisco Garces, a Spanish missionary priest, in 1774. Franciscan missionary Francisco Dumatz of the San Gabriel Mission led his company into the San Bernardino Valley in 1810. In observance of the feast day of St. Bernardine of Siena, Dumatz named the valley and the nearby mountain range San Bernardino. (BFSA, 2017a, p. 3.0-6)

❑ **Mexican Period (1821 to 1846)**

After the Mexican-born Spanish and the Catholic Church joined the revolution against the Spanish, Spain was finally defeated in 1821. The revolution had repercussions in the northern territories, and by 1834, all of the mission lands had been removed from the control of the Franciscan Order under the Acts of Secularization. Without proper maintenance, the missions quickly began to disintegrate, and after 1836, missionaries ceased to make regular visits inland to minister to the needs of the Native Americans. Large tracts of land continued to be granted to persons who applied for them or who had gained favor with the Mexican government. Grants of land were made to settle government debts, and

the Mexican government was also called upon to reaffirm some older Spanish land grants shortly before the Mexican-American War of 1846. (BFSA, 2017a, p. 3.0-6)

❑ Anglo-American Period (1846 to Present)

A General History of the San Bernardino Valley

By 1842, the Mexican government had granted the Lugo family Rancho San Bernardino. The grant included a holding of 37,700 acres, which encompassed the entire San Bernardino Valley. During the Mexican-American War from 1846 to 1847, California was invaded by United States troops. At the time, the inhabitants of California were practically defenseless, and they quickly surrendered to the United States Navy in July of 1847. Captain Jefferson Hunt of the Mormon Battalion led a group of settlers into San Bernardino, and as a result, by 1851, the Mormon Colony purchased the rancho from the Lugos and occupied the area until 1857, when Joseph Smith recalled his followers to Salt Lake City as a result of the persistent threat of invasion by federal troops. The ensuing mass exodus resulted in an approximately 50 percent drop in population of Euro-Americans from San Bernardino Valley and the hindrance of valley development by Euro-Americans. (BFSA, 2017a, pp. 3.0-6 - 3.0-7)

A General History of the Colton Area

Following the establishment of the San Gabriel Mission in 1810, the Mexican government granted the land for the San Bernardino and Jurupa ranchos by 1840. After the Mexican-American War, the ranchos began to be subdivided into smaller ranchos. George Cooley of Kent, England purchased one of these subdivisions in 1854 and began to develop "Cooley Ranch" within present-day City of Colton. Cooley, who was a member of the San Bernardino Board of Supervisors, continued to add land to his property until about 1873. At this time, Cooley Ranch had grown to over 400 acres. The development of the city of Colton began in 1875, when the Southern Pacific Railway's (SPRW) northerly-growing railway reached Cooley Ranch. The SPRW stopped at Cooley Ranch to establish a railway depot, competing with nearby San Bernardino. Subsequently, the headquarters of the rail line moved to the new Cooley Ranch depot, and as a result, railway workers and executives settled in the vicinity. Colton is named after a former Civil War General and SPRW Vice President David Colton that relocated to the Cooley Ranch depot once it was established. (BFSA, 2017a, pp. 3.0-7 - 3.0-8)

Colton continued to prosper as the SPRW moved north, likely due to the sustainable citrus economy that supplemented the remaining ranchos and the establishment of Colton Crossing. Colton Crossing was established in 1883, when the California Southern Railroad won the rights to cross over the SPRW, increasing the importance of Colton as a hub of industrial production between northern, southern, eastern, and western California. People continued to settle in Colton, and in 1887, the city became incorporated. (BFSA, 2017a, pp. 3.0-7 - 3.0-8)

The population of Colton grew rapidly in the early 1900s, experiencing a 209 percent increase from the year 1900 to the year 1910. The first city hall was built in 1890, the Colton Electric Utility was founded in 1896, the Colton Fire Department was founded in 1889, and the Colton Police Department

was established in 1937. Larger increases in the population of the city of Colton occurred during the 1930s, 1950s, and 1990s. (BFSA, 2017a, pp. 3.0-8 - 3.0-9)

A Specific History of Roquet Ranch

Roquet Ranch was named for Harry V. Roquet, a prominent figure in the city of Colton who purchased the La Loma Hills with his wife, Dorothy, in approximately 1947. Previously, the land was covered with citrus groves, but over the years, Roquet developed the land to raise cattle and chickens, and later to grow walnuts and oat hay. In 1959, Roquet founded the Trinity Water Company, which helped provide water to nearby homes and supported the growth of agriculture in the area. In 1971, Roquet sold 47 acres of the southeast portion of the property which was subsequently developed as a mobile home park that is currently referred to as "Cadena Creek." (BFSA, 2017a, p. 3.0-7)

B. Geologic Setting

Geologically, the Project site encompasses much of the southern half of the La Loma Hills and overlooks the Santa Ana River floodplain to the west. The La Loma Hills are predominantly composed of Cretaceous granitic rocks (tonalites to granodiorites) of the Box Springs plutonic complex. The granitic rocks range from a porphyritic granodiorite (map unit Kbg), through a heterogeneous granodiorite and tonalite (map unit Kbgt), to a biotite-hornblende tonalite (map unit Kbft) (refer to Attachment 4 of *Technical Appendix F2*). The few sedimentary units, mainly exposed around the perimeter of the Project site, include Quaternary (early to late Pleistocene) older alluvial valley deposits (map unit Qoa_3), and old and very old alluvial fan deposits (map units Qof_3 and $Qvof_3$) that consist of well-consolidated, crudely stratified, texturally massive to faintly laminated, poorly sorted, fine- to very coarse-grained sand capped by A/AB/B soils having a Bt horizon as much as 1 to 2 meters thick. The middle Pleistocene older alluvial fan sediments (Qof_3) in the northwest valley likely represent coarser clastic materials derived from upslope exposures on the steep hillside slopes, whereas those across much of the southern part of the site and to the east probably represent more distal, finer-grained fan sediments derived from the Box Mountains to the east of the site. These older fan sediments grade eastward into even older, early to middle Pleistocene, alluvial fan sediments ($Qvof_3$) derived from the Box Springs plutonic complex. Along the course of the Santa Ana River and its associated floodplain, all of the mapped sedimentary units adjacent to the Project site are middle or late Holocene ("modern") in age (late Holocene map units are Qw, Qw_1, Qw_2, and Qw_3 [Quaternary wash deposits], and Qa [Quaternary alluvial valley deposits] and Qyf_5 [Quaternary young alluvial fan deposits]). Middle Holocene map units include Quaternary young alluvial valley deposits (map unit Qya_3). (BFSA, 2017b, pp. 1-2)

C. Existing Historic and Archaeological Resources

BFSA's cultural resources assessment (*Technical Appendix F1*) for the Project site consisted of archaeological records searches conducted by the San Bernardino Archaeological Information Center (SBAIC) at the San Bernardino County Museum (SBCM) and standard review of the National Register of Historic Places and the Office of Historic Preservation Historic Property Directory; a Sacred Lands File (SLF) search conducted by the Native American Heritage Commission (NAHC); an intensive

pedestrian survey (Phase I field investigation) of the Project site was conducted in March 2014 and May 2015; an intensive pedestrian survey of the Project's off-site improvement areas was conducted in July 2016; and a Phase II field study (significance evaluation) of the 25 archaeological sites identified at the site during the Phase I field study was conducted in May 2015 through June 2015. (BFSA, 2017a, pp. 4.0-1 - 4.0-2)

Literature Review

The NAHC SLF search did not indicate the presence of a sacred site within the one-mile search radius of the Project site (BFSA, 2017a, p. 4.0-3). The results of the archaeological records search conducted by the SBAIC at the SBCM included a one-mile radius around the Project site. The results of the records search identified 14 reported cultural resources located within the Project site, and an additional 49 cultural resources were reported to be located within a one-mile radius of the Project (refer to Table 5.1-1 of *Technical Appendix F1*). The records search also indicated that 61 cultural resource studies have been conducted within a one-mile radius of the Project (see Table 5.1–2 of *Technical Appendix F1*), with two of these studies occurring entirely within the Project site and eight occurring partially on Project site. Cultural resources identified and inventoried at the Project site during previous cultural resource studies include: SBR-314, SBR-5109, SBR-5110, P-36-060238, SBR-7172/H, SBR-9814/H, SBR-13,172 through SBR-13,177, and SBR-13,179. Additionally, potential historic-era Site P1074-113/H (Trujilo Ditch; projected to be part of Site SBR-6085/H, and crosses a portion of the off-site improvement corridor), and historic town site (San Salvador) P1074-30/H were identified in the records. However, these two sites were never formally recorded with the SBAIC, nor was their presence confirmed. (BFSA, 2017a, pp. 5.0-1 - 5.0-10)

Archeological and Historical Pedestrian Survey Results

The pedestrian survey consisted of a series of parallel transects placed at 10-meter intervals along the north- to south-trending topography of La Loma Hills. During the pedestrian survey, it was observed that portions of the Project site have been disturbed by modern pedestrian activities, agricultural activities, and environmental erosion. The majority of the Project site was observed to have been disturbed by modern road grading and power line construction. As a result, many of the cultural resources identified during the survey lie within disturbed contexts. The Phase I field investigation identified 25 archaeological sites at the Project site, including 14 previously recorded cultural resources (SBR-314, SBR-5109, SBR-5110, SBR-7172/H, SBR- 9814/H, SBR-13,172 through SBR-13,177, SBR-13179, SBR-13,180, and P-36-060238) and the identification of 11 previously unrecorded cultural resources (SBR-29,029 through SBR-29,039). Subsequent investigations of the archaeological sites revealed an isolated artifact, bedrock milling features, a historic canal, historic and prehistoric rock shelter features, and prehistoric rock art ("yoni" features). The prehistoric sites identified on the Project site reflect the Late Prehistoric subsistence pattern in the foothill region of San Bernardino County and share common traits associated with food collecting and processing. The elements of the historic sites identified within the Project site are consistent with the agricultural and

economic growth of the region that spanned from the 1880s to the 1940s. (BFSA, 2017a, pp. 5.0-10 - 5.0-11)

BFSA completed significance testing at all the sites encountered during the survey in 2015. The testing program involved the thorough recordation of the identified resources and any associated features, and advancing shovel test pit (STP) excavations to determine the subsurface extent of the resources. Refer to Section 4.2 of the *Technical Appendix F1* for a detailed account of the field methodologies employed. Based upon the information gathered during the investigation of the cultural resources within the Project site, only two sites have been identified as significant, which include SBR-29,034 and SBR-29,037, both of which are isolated rock art petroglyphs identified as "yoni" features. No surface or subsurface artifact deposits were encountered at SBR-29,034 or SBR-29,037. However, the features themselves are considered an important representation of the cultural beliefs of the Native American populations during the prehistoric occupation of the region, and thus are considered a significant resource. Archaeological sites SBR-29,034 and SBR-29,037 are located in an area that would be designated as "Open Space-Resource" by the Project and are therefore outside of the area of physical disturbances for the proposed Project. Each of the 25 on-site archaeological resource sites is described in further detail below based on the evaluations performed as part of the field investigation activities conducted at the Project site by BFSA. (BFSA, 2017a, p. 6.0-2)

Site SBR-314

Site SBR-314 is a prehistoric bedrock milling site comprised of 15 bedrock milling features with 84 milling elements and one prehistoric rock shelter. The bedrock outcrops that characterize SBR-314 are highly exfoliated, which is evidenced by the poor integrity of the milling surfaces. Additionally, the site has been disturbed by spray-paint graffiti, cultivation and livestock grazing, and modern target practice, as is suggested by the presence of modern glass bottles fragments on the surface of the site. The field investigations at Site SBR-314 did not produce any artifacts or evidence of a subsurface deposit. Based upon the results of the field investigation, this resource was determined to not meet the criteria for a significant cultural resource. Site SBR-314 is located within the proposed development impact area.

Site SBR-5109

Site SBR-5109 is a small bedrock milling site comprised of two milling slicks on a single bedrock milling feature. The site maintains a moderate level of integrity with minimal disturbances. Because the study of Site SBR-5109 did not produce any artifacts or evidence of a subsurface deposit, it is not considered to be a significant resource. Site SBR-5109 is located outside of the proposed development impact area.

Site SBR-5110

Site SBR-5110 is a small bedrock milling site comprised of two milling slicks on a single bedrock milling feature. The site maintains a very poor level of integrity based upon the fact that the milling

feature has been inverted by grading of a power line access road. No subsurface investigations were conducted at Site SBR-5110 due to the level of ground disturbance that removed most of the soil around the milling feature. Based on field observations, BFSA concluded that no soil remained in the vicinity of the feature that was associated with any archaeological deposits. Because Site SBR-5110 did not produce any artifacts, maintains very poor integrity, and has been disturbed, it is not considered a significant resource. Site SBR-5110 is located within the proposed physical disturbance area.

Site SBR-7172/H

Site SBR-7172/H is a historic canal alignment that was utilized in the early twentieth century for the transmission of irrigation water, and is located on the northwest portion of the Project site. The canal was previously recorded as discontinuous segments of a concrete-lined ditch; however, the archaeological survey of the Project site and the off-site improvement areas did not identify any remnants of this feature. Site SBR-7172/H maintains a poor level of integrity due to agricultural impacts and disturbance. A small portion of the recorded historic canal alignment follows the western boundary of the Project site and would be within the proposed Project's physical disturbance area. Because the canal represents a linear feature that has no research value or potential for significant deposits, no archaeological testing on Site SBR-7172/H was conducted by BFSA and the resource was not classified as a significant historic resource.

Site SBR-9814/H

Site SBR-9814/H has been previously recorded as a multicomponent historic refuse dump and prehistoric artifact scatter. According to a previous cultural resources study conducted in the area (Bruce Love and Bai "Tom" Tang [1999]), no artifacts were collected when the site was initially recorded. During the field investigations of Site SBR-9814/H by BFSA, no elements of the site could be identified. The location of the site has been previously graded into a flat lot and the site has been either buried or destroyed. Therefore, Site SBR-9814/H was determined not to be a significant historic resource. This site is partially located within the southernmost portion of the proposed physical disturbance area of the Project.

Site SBR-13,172

Site SBR-13,172 is a small bedrock milling site comprised of two milling slicks on a single bedrock milling feature. According to observations made by BFSA during the field investigation activities, Site SBR-13,172 maintains a moderate level of integrity. BFSA identified no artifacts or evidence of a subsurface deposit in connection with Site SBR-13,172; as such, SBR-13,172 lacks any further research potential and was not considered to be a significant archaeological resource. Site SBR-13,172 is located within the proposed physical disturbance area of the Project.

Site SBR-13,173

Site SBR-13,173 consists of an isolated bedrock milling feature with one milling slick. BFSA did not encounter any surface or subsurface artifact deposits in association with the milling feature during field investigation activities, indicating that the site is a small transient bedrock milling site. Due to the poor integrity of Site SBR-13,173 and the absence of subsurface artifact deposits, SBR-13,173 was determined to not meet the criteria for a significant cultural resource. Site SBR-13,173 is located within the proposed physical disturbance area of the Project.

Site SBR-13,174

Site SBR-13,174 is a small bedrock milling site comprised of two bedrock milling features with three milling slicks. Aside from the milling features, no cultural materials were identified as a result of the field investigation. BFSA's assessment of Site SBR-13,174 did not produce any artifacts or evidence of a subsurface deposit; therefore, Site SBR-13,174 lacks any further research potential and is not considered a significant resource. Site SBR-13,174 is located within the proposed physical disturbance area of the Project.

Site SBR-13,175

Site SBR-13,175 is a small bedrock milling site comprised of two milling slicks on a single bedrock milling feature. BFSA did not recover any cultural materials during the field investigation, and Site SBR-13,175 maintains a moderate to poor level of integrity due to modern trash dumping, road grading, and erosion. Due to the generally poor integrity of Site SBR-13,175 and the lack of any surface or subsurface artifact deposits, Site SBR-13,175 is not considered significant. Site SBR-13,175 is located within the proposed physical disturbance area of the Project.

Site SBR-13,176

Site SBR-13,176 is comprised of one bedrock milling feature with two milling slicks. BFSA did not identify any artifacts in association with the milling feature, suggesting that the site is a small transient bedrock milling site. Due to the generally poor integrity of Site SBR-13,176 and the lack of a surface or subsurface artifact deposit, it is not considered to be a significant resource because it lacks any further research potential. Site SBR-13,176 is located within the proposed physical disturbance area of the Project.

Site SBR-13,177

Site SBR-13,177 is a prehistoric bedrock milling site comprised of four bedrock milling features with seven milling slicks and a prehistoric rock shelter. BFSA identified no artifacts or subsurface deposits in association with the milling features. Due to the poor integrity of Site SBR-13,177, and the lack of any surface or subsurface deposits, it is not considered to be a significant resource because it lacks any further research potential. Site SBR-13,177 is located within an area proposed to be designated as

"Open Space-Resource," and thus would not be located within the proposed physical disturbance area of the Project.

Site SBR-13,179

Site SBR-13,179 is a prehistoric bedrock milling site comprised of one bedrock milling feature with one milling slick. BFSA identified no artifacts in association with the recorded milling feature. BFSA's survey of Site SBR-13,179 did not produce evidence of any surface or subsurface deposits; therefore, Site SBR-13,179 is not considered significant because it lacks any further research potential. Site SBR-13,179 is located within the proposed physical disturbance area of the Project.

Site SBR-13,180

Site SBR-13,180 is a prehistoric bedrock milling site comprised of one bedrock milling feature with two milling slicks. BFSA identified no artifacts in association with the recorded milling feature. BFSA's survey of Site SBR-13,180 did not produce evidence of any surface or subsurface artifact deposits. Therefore, Site SBR-13,180 is not considered to be a significant resource because it lacks any further research potential. Site SBR-13,180 is located within the proposed physical disturbance area of the Project.

Site P-36-060238

P-36-060238 is an isolated find which is considered a single granitic mano. BFSA's survey of the isolate area identified poor surface and subsurface integrity due to repeated road grading activities. Due to the poor condition of the isolate's surroundings, the lack of associated milling features, and the absence of a subsurface artifact deposit, P-36-060238 was not considered to be a significant resource because it lacks any further research potential. P-36-060238 is located within the proposed physical disturbance area of the Project.

Site SBR-29,029

Site SBR-29,029 is a prehistoric bedrock milling site comprised of two bedrock milling features with three milling slicks. BFSA identified no surface or subsurface artifact deposits in association with the milling feature, suggesting that the site is a small, transient bedrock milling site. At the time of the field investigation activities, BFSA observed Site SBR-29,029 to be impacted by erosion. Due to the lack of evidence of any surface or subsurface artifact deposits associated with Site SBR-29,029, it was not considered to be a significant resource because it lacks any further research potential. Site SBR-29,029 is located within the proposed physical disturbance area of the Project.

Site SBR-29,030

Site SBR-29,030 is a prehistoric stacked rock feature site. BFSA did not encounter any surface or subsurface artifact deposits associated with Site SBR-29,030. Because BFSA's survey of Site SBR-

29,030 did not produce evidence of any surface or subsurface artifact deposits, it is not considered to be a significant resource, and lacks any further research potential. Site SBR-29,030 is located within an area proposed to be designated as "Open Space-Resource," and thus would not be located within the proposed physical disturbance area of the Project.

Site SBR-29,031

Site SBR-29,031 is a historic rock shelter with an associated rock wall. BFSA did not identify evidence of unique historic features or subsurface artifact deposits associated with SBR-29,031, and therefore it was not considered to be a significant resource because it lacks the ability to provide any further research potential. Site SBR-29,031 is located within the proposed physical disturbance area of the Project.

Site SBR-29,032

Site SBR-29,032 is a prehistoric rock shelter with an associated stacked rock feature. BFSA identified no surface or subsurface artifact deposits in association with the feature, suggesting that it was minimally used prehistorically. BFSA's survey of Site SBR-29,032 did not produce evidence of any surface or subsurface artifact deposits; therefore, Site SBR-29,032 was not considered to be significant because it lacks any further research potential. Site SBR-29,032 is located within the proposed physical disturbance area of the Project.

Site SBR-29,033

Site SBR-29,033 is a prehistoric bedrock milling site comprised of one bedrock milling feature with one milling slick. BFSA identified no surface or subsurface artifact deposits in association with this milling feature, suggesting that SBR-29,033 is a small, transient bedrock milling site. BFSA's survey of Site SBR-29,033 did not produce evidence of any surface or subsurface artifact deposits; therefore, SBR-29,033 was not considered to be a significant resource because it lacks any further research potential. Site SBR-29,033 is located within an area proposed to be designated as "Open Space-Resource," and thus would not be located within the proposed physical disturbance area of the Project.

Site SBR-29,034

Site SBR-29,034 consists of a prehistoric "yoni" rock art (petroglyph) feature. No surface or subsurface artifact deposits were encountered. Although no artifacts or cultural deposits were identified in association with this rock art feature, the feature itself is an important representation of the cultural beliefs of the Native American populations during the prehistoric occupation of the region and as such is determined to be a significant resource under CEQA. Site SBR-29,034 is located within an area proposed to be designated as "Open Space-Resource," and thus would not be located within the proposed physical disturbance area of the Project.

Site SBR-29,035

Site SBR-29,035 is a prehistoric rock shelter. BFSA identified no surface or subsurface artifact deposits in association with Site SBR-29,035, suggesting that it was minimally used prehistorically. BFSA's survey of Site SBR-29,035 did not produce evidence of any surface or subsurface artifact deposits; therefore, the Site SBR-29,035 was not considered a significant resource. Site SBR-29,035 is located within an area proposed to be designated as "Open Space-Resource," and thus would not be located within the proposed physical disturbance area of the Project.

Site SBR-29,036

Site SBR-29,036 is a prehistoric rock shelter. BFSA did not encounter any surface artifact deposits in association with this feature, suggesting that it was a minimally used hunting or camping area. BFSA's survey of Site SBR-29,036 did not produce evidence of any surface artifact deposits; therefore, Site SBR-29,036 was not considered to be a significant resource because it lacks any further research potential. Site SBR-29,036 is located within an area proposed to be designated as "Open Space-Resource," and thus would not be located within the proposed physical disturbance area of the Project.

Site SBR-29,037

Site SBR-29,037 is a prehistoric "yoni" rock art (petroglyph) feature. BFSA did not encounter any surface or subsurface artifact deposits or cultural deposits in association with this rock art feature. However, the feature itself is an important representation of the cultural beliefs of the Native American populations during the prehistoric occupation of this area and is considered to be a significant resource under CEQA. Site SBR-29,037 is located within an area proposed to be designated as "Open Space-Resource," and thus it is not located within the proposed physical disturbance area of the Project.

Site SBR-29,038

Site SBR-29,038 is a prehistoric rock shelter. BFSA did not encounter any surface artifact deposits in association with the feature, suggesting that it was minimally used prehistorically. BFSA's survey of Site SBR-29,038 did not produce evidence of any surface artifact deposits; therefore, Site SBR-29,038 was not considered to be a significant resource because it lacks any further research potential. Site SBR-29,038 is located within an area proposed to be designated as "Open Space-Resource," and thus it is not located within the proposed physical disturbance area of the Project.

Site SBR-29,039

Site SBR-29,039 is a prehistoric bedrock milling site comprised of one bedrock milling feature with one milling slick. BFSA identified no surface or subsurface artifact deposits in association with the milling feature, suggesting that SBR-29,039 is a small, transient bedrock milling site. BFSA's survey of Site SBR-29,039 did not produce evidence of a surface or subsurface artifact deposit. Therefore,

Site SBR-29,039 was not considered to be a significant resource because it lacks any further research potential. Site SBR-29,039 is located within the proposed development impact area.

D. Paleontological Resources

In the Paleontological Resource and Mitigation Monitoring Assessment prepared for the Project site by BFSA in June 2016, BFSA (*Technical Appendix F2*) discusses a paleontological literature review and collections and records search that was conducted for a nearby property (Bixby Highgrove housing subdivision) by the Curator of Paleontology in the Division of Geological Sciences at the San Bernardino County Museum in Redlands. The records search did not identify any previously recorded fossil localities within the Project boundaries, nor within a one-mile radius of the Bixby Highgrove housing subdivision property (this one-mile radius encompasses the southern part of the subject property). In response to the paleontological literature review and collections and records search that was conducted for the Bixby Highgrove housing subdivision, the San Bernardino County Museum expressed that it regarded the alluvial fan deposits at the property as having a high potential to contain significant paleontological resources. (BFSA, 2017b, pp. 2-3)

BFSA conducted foot surveys of the Roquet Ranch property and off-site improvement areas on March 7, 2014, May 6, 2015, and July 5 to 8, 2016. BFSA did not observe fossils or fossiliferous sediments in any of the Quaternary sedimentary exposures in the northwest valley area, nor in the southwestern, southern, or southeastern parts of the Project site. (BFSA, 2017b, p. 3)

4.4.2 APPLICABLE ENVIRONMENTAL REGULATIONS

1. National Historic Preservation Act (1981)

The National Historic Preservation Act (NHPA) (16 U.S. Code § 470 et. seq.) created the National Register of Historic Places program under the Secretary of the Interior, and provides the legal framework for most state and local preservation laws. Significant historical or archaeological resources can be nominated for and listed in the National Register of Historic Places if certain criteria are met that makes the resource worthy of national recognition. The National Register program also includes National Historic Landmarks, which is limited only to properties of significance to the nation.

The NHPA established the Section 106 review procedure to protect historic and archaeological resources listed in or eligible for listing in the National Register from the impact of projects by a federal agency or project funded or permitted by a federal agency. The National Register is an authoritative guide used by governments, private groups, and citizens to identify the nation's cultural resources worthy of preservation and to indicate what properties should be considered for protection from destruction or impairment. Listing of private property on the National Register does not prohibit by law any actions which may otherwise be taken by the property owner with respect to the property. Prior to implementing an "undertaking" (e.g., issuing a federal permit), Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties and to afford the Advisory Council on Historic Preservation (ACHP) and the State Historic Preservation Office (SHPO) a reasonable opportunity to comment on any undertaking that would adversely affect

properties eligible for listing in the National Register of Historic Places (NRHP). As indicated in Section 101(d)(6)(A) of the NHPA, properties of traditional religious and cultural importance to a tribe are eligible for inclusion in the NRHP. Under the NHPA, a resource is considered significant if it meets the NRHP listing criteria at 36 Code of Federal Regulations (CFR) 60.4.

2. Native American Graves Protection and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

3. California Register of Historic Places (1993)

As a recipient of federal funding, the California Office of Historic Preservation administers the California Register of Historical Resources (CA Pub. Res. Code § 5020 et. seq.). The purpose of the California Register is to develop and maintain an authoritative guide used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate which properties should be protected, to the extent prudent and desirable, from substantial adverse change. The State Historic Preservation Officer enforces a designation and protection process, has a qualified historic preservation review commission, maintains a system for surveys and inventories, and provides for adequate public participation in its activities. Sites, places or objects that are eligible to the National Register, are automatically included in the California Register.

4. California Code of Regulations Title 14, Chapter 3 Section 15064.5

California Code of Regulations (CCR), Title 14, Chapter 3, § 15064.5, "Determining the Significance of Impact to Archaeological and Historical Resources," establishes the procedure for determining the significance of impacts to archeological and historical resources in CEQA compliance documents, as well as classifying the type of resource. The evaluation of cultural resources under CEQA in this EIR is based upon the definitions of resources provided in § 15064.5. According to CEQA § 15064.5(a), the term "historical resources" shall include the following:

> *(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.*
>
> *(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such*

resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Is associated with the lives of persons important in our past;

(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

5. California Code of Regulations Title 14, Division 3, Chapter 1 § 4307

According to CCR Title 14, Division 3, Chapter1, § 4307(a):

No person shall destroy, disturb, mutilate, or remove earth, sand, gravel, oil, minerals, rocks, paleontological features, or features of caves.

6. California Code of Regulations title 14, Division 3, Chapter 1 § 4308

According to CCR Title 14, Division 3, Chapter1, § 4308:

No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value.

7. Government Code Section 6250-6270 (California Public Records Act)

Government Code Section 6254 does not require the disclosure of:

> *Records of Native American graves, cemeteries, and sacred places and records of Native American places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code maintained by, or in the possession of, the Native American Heritage Commission, another state agency, or a local agency.*

8. California Health and Safety Code Section 7050.5

California Health and Safety Code § 7050.5 makes it illegal for persons to knowingly mutilate or disinter, disturb, or willfully remove any human remains in or from any location other than a dedicated cemetery without authority of law, except as provided in § 5097.99 of the Public Resources Code. Section 5097.94 also establishes procedures for the identification and appropriate handling of human remains, should they be discovered inadvertently. The procedures require notice to the coroner of the county in which the human remains are discovered. If the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the corner is required to contact the NAHC.

9. California Public Resources Code, Division 5, Chapter 1.75, § 5097.98

In the event of discovery of Native American human remains, California Public Resources Code § 5097.98 requires the California NAHC to contact the most likely descendant of the deceased Native American within 48 hours of discovery. California Public Resources Code § 5097.98 also establishes procedures to allow the most likely descendant to inspect the remains and recommend a means of disposition.

10. Senate Bill 18 (SB18) (Chapter 905, Statutes of 2004)

The Governor's Office of Planning and Research (OPR) is required to implement various long range planning and research policies and goals that are intended to shape statewide development patterns and significantly influence the quality of the state's environment. SB18 requires that the OPR guidelines contain advice, developed in consultation with the NAHC, for consulting with California Native American tribes for the preservation of, or the mitigation of impacts to, specified Native American places, features, and objects. SB18 also requires those guidelines to address procedures for identifying the appropriate California Native American tribes, for consultation. SB18 requires a planning agency, during the preparation or amendment of their general plan, to refer the proposed action to California Native American tribes, as specified, and also provide opportunities for involvement of California Native American tribes. SB18 requires that, prior to the adoption or amendment of a city or county's general plan, the city or county conduct consultations with California Native American tribes for the purpose of preserving specified places, features, and objects that are located within the city or county's jurisdiction. (See Senate Bill 18 Chapter 905 for full context) (California State Legislature, 2004)

11. California Assembly Bill No. 52 (AB52), 2014

California Assembly Bill 52 (AB52) (2014) Chapter 532 is an act to amend Section 5097.94 of, and add Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2 and 21084.3 to the California Public Resources Code, relating to Native Americans. AB 52 Chapter 532 was approved by the Governor on September 25, 2014. AB 52 requires:

> *"a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed Project, if the tribe requested to the lead agency, in writing, be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation, prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project."*

If the tribes desire notification of proposed projects in that area that may cause a substantial adverse change in the significance of a tribal cultural resource, AB52 requires that Native American tribes send written notice of their geographic areas of traditional and cultural affiliation to CEQA lead agencies. The CEQA lead agency is then required to provide such notification and consult with the tribe(s) if the tribe(s) requests consultation.

The provisions listed in AB52 are applicable to projects that have a notice or preparation or a notice of negative declaration filed on or after July 1, 2015. By requiring the CEQA lead agency to consider the effects relative to tribal cultural resources and to conduct consultation with California Native American tribes, AB52 imposes a state-mandated local program. AB52 additionally requires the NAHC to provide each California Native American tribe, as defined, on or before July 1, 2016, with a list of all public agencies that may be a lead agency within a geographic area in which the tribe is traditionally or culturally affiliated; the contact information of those agencies; and information on how the tribe may request those public agencies to notify the tribe of projects within the jurisdiction of those public agencies for the purposes of requesting consultation. See AB52 Chapter 532 for full context (Assembly Bill No. 52, 2014, Ch. 532)

According to CEQA Statute § 21074:

> (*a*) *"Tribal cultural resources" are either of the following:*
>
> *(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:*
>
> *(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.*
>
> *(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.*

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

12. Historic and Scenic Preservation Ordinance of the City of Colton (Ordinance No. 0-11-96)

Ordinance No. 0-11-87 (known as the "Historic and Scenic Preservation Ordinance of the City of Colton") was adopted by the City of Colton in 1987, and established rules and regulations governing the designation, preservation, and perpetuation of historic and scenic properties within the City. This ordinance establishes a nomination and designation program for historic resources, and authorizes a Historic and Scenic Preservation Commission. The Historic Preservation Commission consists of seven members appointed by the City Council to make recommendations, decisions, and determinations concerning the designation, preservation, protection, enhancement, and perpetuation of historic and cultural resources in the City. (City of Colton, 2013c, pp. 4.5-10 - 4.5-11)

13. Historic Preservation Ordinance of the City of Colton (Ordinance No. 0-11-96)

The City of Colton adopted Ordinance No. 0-11-96 (known as the "Historic Preservation Ordinance of the City of Colton") in 1996. This ordinance further established rules and regulations governing the designation, preservation, and perpetuation of historic and scenic properties. (City of Colton, 2013c, p. 4.5-11)

In 1999, Ordinance No. 0—2-99 amended the previous Historic Preservation Ordinance No. 0-11-96 to facilitate the placement of historic districts on the list of nominated historic resources. The amendment also defined the City Manager as the Historic Preservation Officer authorized to appoint a staff liaison to the Historic Preservation Commission. The City has six designated historic districts, nine Mills Act Homes, and 53 designated Landmark properties. (City of Colton, 2013c, p. 4.5-11)

14. City of Colton General Plan

The City of Colton's General Plan Cultural Resources Preservation Element includes goals, policies, and implementation measures designed to protect and maintain the City's historic resources. The

following goals and policies from the City's General Plan Cultural Resources Element are applicable to the Project (City of Colton, 2000, pp. 18-19):

- Goal #1: Identify, protect, and preserve Colton's rich archaeological resources for the enjoyment of future generations.
- Policy 1a: Conserve in their entirety the largest and most unique archaeological sites.
- Goal #2: Identify, designate and preserve specific historically significant structures, landscapes, and facilities.
- Policy 2f: Ensure future development is compatible with existing structures and district characteristics.

4.4.3 BASIS FOR DETERMINING SIGNIFICANCE

The Project would have potentially significant cultural resources impacts if it or any Project-related components would:

a. *Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?*

b. *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?*

c. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

d. *Disturb any human remains, including those interred outside of formal cemeteries?*

e. *Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?*

4.4.4 IMPACT ANALYSIS

Threshold a)	***Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?***

Under existing conditions, the Project site is vacant (with the exception of the two-acre portion of the site occupied by the Roquet Paving Inc. facility), and consists of a hilly landscape associated with the La Loma Hills topographic feature, with boulder-covered steep slopes and canyons to the east, and more gently sloping land on the southwest third of the property. The Project site is adjacent to the Santa Ana River floodplain along the west side of the property. Most of the flatter portions of the Project site has been affected by historical agriculture, roadway construction, trash dumping, and erosion. The agricultural activities that occurred on the Project site were typical of agricultural activity throughout the Colton area. There are no distinct features and an existing portion of a remnant irrigation channel lacks historical significance. (BFSA, 2017a, p. 1.0-1)

The City of Colton General Plan Cultural Resources Element identifies six historic districts within the City of Colton which include: (1) Citrus Processing District, (2) The Terrace District, (3) La Cadena Drive District, (4) Ninth Street District, (5) San Salvador Old Commercial Center District, and (6) Agua Mansa District. The Project site is not located within any of these six districts. The nearest historic district to the Project site is the Agua Mansa District, which is located to the north of the Project site across the Santa Ana River and is bound by Riverside Avenue to the west, the Santa Ana River to the south, Agua Mansa Road to the north and La Cadena Drive to the east. The Project would construct electric lines along the side of the Riverside Avenue Bridge from the RCFCD right-of-way across the Santa Ana River to existing underground utilities within Riverside Avenue, which bounds the Agua Mansa District to the west. However, the utility improvements would occur outside of the boundaries of the Agua Mansa District. Additionally, under existing conditions, the area of the proposed off-site utilities improvement along Riverside Avenue is already improved with an existing roadway (Riverside Avenue) and associated utilities. Based on the foregoing analysis, the Project would not impact any of the City's historic districts. (City of Colton, 2000, pp. 16-17)

The City of Colton General Plan Cultural Resources Element also identifies 46 currently designated historic landmarks (refer to Appendix B of the Colton General Plan Cultural Resources Element for the complete list) (City of Colton, 2000, p. 42). None of the historic landmarks are located within the boundaries of the Project site, nor are they located in the immediate vicinity of the Project site or the proposed off-site improvement areas. Additionally, the City's General Plan Cultural Resources Element identifies five individual sites recommended for historic listing, including the following: (1) Cooley Ranch, (2) Southern Pacific Railroad Tracks, (3) City Hall/Second Lincoln School, (4) (First) Lincoln School, and (5) Hollow Hill Dairy (City of Colton, 2000, p. 43). None of these five individual sites recommended for historic listing are located within the Project boundaries, nor are they located in the immediate vicinity of the Project site. Based on the foregoing analysis, the Project would have no impact on currently designated historic landmarks, nor would it impact sites recommended for historic listing.

Under existing conditions, the Project site contains six structures associated with the Roquet Paving Inc. facility on the southeast portion of the Project site which would be demolished and removed from the property as part of the Project. The on-site structures include the following: two temporary construction trailers located on the northeast portion of the Roquet Paving Inc. facility, a workshop structure located adjacent to the offices is used as parts storage and for repair of vehicles and construction equipment, and three cargo containers that are located west of the workshop building and are used for document and record storage for the Roquet Paving Company. The structures are located within a fenced, paved, construction yard. The workshop building is composed of steel and masonry and appears to be the only permanent structure on the Project site. (LAI, 2015, p. 5)

The onsite buildings do not display any unique features that would distinguish them from other similar properties in the City of Colton. The Project site is not listed on any federal, State, or local listings of historical resources. Structures and features are generally required to be at least 50 years old for consideration for listing on the NHPA. Because the existing improvements on the Project site are less

than 50 years old, and because exceptional circumstances do not occur that would be applicable to federal listing, the existing structures and improvements at the site are not eligible for NHPA listing.

The existing improvements at the Project site would not meet the criteria used by the California State Parks Office of Historic Preservation (OHP) in determining whether a structure is eligible for inclusion on the California Register of Historical Resources because: 1) it is not associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; 2) it is not associated with the lives of persons important to local, California or national history; 3) it does not embody the distinctive characteristics of a type, period, region or method of construction or represent the work of a master or possess high artistic values; and 4) it has not yielded, nor does it have the potential to yield, information important to the prehistory or history of the local area, California, or the nation. Therefore, because the existing improvements are representative of typical 1970s-era construction yard properties and would not otherwise meet OHP's criteria for inclusion on the California Register of Historical Resources, the existing Roquet Paving Inc. facility is not eligible for a State listing.

There are no other structures or improvements on-site that could be considered a historical resource pursuant to CEQA Guidelines Section 15064.5(a). Based on the foregoing analysis, the existing structures and features on the site are not significant historical resources. Therefore, the demolition and removal of the existing improvements during the implementation of the proposed Project would have no impact to historic resources as defined by CEQA Guidelines Section 15064.5(a) and mitigation is not required.

The cultural resources assessment conducted by BFSA identified two historic features at the Project site and one multi-component site that includes a historic feature, which included the following (BFSA, 2017a, pp. 6.0-1 - 6.0-9):

- Site SBR-7172/H: Consists of an historic canal alignment that was utilized in the early twentieth century for the transmission of irrigation water, and is located on the northwest portion of the Project site. The canal was previously recorded as discontinuous segments of a concrete-lined ditch; however, the archaeological survey of the Project site and the off-site improvement areas did not identify any remnants of this feature. Site SBR-7172/H maintains a poor level of integrity due to agricultural impacts and disturbance. A small portion of the recorded historic canal alignment that follows the western boundary of the Project site would potentially be impacted by the proposed development. Because the canal represents a linear feature that has no research value or potential for significant deposits, no archaeological testing on Site SBR-7172/H was conducted by BFSA. Given that this canal feature has no remaining elements within the Project development footprint, and is not considered a significant historic feature, Project impacts to Site SBR-7172/H are considered less than significant.

- Site SBR-29,031: Consists of an historic rock shelter with an associated rock wall located on the western portion of the Project site. BFSA did not identify evidence of unique historic

features or subsurface artifact deposits associated with SBR-29,031, and therefore it is not considered to be a significant resource because it lacks the ability to provide any further research potential. Because it is located within the proposed development footprint, Site SBR-29,031 would be impacted by the Project. However, Project-related impacts to Site SBR-29,031 would not be significant or adverse since Site SBR-29,031 is not considered a significant resource.

- Site SBR-9814/H: Consists of a multicomponent historic refuse dump and prehistoric artifact scatter, and is located along the southern boundary of the Project site. According to a previous cultural resources study conducted in the area (Bruce Love and Bai "Tom" Tang [1999]), no artifacts were collected when the site was initially recorded. During the field investigations of Site SBR-9814/H by BFSA, no elements of the site could be identified. The location of the site has been previously graded into a flat lot and the site has been either buried or destroyed. Therefore, Site SBR-9814/H is determined not to be significant, and any impacts to Site SBR-9814/H resulting from the Project would be less than significant.

As discussed above, the historic resources identified at the Project site are not considered to be significant. Therefore, there is no reasonable potential for the Project's construction or operation activities to impact any significant historical resources. The proposed Project would not result in a substantial adverse change in the significance of a historic resource as defined in CCR § 15064.5, and impacts associated with historical resources would be less than significant.

Threshold b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?

As discussed above under Subsection 4.4.1C of this EIR, BFSA conducted a cultural resources assessment (*Technical Appendix F1*) for the Project site, which consisted of archaeological records searches conducted by the San Bernardino Archaeological Information Center (SBAIC) at the San Bernardino County Museum (SBCM) and standard review of the National Register of Historic Places and the Office of Historic Preservation Historic Property Directory; a Sacred Lands File (SLF) search conducted by the Native American Heritage Commission (NAHC); an intensive pedestrian survey (Phase I field investigation) of the Project site conducted in March 2014 and May 2015; an intensive pedestrian survey of the Project's off-site improvement areas conducted in July 2016; and a Phase II field study (significance evaluation) of the 25 archaeological sites identified within the Project site during the Phase I field study conducted in May 2015 through June 2015.

The cultural resources assessment identified a total of 25 cultural resources at the Project site, which were discussed in detail in Subsection 4.4.1C of this EIR. Of the 25 cultural resource sites identified within the Project site, 16 sites were identified within the physical disturbance area of the proposed Project. The construction of the proposed Project would remove or otherwise adversely affect each of the 16 cultural resource sites identified within the physical disturbance areas. However, none of these 16 sites meet the definition of a significant resource under CEQA. Based on the significance evaluation

conducted by BFSA, only two of the 25 cultural resources were determined to meet the definition of a significant cultural resource. Each of the two sites are discussed below.

Site SBR-29,034 consists of a prehistoric carved yoni feature site. No surface or subsurface artifact deposits were encountered. Although no artifacts or cultural deposits were identified in association with this rock art feature, the feature itself is an important representation of the cultural beliefs of the Native American populations during the prehistoric occupation of the region and is evaluated as a significant resource under CEQA. Site SBR-29,034 is located within an area proposed to be designated as "Open Space-Resource," and thus would not be directly impacted by the proposed development Project. However, the remote potential exists for this significant archaeological resource to be indirectly impacted during Project grading and construction activities. As such, the potential for impacts to this resource during Project construction is regarded as potentially significant prior to mitigation.

Site SBR-29,037 consists of a prehistoric carved yoni feature site located within the Project site. BFSA did not encounter any surface or subsurface artifact deposits or cultural deposits in association with this rock art feature. However, the feature itself is an important representation of the cultural beliefs of the Native American populations during the prehistoric occupation of this area and is considered to be a significant resource under CEQA. Site SBR-29,037 is located within an area proposed to be designated as "Open Space-Resource," and thus it is unlikely that the proposed development would directly impact this resource. However, the remote potential exists for this significant archaeological resource to be indirectly impacted during Project grading and construction activities. As such, the potential for impacts to this resource during Project construction is regarded as potentially significant prior to mitigation.

As discussed above, absent mitigation, the Project would result in a potentially significant impact to known archaeological resource sites SBR-29,034 and SBR-29,037, during Project-related grading and construction activities. Implementation of Mitigation Measures MM 4.4-1 and MM 4.4-3, which impose fencing requirements, other avoidance measures, and recordation of cultural resource easements for the protection of sites SBR-29,034 and SBR-29,037, would reduce this impact to less than significant.

Based on the presence of known significant archaeological resources at the Project site, additional unknown archaeological resources may also be present at the site that could potentially be uncovered during excavation and grading activities, which would result in a significant impact to archeological resources if any unearthed resource meets the definition of a significant resource under CEQA. Accordingly, implementation of Mitigation Measure MM 4.4-3 requires the provision of full-time archaeological and Native American monitors during grading activities to undertake procedures that would avoid the destruction of significant archaeological resources should they be uncovered during grading and excavation activities. With implementation of Mitigation Measure MM 4.4-3, the Project's potential impacts to unknown archaeological resources at the site would be reduced to less than significant.

Threshold c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As discussed in Subsection 4.4.1D of this EIR, the results of the paleontological literature review and the collections and records searches at the SBCM did not identify any previously recorded fossil localities within the Project boundaries or within the vicinity of the Project site. BFSA did not observe fossils or fossiliferous sediments in any of the Quaternary sedimentary exposures in the northwest valley area, nor in the southwestern, southern, or southeastern parts of the Project site. BFSA also conducted foot surveys of the Roquet Ranch property and off-site improvement areas on March 7, 2014, May 6, 2015 and July 5 to 8, 2016. However, according to the Paleontological Resource and Mitigation Monitoring Assessment prepared for the proposed Project, the alluvial fan deposits at the property are considered to have a high potential to contain significant paleontological resources. (BFSA, 2017b, pp. 2-3)

Due to the high potential for the Quaternary older alluvial valley and alluvial fan sediments at the Project site to yield paleontological resources, absent mitigation, Project grading and construction activities may result in a significant impact to paleontological resources should they exist at the site and be uncovered during ground-disturbing construction activities. Accordingly, Mitigation Measure MM 4.4-4 requires the provision of a paleontological monitor when performing any grading, excavation, and/or trenching activities within areas of the Project site where Quaternary older alluvial valley and alluvial fan sediments (Qoa_3, Qof_3, and $Qvof_3$) are mapped (refer to Attachment 4 of the Paleontological Resource and Mitigation Monitoring Assessment [*Technical Appendix F2*]). With implementation of Mitigation Measure MM 4.4-4, Project-related impacts to paleontological resources would be reduced to less than significant.

The Paleontological Resource and Mitigation Monitoring Assessment performed by BFSA did not identify any significant unique geologic features at the Project site. Accordingly, the Project would have no impact on any significant unique geologic features.

Threshold d) Disturb any human remains, including those interred outside of formal cemeteries?

The Project site and off-site improvement area do not contain a cemetery and the pedestrian surveys conducted by BFSA did not identify the presence of any human remains. In the unlikely event that human remains are encountered beneath the surface of the property during Project construction, the construction contractor would be required to comply with California Health and Safety Code, Section 7050.5 "Disturbance of Human Remains" and Public Resources Code Section 5097.98.

Pursuant to California Health and Safety Code Section 7050.5(a):

> *Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Section 5097.99 of the Public*

Resources Code. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (l) of Section 5097.94 of the Public Resources Code or to any person authorized to implement Section 5097.98 of the Public Resources Code.

Pursuant to California Health and Safety Code Section 7050.5(b):

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

Pursuant to California Health and Safety Code Section 7050.5(c)

If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Pursuant to California Public Resources Code Section 5097.98(a)

Whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site.

Pursuant to California Public Resources Code Section 5097.98(b)

Upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this section, with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment. The descendants' preferences for treatment may include the following… (See Section 5097.98(b)(1-3).

Mandatory compliance with California Health and Safety Code Section 7050.5, and Public Resources Code Section 5097.98 in the unlikely event that human remains are discovered would ensure that impacts associated with the discovery of human remains would be less than significant and no mitigation is required.

Threshold e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?

The provisions of Public Resources Code § 21074 were established pursuant to AB 52. Pursuant to § 11(c) of AB 52, the provisions of AB 52 apply to projects that have a notice of preparation (NOP) or a notice of negative declaration or mitigated negative declaration filed on or after July 1, 2015. The proposed Project's NOP was distributed for public review on June 24, 2016. Accordingly, the Project is subject to the provisions of AB 52.

According to CEQA Statute § 21074(a), "Tribal cultural resources" are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1 [listing in the California Register of Historical Resources]. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

As part of the AB 52 consultation processes required by State law, the City of Colton sent notification of the proposed Project on June 1, 2016 to the Native American tribes with possible traditional or cultural affiliation to the area that previously requested consultation pursuant to AB 52 requirements. The City received responses from the San Manuel Band of Mission Indians and the Agua Caliente Band of Cahuilla Indians. In their response to the City's notification of the Project, the Agua Caliente Band of Cahuilla Indians deferred to the San Manuel Band of Mission Indians and concluded their participation in the AB 52 consultation on August 25, 2016. The consultation with the San Manuel Band of Mission Indians was concluded on July 25, 2017. Neither the San Manuel Band of Mission Indians nor the Agua Caliente Band of Cahuilla Indians identified any specific significant tribal cultural resources at the Project site pursuant to CEQA statute § 21074(a). The City of Colton has completed mandatory compliance with Public Resources Code § 21074 associated with the environmental review of the proposed Project and no significant tribal cultural resources have been identified. Accordingly, it was determined that the Project would result in no impacts associated with the significance of tribal cultural resources.

4.4.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the Project site and installation of the Project's off-site improvements in conjunction with other development projects in the vicinity of the Project site that are located in the southwestern foothills of San Bernardino County (for evaluation of paleontological resources and historical resources) and the traditional use area of the Serrano, the Cahuilla, and the Luiseño tribes (for evaluation of archaeological and tribal cultural resources). These areas have a potential to yield cultural resources that have affiliation with the cultural context of the Project site.

Record searches and field surveys conducted by BFSA indicate that no above-ground historical resources are located on the Project site or within the off-site improvement areas, with the exception of an historic canal alignment (SBR-7172/H), a rock shelter and associated rock wall on the western portion of the Project site (SBR-29,031), and historic refuse dump on the southern boundary of the Project site (Site SBR-9814/H). None of the three historic resources are considered significant under CEQA. Although other cumulative projects in southwestern San Bernardino County may impact significant historical resources that have the potential to lead to a cumulative effect, due to the lack of significant historical resources on the Project site and within the off-site improvement area, there is no potential for the Project to contribute towards a significant cumulative impact to the significance of a historical resource or collection of resources as defined in California Code of Regulations § 15064.5.

During their archaeological survey investigations on the Project site and within the off-site improvement areas, BFSA identified 25 archaeological resources at the Project site. Two of these archaeological resources are considered significant resources, which includes Site SBR-29,034 and Site SBR-29,037. Implementation of Mitigation Measure MM 4.4-1 would adequately protect Site SBR-29,034 and Site SBR-29,037 during grading and construction activities, reducing impacts to a less-than-significant level. Furthermore, implementation of Mitigation Measure MM 4.4-2 would ensure that unknown significant archaeological resources that may be uncovered during Project

grading and excavation activities would not be destroyed through the use of Native American and archaeological monitoring during such activities. Although other development projects in the traditional use area for the Serrano, the Cahuilla, and the Luiseño tribes may impact significant archeological resources leading to a cumulative effect, with implementation of Mitigation Measures MM 4.4-1, MM 4.4-2, and MM 4.4-3, the Project would result in less-than-significant impacts to archeological resources on the Project site and within the off-site improvement areas; accordingly, there is no potential for the proposed Project to contribute towards a significant cumulative impact to the significance of an archaeological resource or a collection of resources pursuant to California Code of Regulations § 15064.5. Other projects will also be required to comply with SB 18 and/or AB 52.

The results of the paleontological literature review and the collections and records searches at the SBCM demonstrate that the Quaternary older alluvial valley and alluvial fan sediments at the property are considered to have a high potential to contain significant paleontological resources. Therefore, there is the potential for the Project to adversely impact significant nonrenewable paleontological resources during ground-disturbing construction activities, absent mitigation. However, implementation of Mitigation Measure MM 4.4-3 would reduce potential impacts to paleontological resources at the Project site to a less-than-significant levels. Although other development projects in the foothills of southwest San Bernardino County that involve subsurface excavations have a similar potential to encounter paleontological resources, there is no potential for the proposed Project to considerably contribute towards a cumulative impact to significant paleontological resources because with implementation of Mitigation Measure MM 4.4-3, the Project would result in less-than-significant impacts to paleontological resources. Also, paleontological resources are generally site-specific and resource-specific and are not affected by other cumulative projects. Therefore, the Project's potential to result in a cumulatively considerable impact to a unique paleontological resource or site or unique geologic feature is less than significant and no mitigation is required on a cumulative basis beyond Mitigation Measure MM 4.4-3.

Finally, due to mandatory compliance required of all ground-disturbing construction activities with the provisions of the California Health and Safety Code § 7050.5 as well as Public Resources Code § 5097 et. seq., human remains would be assured proper treatment if encountered. Because all other development projects within the City of Colton and elsewhere in the region similarly would be required to comply with State law, any cumulative impact associated with the discovery of human remains would be reduced to below a level of significance.

The City of Colton has completed mandatory compliance with Public Resources Code § 21074 associated with the environmental review of the proposed Project, and no significant tribal cultural resources have been identified at the Project site. Therefore, the Project would have no direct or cumulative impacts on tribal cultural resources.

4.4.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a): Less-than-Significant Impact. The Cultural Resources Assessment performed at the site by BFSA identified three historic resources on the Project site; however, none of the historic resources

are significant under CEQA. No other significant historic resources are present on the Project site or within the off-site improvement areas; therefore, the Project would not cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations § 15064.5 and impacts would be less than significant.

Threshold b): Potentially Significant Impact. A total of 25 cultural resource sites are known to be present at the Project site, two of which meet the definition of a significant resource under CEQA. Although not located within the development footprint (located in open space areas), there is the potential for these significant cultural resources to be subject to indirect adverse impacts during Project grading and construction activities, absent mitigation. In addition, there is a potential for significant resources to be unearthed during Project construction, which could be significantly impacted if not property identified and treated and without mitigation. As such, impacts to these resources would be potentially significant prior to mitigation.

Threshold c): Potentially Significant Impact. The Project would not impact any known or unique paleontological resource, site, or unique geologic feature because no such resources are known to be present in the Project's ground-disturbing construction footprint. However, the Quaternary older alluvial valley and alluvial fan sediments at the property have a high potential to contain significant paleontological resources. Therefore, prior to mitigation, there is the potential for the Project to adversely impact significant nonrenewable paleontological resources during ground-disturbing construction activities if such resources are unearthed and not properly identified and treated.

Threshold d): Less-than-Significant Impact. In the unlikely event that human remains are discovered during the Project's ground-disturbing activities, compliance with the applicable provisions of California Health and Safety Code § 7050.5 and California Resources Code § 5097 et. seq. would be required. Mandatory compliance with State law would ensure that human remains, if encountered, including those which may be of Native American decent, are appropriately treated and would preclude the potential for significant impacts.

Threshold e): No Impact. The City of Colton sent notification of the proposed Project on June 1, 2016 to Native American tribes with possible traditional or cultural affiliation to the area. Responses were received from the San Manuel Band of Mission Indians and the Agua Caliente Band of Cahuilla Indians. Consultation with the Agua Caliente Band of Cahuilla Indians concluded on August 25, 2016, and consultation with the San Manuel Band of Mission Indians concluded on July 25, 2017. Neither the San Manuel Band of Mission Indians nor the Agua Caliente Band of Cahuilla Indians identified any significant tribal cultural resources at the Project site pursuant to CEQA statute § 21074(a). The City of Colton has completed mandatory compliance with Public Resources Code §21074 in regards to Native American consultation; no significant tribal cultural resources have been identified. Accordingly, the Project would have no impact on tribal cultural resources.

4.4.7 MITIGATION

MM 4.4-1 Prior to the issuance of grading permits associated with the on-site water tank, the City of Colton Public Works Director or City Engineer or their designee and Development Services Director shall ensure that a note is included on the grading plan requiring that the limits of archaeological resource Site SBR-29,034 and Site SBR-29,037 be fenced to prevent any inadvertent intrusion into either of the sites by grading equipment or personnel. The fencing shall be installed prior to any on-site grading associated with the on-site water tank and remain in place throughout the duration of grading activities associated with the on-site water tank. The Construction Contractor shall be responsible for ensuring that the construction employees comply with the note(s).

MM 4.4-2 Prior to the issuance of grading permits, the City of Colton Public Works Director or City Engineer or their designee and Development Services Director shall approve an Archeological Monitoring Program and Data Recovery Protocol. The Archeological Monitoring Program and Data Recovery Protocol shall include, at a minimum, the following elements:

1. Written verification that a certified archaeologist has been retained to monitor grading activities and implement the Archeological Monitoring Program and Data Recovery Protocol. This verification shall be presented in a letter from the project archaeologist to the City of Colton.
2. Written verification to the City of Colton that a Native American monitor has been retained to be present during grading activities. The Native American monitor shall work in concert with the archaeological monitor to observe ground disturbances.
3. The Project archaeologist and Native American monitor shall attend a pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program.
4. During the original cutting of previously undisturbed deposits, the archaeological monitor(s) and Native American monitor shall be on-site, as determined by the consulting archaeologist, to perform periodic inspections of the excavations. The frequency of inspections shall depend upon the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features.
5. Isolates and clearly non-significant deposits shall be documented in the field so that the monitored grading can continue.
6. In the event that previously unidentified cultural resources are discovered (other than isolates and clearly non-significant deposits), the consulting archaeologist shall have the authority to divert or temporarily halt ground disturbance operation in the area of the discovery to allow for the evaluation of potentially significant cultural resources. The archaeologist shall contact the City of Colton Building Official or their designee at the time of discovery. The archaeologist, in consultation with the City of Colton Building Official or their designee, shall determine the significance of the discovered resources. The City of Colton Building Official or their designee must concur with the evaluation before

construction activities will be allowed to resume in the affected area. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the consulting archaeologist and approved by the City of Colton Building Official or their designee before being carried out using professional archaeological methods. If any human bones are discovered, the San Bernardino County coroner and City of Colton Building Official or their designee shall be contacted. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant (MLD), as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The archaeological monitor(s) shall determine the amount of material to be recovered for an adequate artifact sample for analysis.

7. Any cultural resource material collected during the implementation of the Archeological Monitoring Program and Data Recovery Protocol shall be processed and curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility, to be accompanied by payment of the fees necessary for permanent curation.
8. A report documenting the field and analysis results and interpreting the artifact and research data within the research context shall be completed and submitted to the satisfaction of the City of Colton Building Official or their designee prior to the issuance of any building permits. The report will include DPR Primary and Archaeological Site Forms.

MM 4.4-3 Prior to the approval of a Final Map, the City of Colton Public Works Director or City Engineer or their designee and Development Services Director shall ensure that cultural resource easements are created in order to protect SBR-29,034 and Site SBR-29,037 and ensure that any future trails or other improvements avoid these sites. The easements shall be dedicated to an appropriate tribal entity that will be responsible for overseeing the protection of the cultural resource in perpetuity to the satisfaction of the City of Colton Building Official.

MM 4.4-4 Prior to the issuance of grading permits, the City of Colton Public Works Director or City Engineer or their designee shall ensure that a note is included on the grading plan indicating that a paleontological monitor shall be present during all mass grading and excavation activities where Quaternary older alluvial valley and alluvial fan sediments (Qoa_3, Qof_3, and $Qvof_3$) are mapped at the Project site (as shown in Attachment 4 of the Paleontological Resource and Mitigation Monitoring Assessment [EIR *Technical Appendix F2*]). Prior to the issuance of grading permits, the Project applicant shall provide the City of Colton with a Paleontological Mitigation Monitoring and Reporting Program prepared by a professional paleontologist and which is consistent with the provisions of CEQA, the applicable regulations of the City of Colton and the County

of San Bernardino, and applicable guidelines of the Society of Vertebrate Paleontology which indicates the procedures that will be undertaken to ensure the property identification and treatment of significant paleontological resources should they be unearthed. The City of Colton shall review and approve the Paleontological MMRP prior to the issuance of grading permits.

4.4.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold b): Less-Than-Significant Impact. Implementation of Mitigation Measure MM 4.4-1 would require that fencing is placed around the limits of the two significant archaeological resources identified at the Project site (Site SBR-29,034 and Site SBR-29,037) prior to the commencement of and throughout nearby grading activities in order to prevent intrusion of grading equipment into these sites. Furthermore, implementation of MM 4.4-3 requires the provision of full-time archaeological and Native American monitors throughout grading activities to prevent the destruction of unknown significant archaeological resources that may be uncovered during grading and excavation activities. Mitigation Measure MM 4.4-3 would require the creation of easements to ensure the protection of significant archaeological resources Site SBR-29,034 and Site SBR-29,037 throughout operation of the Project. With implementation of Mitigation Measures MM 4.4-1, MM 4.4-2, and MM 4.4-3, the Project's impacts on known significant archaeological resources Site SBR-29,034 and Site SBR-29,037 and unknown archaeological resources that may exist at the site to less than significant.

Threshold c): Less-Than-Significant Impact. Although no known paleontological resources are present at the Project site, Quaternary older alluvial valley and alluvial fan sediments at the property have a high potential to contain significant paleontological resources. To ensure that significant paleontological resources are not destroyed during grading and excavation activities, Mitigation Measure MM 4.4-4 would require the provision of a paleontological monitor during all mass grading and excavation activities occurring within areas of Quaternary older alluvial valley and alluvial fan sediments (Qoa_3, Qof_3, and $Qvof_3$) and that proper procedures be undertaken to properly identify and treat any discovered resources. With implementation of Mitigation Measure MM 4.4-4, the Project's impacts to paleontological resources would be reduced to less than significant.

4.5 GEOLOGY AND SOILS

This section assesses the existing surface and subsurface geologic conditions and features of the Project site, and determines the potential for impacts associated with these features. The analysis in this section is based in part on information contained in the report titled "Geological and Geotechnical Input for Environmental Impact Report, Roquet Ranch, Northwest and Southeast of 2699 Maryknoll Drive, APNs 1167-011-01, 1167-011-02, 1167-021-01, 1167-021-05, and 1167-021-21, City of Colton, San Bernardino County, California," prepared by Leighton and Associates, Inc. (LAI) and dated October 8, 2014 (and hereinafter identified as the "geotechnical input report"). This report is provided as *Technical Appendix G* to this EIR. Refer to Section 7.0, *References*, for a complete list of reference sources.

4.5.1 EXISTING CONDITIONS

Regional Geology

The Project site is located in the northern Peninsular Ranges Geomorphic Province of southern California along the western edge of the San Bernardino Valley. Strike-slip faults, such as the San Jacinto Fault Zone, are prevalent within the Peninsular Ranges. The San Andreas Fault Zone is located approximately 12 miles northeast of the site, and separates San Bernardino Valley from the San Bernardino Mountains. The San Jacinto Fault Zone is located approximately 4 miles to the northeast, and the active Cucamonga fault is located approximately 14 miles to the northwest. Based on regional geologic maps, the Project site and surroundings are underlain by granitic bedrock of Upper Cretaceous age, which is overlain by older alluvium that eroded from the adjacent mountains. The Santa Ana River floodplain borders the Project site along its western boundary, and contains younger alluvium. (LAI, 2014, p. 3)

Site Topography

The Project site is located in the southern portion of the La Loma Hills with onsite elevations ranging from 1,478 feet ASML near the northeast portion of the Project site to 900 feet AMSL in the southern portion of the Project site. The northern portion of the Project site consists of steep terrain (i.e., slopes in excess of 20 percent) sloping steeply to the north, south, east, and west. The eastern portion of the Project site slopes gently to the east. Figure 2-5, *Topographic Map*, illustrates the Project site's existing topographic conditions.

On-Site Soil Types

Based on a review of pertinent literature and a previous subsurface investigation of the Project site, LAI determined that the Project site is underlain by artificial fill and colluvium/alluvium. In the Project's geotechnical input report, LAI notes that the surficial units are generally composed of silty fine sand with clay, which are potentially compressible due to high porosity. Additionally, LAI reported the Project site to be underlain by granitic rock. The artificial fill beneath the site surface is composed of silty sand and was likely generated from on-site excavations of alluvium and granitic bedrock in order to fill in shallow areas to construct access roads. The artificial fill was observed to

be medium brown, dry to damp, loose, and porous. The alluvium/colluvium observed at the Project site was generally observed along natural slopes, drainage areas, and observed to consist of silty sand with clay and clayey silt. (LAI, 2014, pp. 3-4)

Exhibit 4.6-3, *Soils*, of the City's General Plan EIR indicates that the Project site is predominantly underlain by Vista-Rock Outcrop Complex soils interspersed with Monserate Sandy Loam (2-9%). (City of Colton, 2013c, Exhibit 4.6-3)

Site Geologic Units

The granitic rock units observed to underlie the Project site consist of three types of granitic bedrock: "Kbft" (biotite-hornblende tonalite); "Kbgt" (heterogeneous granodiorite and tonalite); and "Kgb" (gabbro). (LAI, 2014, pp. 3-4; City of Colton, 2013c, Exhibit 4.6-2)

Groundwater

Based on a review of regional groundwater data, LAI estimates the depth to groundwater in the Project vicinity to be approximately 70 feet below ground surface (bgs). The area nearest the Santa Ana River (along the westerly boundary of the Project site) is generally expected to exhibit relatively shallow (<30 feet bgs) groundwater conditions. (LAI, 2014, p. 7)

Faulting and Seismicity

The geologic structure of the entire southern California area is dominated by northwest-trending faults, which include strike-slip, oblique, thrust, and blind thrust faults. The nearest known fault is the Rialto-Colton Fault, which is located approximately 2 miles northeast of the Project site, the activity of which is unknown. The most significant and major active fault systems that could produce significant ground-shaking at the site include the San Jacinto, Cucamonga, and San Andreas faults. The San Jacinto Fault is located approximately 4 miles northeast of the Project site, and is approximately 130 miles in length. The San Bernardino Valley segment of the San Jacinto Fault is capable of generating a maximum credible earthquake of magnitude (Mw) 6.5 to 7.5. The Southern and San Bernardino segments of the San Andreas Fault are located approximately 12.4 miles northeast of the Project site. The San Andreas Fault is widely regarded as the longest and most active fault within the State of California, and spans an approximate distance of 750 miles. These Southern and San Bernardino segments of the San Andreas Fault are estimated to be capable of producing a maximum credible earthquake of magnitude (Mw) 6.8 to 8.0. The Cucamonga Fault Zone is located at the foothills of the San Gabriel Mountains approximately 14.3 miles to the northwest of the Project site, and spans approximately 18.6 miles in length. The Cucamonga Fault is estimated to be capable of generating a maximum credible earthquake of magnitude (Mw) 6.0 to 7.0. The most recent surface movement along the Cucamonga Fault Zone occurred within the last few thousand years. (LAI, 2014, pp. 6-7)

The Project site is not located within a State of California designated Alquist-Priolo Earthquake Fault Zone, nor a County of San Bernardino designated Earthquake Fault Zone (LAI, 2014, p. 4).

Seismic Shaking

As is common to virtually all of Southern California, strong ground-shaking can be expected at the Project site during moderate to severe earthquakes in this general region. The intensity of ground-shaking at a given location depends primarily upon earthquake magnitude, site distance from the source, and site response (soil type) characteristics. The site-specific seismic coefficients based on the California Building Standards Code (CALGreen) are provided in the Project-specific geotechnical input report. (LAI, 2014, pp. 4-5)

Liquefaction Potential

Liquefaction occurs when loose, cohesionless, water-saturated soils (generally fine-grained sand and silt) are subjected to strong seismic ground motion of significant duration. These soils essentially behave similar to liquids, losing bearing strength. Structures built on these soils may tilt or settle when the soils liquefy. Liquefaction occurs more often in earthquake-prone areas underlain by sandy alluvium where the groundwater table is shallower than 50 feet bgs.

The Colton General Plan Update EIR does not identify the Project site as being in an area potentially susceptible to liquefaction (City of Colton, 2013c, Exhibit 4.6-4). However, according to the Project-specific geotechnical input report, shallow groundwater conditions may exist locally within a depth of approximately 30 feet within the western portion of the Project site that lies adjacent the Santa Ana River, and thus may be susceptible to liquefaction (LAI, 2014, p. 12).

Landslides

The Colton General Plan Update EIR shows the majority of the Project site as being located within an area susceptible to earthquake-induced landslides (City of Colton, 2013c, Exhibit 4.6-4). Both static and dynamic bedrock slope instability is moderate to high due to the presence of relatively high topographic relief across the Project site (LAI, 2014, p. 14).

Tsunamis and Seiche Potential

A tsunami, or seismically generated sea wave, is generally created by a large, distant earthquake occurring near a deep ocean trough. A seiche is an earthquake-induced wave in a confined body of water, such as a lake or reservoir. Damage from tsunamis is confined to coastal areas that are 20 feet or less above sea level. The Project site is located approximately 42 miles northeast of the Pacific Ocean. Since the Project site is not located near the coast or any confined bodies of water, the risk of inundation from a tsunami or seiche is considered very low. (LAI, 2014, pp. 14-15)

Lateral Spreading

Lateral spreading occurs when large quantities of intact, non-liquefied soil move downslope on a liquefied substrate of relatively large aerial extent. The mass moves toward an unconfined area, such as a descending slope or stream-cut bluff, and is known to move on slope gradients as gentle as 1

degree. The western portion of the Project site that abuts the Santa Ana River Channel may be susceptible to lateral spreading. (LAI, 2014, p. 13)

Soil Erosion

Erosion is the process by which the upper layers of the surface (such as soils) are worn and removed by the movement of water or wind. Soils with characteristics such as low permeability and/or low cohesive strength are more susceptible to erosion than those soils having higher permeability and cohesive strength. Additionally, the slope gradient on which a given soil is located also contributes to the soil's resistance to erosive forces. Because water is able to flow faster down steeper gradients, the steeper the slope on which a given soil is located, the more readily it will erode. The native soils located on the Project site—as well as the fill slopes that would be constructed with native soils—have a moderate susceptibility to erosion. These materials would be particularly prone to erosion during site development, especially during heavy rains. (LAI, 2014, p. 18)

Subsidence

Subsidence is a gradual settling or sudden sinking of the ground surface. The principal causes of subsidence are aquifer-system compaction, drainage of organic soils, underground mining, and natural compaction. Research performed by LAI as part of the Project-specific geotechnical input report indicates the potential for ground subsidence in the Project vicinity to be very low. (LAI, 2014, p. 19)

Expansive Soils

Based on the soil types observed onsite during the site reconnaissance and a review of previous geotechnical investigations performed as part of the Project-specific geotechnical input report, LAI concluded on-site soils exhibit an Expansion Index (EI) in the "very low" to "medium" range, or an EI of less than 90. Left unmitigated, expansive soils underlying a foundation or slab can cause damage to the structure, including heaving, tilting and cracking of the foundation. Differential movement in the building can result in damage to floors and walls, as well as door and window frames. (LAI, 2014, p. 17)

Exhibit 4.6-4, *Geologic Hazards*, of the City's General Plan EIR indicates the Project site contains small areas of expansive soils resulting from the presence of Monserate Sandy Loam (2-9%) soil type. (City of Colton, 2013c, Exhibit 4.6-4)

4.5.2 APPLICABLE ENVIRONMENTAL REGULATIONS

The following is a brief description of the federal, state and local environmental laws and related regulations associated with geology and soils.

Federal Regulations

1. Federal Water Pollution Control Act (Clean Water Act)

The Federal Water Pollution Control Act (also known as the Clean Water Act (CWA)) is the principal federal statute that addresses water resources. The provision of the CWA applicable to geology and soils is CWA Section 402, which applies to all construction sites of over one acre in size and, in part, serves to control the potential impacts of erosion. CWA Section 402 authorizes the National Pollutant Discharge Elimination System (NPDES) permit program that covers point sources of pollution discharging to a water body. The NPDES program requires operators of construction sites one acre or larger to prepare a Storm Water Pollution Prevention Plan (SWPPP) and obtain authorization to discharge storm water under an NPDES construction storm water permit.

State Regulations

1. Alquist-Priolo Earthquake Fault Zoning Act (CA Pub. Res. Code §2621 et. seq.)

The Alquist-Priolo Special Studies Zone Act was signed into law in 1972 and renamed the Alquist-Priolo Earthquake Fault Zoning Act in 1994. The primary purpose of the Alquist-Priolo Act is to mitigate the hazard of fault rupture by prohibiting the location of structures for human occupancy across the trace of an active fault. As discussed above, the Project site does not fall within an Alquist-Priolo Zone.

2. Seismic Hazards Mapping Act (CA Pub. Res. Code §2690 et. seq.)

The Seismic Hazards Mapping Act of 1990 is a statewide seismic hazard mapping and technical advisory program to assist cities and counties in fulfilling their responsibilities for protecting the public health and safety from the effects of strong ground shaking, liquefaction, landslides, or other ground failure and other seismic hazards caused by earthquakes. The California Geologic Survey (CGS) is the principal Sate implementing agency which has mapped out seismic zones requiring the completion of site-specific geotechnical investigations prior to construction of a project.

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

The California Green Building Standards Code (CCR, Title 24, Part 11), also known as the California Building Standards Code (CBSC) or CALGreen, is the standard from which California buildings derive appropriate building design standards. The International Building Code (IBC) used by the International Conference of Building Officials establishes design and construction standards for buildings and facilities. The CBSC incorporates the IBC as well as other uniform codes into its code standards. All development projects in California, including the proposed Project, are required to comply with CALGreen.

4. State Water Resources Control Board (SWRCB)

The State Water Resources Control Board adopts statewide water quality control plans and its nine Resource Water Quality Control Boards (RWQCBs) are required to develop and adopt regional water

quality control plans that conform to state water quality policy. The Project site is within the purview of the Santa Ana RWQCB. Water quality standards and control measures for surface and ground waters of the Santa Ana Region are contained in the Water Quality Control Plan for the Santa Ana Region (also known as the "Basin Plan"). The Basin Plan is thus applicable to the proposed Project and serves to control the potential impacts of erosion.

Regional and Local Regulations

1. South Coast Air Quality Management District Rule 403

The South Coast Air Quality Management District (SCAQMD) is responsible for enforcing air pollution control measures. Rule 403 addresses blowing dust from construction sites and is applicable to the Project due to its potential to result in wind erosion during grading and construction activities.

2. City of Colton General Plan

The Safety Element of the City of Colton General Plan addresses geologic and seismic hazards, among other hazards affecting the city. The Safety Element includes goals and policies to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from natural and human-induced hazards. The following policy from the City's General Plan Safety Element is the only policy applicable to the proposed Project that pertains to the topic of geology and soils.

Standard No. 1: "Require geologic studies on proposed developments for human occupancy within areas with identified hazards." (City of Colton, 1987c, p. 7-6)

Standard No. 2: "Structural design shall be compatible with the local geologic hazard." (City of Colton, 1987c, p. 7-6)

Standard No. 3: "Public Safety facilities shall be located, designed, and managed in a manner which would maximize their ability to remain functional during and after a major geologic disaster." (City of Colton, 1987c, p. 7-6)

3. City of Colton Municipal Code

Title 15 (Buildings and Construction) of the City of Colton Municipal Code includes specific requirements for grading plans and building plans, which are reviewed by a Building Official prior to approval. Chapter 18.4 (Hillside Standards) establishes regulations for the preservation of hillsides and ridgelines with important topographic features that contribute to the community's sense of identity.

4.5.3 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact associated with geology and soils if the Project or any Project-related component would:

a. *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

   1) *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.*

   2) *Strong seismic ground shaking.*

   3) *Seismic-related ground failure, including liquefaction.*

   4) *Landslides;*

b. *Result in substantial soil erosion or the loss of topsoil;*

c. *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;*

d. *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or*

e. *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.*

4.5.4 IMPACT ANALYSIS

Threshold a)	***Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:***
	1) 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.
	2) Strong seismic ground shaking?
	3) Seismic-related ground failure, including liquefaction?
	4) Landslides?

1) Rupture of a Known Earthquake Fault

The Project site is not located within any Alquist-Priolo Earthquake Fault Zones and no known faults underlie the site. The nearest fault to the Project site is the Rialto-Colton Fault, which is located approximately 2 miles northeast of the Project site, the activity of which is unknown. Because the Project site is not located within an Alquist-Priolo Earthquake Fault Zone and because no known active faults underlie the Project site, the Project site would not be exposed to fault rupture during a seismic event and no impact would occur.

2) Strong Seismic Ground Shaking

As with much of the Southern California region, the Project site is located in a seismically active area. The buildings and infrastructure proposed on the Project site would be subject to ground shaking during seismic events along local and regional faults that would occur during the lifetime operation of the proposed Project. Therefore, the Project has the potential to expose people or structures to adverse effects associated with seismic events. The San Jacinto Fault Zone (located approximately 4 miles northeast of the Project site) is known to be potentially capable of producing the most intense ground accelerations at the Project site, due to its location and potential magnitude. The maximum earthquake expected from the San Jacinto Fault Zone in this area is of magnitude (Mw) 6.5 to 7.5. The hazard posed by seismic shaking in the Project vicinity is considered high, due to the proximity of known active faults.

The Project's geotechnical input report (*Technical Appendix G*) identifies general recommendations to attenuate seismic hazards at the site in accordance with the requirements and standards of CALGreen and Chapter 15.06 Building Code of the City of Colton Municipal Code. Compliance with applicable requirements of CALGreen and the City of Colton, and the recommendations listed in the Project's geotechnical input report (*Technical Appendix G*), would be assured through City review of grading and building permits which would ensure that strong seismic ground shaking effects are attenuated. Accordingly, the Project would have a less-than-significant impact associated with seismically-induced ground shaking and mitigation is not required.

3) Seismic-Related Ground Failure, Including Liquefaction

According to the geotechnical input report prepared for the Project, the Project site has not been identified on any local maps as being located within an area potentially susceptible to liquefaction. Additionally, the Colton General Plan Update EIR does not identify the Project site as being in an area potentially susceptible to liquefaction (City of Colton, 2013c, Exhibit 4.6-4). However, according to the geotechnical input report, the western portion of the Project site that abuts the Santa Ana River Channel may be underlain by shallow groundwater (less than 30 feet bgs) conditions, and thus may be susceptible to liquefaction (LAI, 2014, p. 12). Accordingly, the potential for liquefaction to occur in the western portions of the site during the lifetime of the Project is considered potentially significant prior to mitigation. Mitigation Measure MM 4.5-2 requires that prior to issuance of any grading permit, a Project-specific geotechnical investigation be performed to further evaluate the potential hazards associated with liquefaction and require construction practices that lessen potential risks to persons and structures to below a level of significance. With the implementation of Mitigation Measure MM 4.5-2 along with compliance with CALGreen building code requirements, impacts associated with liquefaction would be reduced to less than significant.

4) Landslides

As discussed above, the Colton General Plan Update EIR indicates the Project site is located within an area susceptible to earthquake-induced landslides (City of Colton, 2013c, Exhibit 4.6-4). Additionally, the geotechnical input report prepared for the Project concluded that slope instability at the Project site

is moderate to high as a result of the presence of static and dynamic bedrock coupled with the relatively high topographic relief across the subject property (LAI, 2014, p. 14). Accordingly, the potential for landslides at the Project site during construction and operation of the Project is considered potentially significant prior to mitigation. Mitigation Measure MM 4.5-1 requires that prior to issuance of any grading permit, a Project-specific geotechnical investigation be performed to further evaluate the potential hazards associated with landslides and require construction practices that lessen potential risks to persons and structures to below a level of significance. Additionally, Mitigation Measure MM 4.5-1 requires that any remedial measures recommended by the future Project-specific geotechnical investigation be implemented prior to issuance of any grading permit. With implementation of Mitigation Measure MM 4.5-1, impacts associated with landslides would be reduced to less than significant.

Threshold b) Would the Project result in substantial soil erosion or the loss of topsoil?

Impact Analysis for Temporary Construction-Related Activities

As discussed above, the geotechnical input report prepared for the Project concluded that on-site native soils and fill slopes constructed with native soils, have a moderate susceptibility to erosion (LAI, 2014, p. 18). The proposed demolition and grading activities associated with the Project would temporarily expose underlying soils to water and air, which would further increase erosion susceptibility while the soils are exposed. Exposed soils on the Project site would be subject to erosion during rainfall events or high winds due to temporary exposure of these erodible materials to wind and water. Erosion by water would be greatest during the first rainy season after grading before structures are erected and paving and landscaping occur. Erosion by wind would be highest during periods of high wind speeds when soils are exposed.

Pursuant to the requirements of the State Water Resources Control Board, the Project Applicant is required to obtain coverage under a National Pollutant Discharge Elimination System (NPDES) permit for construction activities. The NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least one acre of total land area. Additionally, during grading and other construction activities involving soil exposure or the transport of earth materials, § 15.06.290 of Chapter 15.06 (Building Code) of the City of Colton Municipal Code, which establishes requirements for the control of dust and erosion during grading, would apply to the Project (City of Colton, 2016a, § 15.06.290). As part of the mandatory Municipal Code and NPDES requirements, the Project Applicant would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) that would address construction fencing, sand bags, and other erosion-control features (including wind erosion) that would be implemented during the construction phase to reduce the site's potential for soil erosion or the loss of topsoil. In addition, construction activities associated with the Project would be required to comply with SCAQMD Rule 403-Fugitive Dust, which would preclude wind-related erosion hazards during construction activities. Mandatory compliance to the Project's NPDES permit and these regulatory requirements of the SCAQMD and City of Colton would ensure that water and wind erosion is minimized and not substantial; impacts would be less than significant.

Impact Analysis for Long-Term Operational Activities

Following construction, wind and water erosion on the Project site would be minimized, as the areas disturbed during construction would be landscaped or covered with impervious surfaces. Only nominal areas of exposed soil, if any, would occur in the Project's landscaped areas. The only potential for erosion effects to occur during Project operation would be indirect effects from storm water discharged from the property. The conceptual drainage system for the Roquet Ranch community is illustrated on Figure 4.8-3, *Conceptual Drainage Plan*, and would consist of a network of drainage lines and six (6) water quality management basins throughout the Project site intended to attenuate storm water runoff flows. The proposed water quality management basins are designed according the City of Colton standards to detain and slowly release storm water to allow particles and associated pollutants to settle out. The proposed storm drains would convey storm water into the six proposed water quality basins. Additionally, an open flood channel is proposed on the southern portion of the Project site within Planning Area 20E. Storm water collected on the southeast portion of the Project site would also be discharged to the existing off-site storm drain in La Cadena Drive to the east of the Project site and the existing Cadena Creek channel to the south of the Project site. All development within the City of Colton, including the Project, is subject to the provisions of the City's NPDES MS4 Permit. Additionally, the Project would install design features as specified in the Project's Preliminary Water Quality Management Plan which is included in *Technical Appendix J.* The implementation of the drainage plan described above, and the design features discussed in the WQMP, would ensure the Project does not result in significant siltation or erosional effects associated with water discharge.

In addition, the Project Applicant is required to prepare and submit to the City for approval a Project-specific SWPPP and Final WQMP prior to the issuance of building permits. The SWPPP and Final WQMP together are required to identify and implement an effective combination of erosion control and sediment control measures (i.e., BMPs) to reduce or eliminate discharge to surface water from storm water and non-storm water discharges. Adherence to the requirements noted in the Project's required WQMP (refer to *Technical Appendix J*) and site-specific SWPPP would further ensure that potential long-term operational erosion and sedimentation effects would be less than significant.

Threshold c)	***Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?***

According to the Project-specific geotechnical input report (*Technical Appendix G*) and the City's General Plan Update EIR, granitic rock units observed to underlie the Project site consist of 3 types of granitic bedrock: "Kbft" (biotite-hornblende tonalite); "Kbgt" (heterogeneous granodiorite and tonalite); and "Kgb" (gabbro) (LAI, 2014, pp. 3-4; City of Colton, 2013c, Exhibit 4.6-2). Additionally, the geotechnical input report states that shallow groundwater conditions likely exist on the western portion of the Project site that abuts the Santa Ana River Channel. High topographic relief also exists across the majority of the Project site. The potential for these lithological characteristics to result in unstable geologic conditions are discussed below.

Landslides

As discussed above in Threshold a) and depicted on Exhibit 4.6-4 of the City's General Plan, the Project site is located in an area susceptible to landslides. Both static and dynamic bedrock slope instability at the Project site is moderate to high due to the presence of relatively high topographic relief across the subject property (LAI, 2014, p. 14). Accordingly, the potential for landslides at the Project site during construction and operation of the Project is considered potentially significant prior to mitigation. Mitigation Measure MM 4.5-1 requires that prior to issuance of any grading permit, a Project-specific geotechnical investigation be performed to further evaluate the potential hazards associated with landslides. Additionally, Mitigation Measure MM 4.5-1 requires that any remedial measures recommended by the future Project-specific geotechnical investigation be implemented prior to issuance of any grading permit. With implementation of Mitigation Measure MM 4.5-1, impacts associated with landslides would be reduced to less than significant.

Lateral Spreading

As stated above in Section 4.5.1, the western portion of the Project site that abuts the Santa Ana River Channel may be susceptible to lateral spreading due to shallow groundwater conditions within this area of the Project site (LAI, 2014, p. 13). As such, a potentially significant impact would occur prior to mitigation. Mitigation Measure MM 4.5-2 requires that prior to issuance of any grading permit, a Project-specific geotechnical investigation be performed to further evaluate the potential hazards associated with lateral spreading. Additionally, Mitigation Measure MM 4.5-2 requires that any remedial measures recommended by the future Project-specific geotechnical investigation be implemented prior to issuance of any grading permit. With implementation of Mitigation Measure MM 4.5-2, impacts associated with lateral spreading would be reduced to less than significant.

Subsidence

The research performed as part of the Project-specific geotechnical input report prepared by LAI did not identify reports of regional subsidence in the Project vicinity, nor did it identify intense removal of significant quantities of water or oil extraction in the area. As such, the potential for ground subsidence is very low, and a less-than-significant impact would occur.

Liquefaction

Due to the shallow groundwater (less than 30 feet bgs) conditions that likely exist within the western portion of the Project site that abuts the Santa Ana River Channel, the Project site is susceptible to liquefaction. Accordingly, a potentially significant impact would occur prior to mitigation. Compliance with the mandatory provisions of CALGreen would reduce the potential for adverse impacts associated with liquefaction. Nevertheless, Mitigation Measure MM 4.5-2 has been identified that would require that prior to issuance of any grading permit, a site-specific geotechnical investigation be performed to further evaluate the potential hazards associated with liquefaction. Additionally, Mitigation Measure MM 4.5-2 requires that any remedial measures recommended by the future Project-specific geotechnical investigation be implemented prior to issuance of any grading

permit. With compliance with CALGreen along with implementation of Mitigation Measure MM 4.5-2, impacts associated with liquefaction would be reduced to less than significant.

Collapse

Collapse potential refers to the potential settlement of the alluvial soil under existing stresses (loads) upon being subjected to moisture. Based on the type of soils observed at the Project site as part of the Project-specific geotechnical input report (*Technical Appendix G*), the potential for significant collapse is considered "slight" to "moderate" (LAI, 2014, p. 8). Accordingly, a potentially significant impact would occur with respect to collapsible soil conditions at the Project site absent mitigation. Mitigation Measure MM 4.5-1 requires that prior to issuance of any grading permit, a Project-specific geotechnical investigation be performed to further evaluate the potential hazards associated with collapsible soils. Mitigation Measure MM 4.5-1 requires that any remedial measures recommended by the future Project-specific geotechnical investigation be implemented prior to issuance of any grading permit. With implementation of Mitigation Measure MM 4.5-1, impacts associated with collapsible soils would be reduced to less than significant.

Threshold d) ***Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?***

The Project-specific geotechnical input report concluded on-site soils exhibit an Expansion Index (EI) in the "very low" to "medium" range, or an EI of less than 90 (LAI, 2014, p. 17). Additionally, Exhibit 4.6-4, *Geologic Hazards*, of the City's General Plan EIR indicates the Project site contains small areas of expansive soils resulting from the presence of Monserate Sandy Loam (2-9%) soil type (City of Colton, 2013c, Exhibit 4.6-4). The potential for expansive soils to be encountered at the Project site represents a potentially significant impact prior to mitigation, because the presence of expansive soil could lead to structural instability if the soils are not properly treated during the construction process. Mitigation Measure MM 4.5-1 has been identified to reduce this impact and ensure that soils are properly treated during construction. With implementation of Mitigation Measure MM 4.5-1, impacts associated with expansive soils would be reduced to less than significant.

Threshold e) ***Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?***

The proposed Project would include facilities that connect to the City's municipal sewer system. No septic tanks or alternative waste water disposal systems are proposed as part of the Project; accordingly, no impact would occur.

4.5.5 CUMULATIVE IMPACT ANALYSIS

With the exception of erosion hazards, potential geologic and soils effects are inherently restricted to the areas proposed for development on the Project site and would not contribute to cumulative impacts associated with other existing, planned, or proposed development. That is, issues including

seismically-induced hazards, landslides, and expansive soils would involve effects to (and not from) the proposed development and are specific to on-site conditions. Mandatory adherence to CALGreen and the recommendations given in the Project's geotechnical input report (*Technical Appendix G*), WQMP (*Technical Appendix J*), and future geotechnical investigation, would address the site-specific geologic and soil conditions through site-specific design and construction efforts that have no relationship to, or impact on, off-site areas. Because of the site-specific nature of these potential hazards and the measures to address them, there would be no connection to similar potential issues or cumulative effects to or from other properties. As such, the Project would have a less than cumulatively considerable effect related to impacts associated with geology and soils.

As discussed in the impact analysis of Threshold b), the Project would not result in substantial soil erosion or the loss of topsoil. Other development projects in the vicinity of the Project site as well as full General Plan buildout in the City of Colton and other jurisdictions that drain into the same receiving waters as the Project site would be required to comply with similar regulatory requirements as the Project to preclude substantial adverse erosion impacts. Development projects such as this one that disturb at least 1.0 acre of land are required to obtain coverage under a NPDES Permit. Development projects also must comply with their associated SWPPPs and WQMPs. All development projects in the vicinity of the Project site also would be required to comply with all applicable building codes in their governmental jurisdiction, and SCAQMD Rule 403-Fugitive Dust, which would preclude wind-related erosion hazards during construction activities. Therefore, because the Project would result in less-than-significant erosion impacts, and because other development projects within the vicinity or the Project site that drain into the same receiving waters would be subject to similar requirements to control erosion during short-term construction activities and long-term operation, cumulative impacts associated with soil erosion and the loss of topsoil would be less than significant and the Project's contribution would be less than cumulatively considerable.

4.5.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a): Potentially Significant Impact. The Project would not expose people or structures to substantial adverse effects from seismic hazards. As with all properties in the southern California region, the Project site is subject to strong seismic ground shaking associated with earthquakes; however, mandatory compliance with local and state ordinances and building codes including but not limited to CBSC (Chapter 18) and Chapter 15.06 Building Code of the City of Colton Municipal Code, would ensure that the proposed structures are developed as required to attenuate the risk of loss, injury, or death to less-than-significant levels. According to the geotechnical input report prepared for the Project, the western portion of the Project site that abuts the Santa Ana River Channel may be underlain by shallow groundwater conditions, and thus may be susceptible to liquefaction (LAI, 2014, p. 12). Accordingly, the potential for liquefaction to occur on-site during Project operations is considered potentially significant prior to mitigation. Additionally, due to the Project site's lithology and relatively high topographic relief across the site, the potential for landslides at the Project site during construction and operation of the Project is considered potentially significant prior to mitigation.

Threshold b): Less-than-Significant Impact. The geotechnical input report prepared for the Project concluded that on-site native soils and fill slopes constructed with native soils, have a moderate susceptibility to erosion (LAI, 2014, p. 18). However, mandatory compliance with the Project's NPDES permit, regulatory requirements of the SCAQMD (i.e., SCAQMD Rule 403-Fugitive Dust) and City of Colton, and the Project-specific SWPPP and WQMP would ensure that water and wind erosion is minimized and not substantial; impacts would be less than significant and no mitigation is required.

Threshold c): Potentially Significant Impact. The Project's geotechnical input report did not identify conditions at the site that would increase the potential for ground subsidence, and the potential for subsidence is considered very low; therefore, a less-than-significant impact would occur. The western portion of the Project site that abuts the Santa Ana River Channel may be susceptible to lateral spreading and liquefaction due to shallow groundwater conditions in this area of the Project site. Accordingly, significant impacts as a result of liquefaction and lateral spreading would occur absent mitigation. Due to the lithology and relatively high topographic relief at the Project site, significant impacts associated with landslides would occur absent mitigation. The geotechnical input report identified the potential for significant collapse is considered "slight" to "moderate"; therefore, a significant impact would occur with respect to collapsible soil conditions at the Project site prior to mitigation.

Threshold d): Potentially Significant Impact. The Project's geotechnical input report concluded on-site soils exhibit an Expansion Index (EI) in the "very low" to "medium" range (LAI, 2014, p. 17). The City of Colton General Plan Update EIR also indicates small areas of expansive soils are anticipated to exist at the Project site (City of Colton, 2013c, Exhibit 4.6-4). Accordingly, a potentially significant impact would occur with regard to expansive soils absent mitigation.

Threshold e): No Impact. The proposed Project does not include septic tanks or alternative waste water disposal systems; accordingly, no impact would occur.

4.5.7 MITIGATION

MM 4.5-1 Prior to issuance of any grading permit, the City of Colton Public Works Director or City Engineer or their designee shall require that a Project-specific geotechnical investigation is prepared which shall, at a minimum, address: slope stability, landslides, collapsible soils, and expansive soils. If warranted, the geotechnical investigation report shall identify recommended remedial measures and Project design features that would address the potential impacts of the identified geologic hazards on the proposed development. Remedial measures to address slope stability and landslides may include removal, repositioning, embedment, anchoring of the boulders; installation of catchment fences; and construction in accordance with the recommendations of the project geotechnical engineer, CALGreen and any City and/or County guidelines. Potential remedial measures that may be required to address collapsible soils include overexcavation of all uncontrolled artificial fill and upper portion of the surficial soils

during site grading. Typical remedial measures undertaken to address expansive soils include performing testing after grading of the proposed pads is completed and prior to construction of the proposed foundations to evaluate the expansive potential of the underlying soil, and providing the results to the structural engineer to design a foundation system that is able to withstand the expansive potential of the underlying soils.

MM 4.5-2 Prior to the issuance of the first grading or building permit, the City of Colton Director of Public Works or City Engineer shall ensure that a report is prepared by a licensed geotechnical engineer that shall examine the western portion of the Project site near the Santa Ana River where groundwater exists locally within a depth of approximately 30 feet. These areas shall be examined by performing geotechnical explorations to a depth of at least 35 feet below the existing grade or proposed grade, whichever is at the lower elevation. If the explorations reveal that differential settlement or lateral movement would occur related to liquefaction, dry seismic settlement, or lateral spreading, remedial measures shall be undertaken as recommended by the licensed geotechnical engineer and approved by the City of Colton, as part of the grading operation and construction phases. Measures may include but not be limited to the removal and recompaction of near surface soils, the use of deep foundations and/or stone columns, and deep dynamic compaction. The remedial measures undertaken shall ensure that potential differential settlements and lateral movements calculated as a result of the geotechnical exploration and analysis can be safely accommodated within habitable structures, paved roads, and wet or dry utilities, thereby safeguarding habitable structures, roads, and utility lines against potential seismic hazards. The findings of the geological explorations and recommendations shall be documented in a report prepared by the licensed geotechnical engineer. The report shall be approved by the City of Colton and the recommendations contained in the report shall be implemented and required as grading permit and building permit conditions of approval.

4.5.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Threshold a): Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measure MM 4.5-1 would require a Project-specific geotechnical investigation be performed to further evaluate the potential hazards associated with landslides, and any remedial measures recommended by the future Project-specific geotechnical investigation be implemented prior to issuance of any grading permit. With implementation of MM 4.5-1, impacts associated with landslides would be reduced to less than significant. Mitigation Measure MM 4.5-2 would require a Project-specific geotechnical investigation be performed to further evaluate the potential hazards associated with liquefaction on the western portion of the Project site. Any remedial measures recommended by the future Project-specific geotechnical investigation that address liquefaction must be implemented prior to issuance of any grading permit. With implementation of Mitigation Measure MM 4.5-2, impacts associated with liquefaction would be reduced to less than significant.

Threshold c): Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measure MM 4.5-1 would require a Project-specific geotechnical investigation be performed to further evaluate the potential hazards associated with landslides and collapsible soils, and any remedial measures recommended by the future Project-specific geotechnical investigation be implemented prior to issuance of any grading permit. With implementation of Mitigation Measure MM 4.5-1, impacts associated with landslides and collapsible soils would be reduced to less than significant.

Mitigation Measure MM 4.5-2 would require a Project-specific geotechnical investigation be performed to further evaluate the potential hazards associated with lateral spreading and liquefaction on the western portion of the Project site. Any remedial measures recommended by the future Project-specific geotechnical investigation that address lateral spreading and liquefaction must be implemented prior to issuance of any grading permit. With implementation of Mitigation Measure MM 4.5-2, impacts associated with lateral spreading and liquefaction would be reduced to less than significant.

Threshold d): Less-than-Significant Impact with Mitigation. Mitigation Measure MM 4.5-1 requires that prior to issuance of any grading permit, a Project-specific geotechnical investigation be performed to further evaluate the potential hazards associated with expansive soils. Additionally, Mitigation Measure MM 4.5-1 requires that any remedial measures recommended by the future Project-specific geotechnical investigation be implemented prior to issuance of any grading permit. With implementation of Mitigation Measure MM 4.5-1, impacts associated with expansive soils would be reduced to less than significant.

4.6 GREENHOUSE GAS EMISSIONS

The analysis in this Subsection is based in part on a greenhouse gas analysis prepared for the Project by Urban Crossroads, Inc. titled, "Roquet Ranch Specific Plan Greenhouse Gas Analysis," dated December 15, 2016 and appended to this EIR as *Technical Appendix E* (Urban Crossroads, Inc., 2016c).

4.6.1 EXISTING CONDITIONS

A. *Introduction to Global Climate Change*

Global Climate Change (GCC) refers to change in average meteorological conditions on the Earth with respect to temperature, wind patterns, precipitation, and storms. Debate exists within the scientific community regarding the extent to which GCC is occurring naturally or as a result of human activity. Some data suggests that GCC has occurred naturally over the course of thousands or millions of years and that these historical changes to the Earth's climate have occurred naturally without human influence, as in the case of an ice age. However, many scientists believe that the climate shift taking place since the Industrial Revolution (1900s) is occurring at a quicker rate and magnitude than in the past as a result of human activity and industrialization. Some scientists believe evidence suggests that GCC is the result of increased concentrations of greenhouse gases in the earth's atmosphere, including carbon dioxide, methane, nitrous oxide, and fluorinated gases. Many scientists believe that this increased rate of climate change is the result of greenhouse gases resulting from human activity and industrialization over the past 200 years. (Urban Crossroads, Inc., 2016c, p. 11)

Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the Earth's atmosphere, but prevent radioactive heat from escaping, thus warming the Earth's atmosphere. Gases that trap heat in the atmosphere are often referred to as greenhouse gases (GHGs). GHGs are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural greenhouse gas effect, the Earth's average temperature would be approximately 61° Fahrenheit (F) cooler than current conditions. (Urban Crossroads, Inc., 2016c, p. 12)

It is not possible for an individual project like the proposed Project to generate enough GHG emissions to make a discernible change in global climate. However, the proposed Project may participate in the potential for GCC through its incremental contribution of GHG emissions when considered in combination with other worldwide sources of GHGs (Urban Crossroads, Inc., 2016c, p. 11). Nevertheless, analytical tools have not been developed to determine the effect of worldwide global warming from a particular increase in GHG emissions, or the resulting effects on climate change in a particular locale. The scientific tools needed to evaluate the impacts that a specific project may have on GCC are likewise not available.

B. Greenhouse Gases

Carbon dioxide, methane, and nitrous oxide emissions are the focus of evaluation in this Subsection because these gases are the primary contributors to GCC from development projects. Although other substances such as fluorinated gases also contribute to GCC, sources of fluorinated gases are not well defined and no accepted emissions factors or methodology exist to accurately calculate these gases. (Urban Crossroads, Inc., 2016c, p. 13)

Greenhouse gases have varying global warming potential (GWP) values; GWP values represent the potential of a gas to trap heat in the atmosphere. CO_2 is used as the reference gas for GWP, and thus has a GWP of 1. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 4.6-1, *Global Warming Potential and Atmospheric Lifetime of Select GHGs*. As shown in Table 4.6-1, GWP (for the Intergovernmental Panel on Climate Change [IPCC] Fourth Assessment Report) ranges from 1 for CO_2 to 22,800 for sulfur hexafluoride (SF_6). (Urban Crossroads, Inc., 2016c, p. 13)

Table 4.6-1 Global Warming Potential and Atmospheric Lifetime of Select GHGs

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)	
		Second Assessment Report (SAR)	4th Assessment Report (AR4)
Carbon Dioxide	50-200	1	1
Methane	12 ± 3	21	25
Nitrous Oxide	120	310	298
HFC-23	264	11,700	14,800
HFC-134a	14.6	1,300	1,430
HFC-152a	1.5	140	124
Sulfur Hexafluoride (SF6)	3,200	23,900	22,800

Source: (Urban Crossroads, Inc., 2016c, Table 2-2)

Provided below is a description of the various gases that could contribute to GCC. For more information about these gases and their associated human health effects, refer to Section 2.4 of *Technical Appendix E* and the reference sources cited therein.

1. Water Vapor (H_2O)

Water Vapor (H_2O) is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the

atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is unknown as there are also dynamics that hold the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually also condense into clouds, which are more able to reflect incoming solar radiation, thereby allowing less energy to reach the Earth's surface and heat it up. There are no human health effects from water vapor itself; however, when some pollutants come in contact with water vapor, they can dissolve and the water vapor can then act as a pollutant-carrying agent. The main source of water vapor is evaporation from the oceans (approximately 85 percent). Other sources include: evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves. (Urban Crossroads, Inc., 2016c, p. 14)

2. Carbon Dioxide

Carbon dioxide (CO_2) is an odorless and colorless GHG that is emitted from natural and anthropogenic (man-made) sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Man-made sources include: the burning of coal, oil, natural gas, and wood. CO_2 is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks. Since the Industrial Revolution began in the mid-1700s, the sort of human activity that increases CO_2 emissions has increased dramatically in scale and distribution. As an example, prior to the Industrial Revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30 percent. Exposure to CO_2 in high concentrations can cause human health effects, but outdoor levels are not high enough to cause direct adverse effects on human health. (Urban Crossroads, Inc., 2016c, p. 15)

3. Methane

Methane (CH_4) is an extremely effective absorber of radiation, though its atmospheric concentration is less than carbon dioxide and its lifetime in the atmosphere is brief (10-12 years) compared to other GHGs. Methane has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning. No health effects are known to occur from exposure to methane. (Urban Crossroads, Inc., 2016c, p. 15)

4. Nitrous Oxide

Nitrous Oxide (N_2O) concentrations began to rise in the atmosphere at the beginning of the Industrial Revolution, and by 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. N_2O is used as an aerosol spray propellant, (e.g., in whipped cream bottles), in potato chip bags to keep chips fresh, and in rocket engines and in race cars. N_2O can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction. Also known as laughing gas, N_2O is a colorless GHG that can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause brain damage. (Urban Crossroads, Inc., 2016c, p. 15)

5. Chlorofluorocarbons (CFCs)

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane ($C2H_6$) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs were first synthesized in 1928 and have no natural source. CFCs were used for refrigerants, aerosol propellants and cleaning solvents. Since the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, due to their long atmospheric lifetime, some of the CFCs will remain in the atmosphere for over 100 years. (Urban Crossroads, Inc., 2016c, pp. 15-16)

6. Hydrofluorocarbons (HFCs)

Hydrofluorocarbons (HFCs) are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order largest to smallest), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were HFC-23 emissions. HFC-134a emissions are increasing due to its use as a refrigerant. The United States Environmental Protection Agency (EPA) estimates that concentrations of HFC-23 and HFC-134a are now about 10 parts per trillion (ppt) each; and that concentrations of HFC-152a are about 1 ppt. No human health effects are known to result from exposure to HFCs, which are manmade and used for applications such as automobile air conditioners and refrigerants. (Urban Crossroads, Inc., 2016c, p. 16)

7. Perfluorocarbons (PFCs)

Perfluorocarbons (PFCs) are primarily produced for aluminum production and semiconductor manufacture. PFCs have stable molecular structures and do not break down through chemical processes in the lower atmosphere. Because of this, PFCs have very long lifetimes, between 10,000

and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). The EPA estimates that concentrations of CF_4 in the atmosphere are over 70 ppt. No human health effects are known to result from exposure to PFCs. (Urban Crossroads, Inc., 2016c, p. 16)

8. Sulfur Hexafluoride (SF6)

Sulfur Hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (22,800). The EPA indicates that concentrations of SF_6 in the 1990's were about 4 ppt. In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection. (Urban Crossroads, Inc., 2016c, p. 16)

C. Greenhouse Gas Emissions Inventories

1. Global, National, State, and City Greenhouse Gas Emissions

Table 4.6-2, *Comparison of Worldwide GHG Emissions*, compares the magnitude of GHG emissions on the global, national, State, and City scales.

Table 4.6-2 Comparison of Worldwide GHG Emissions

Area and Data Year	Annual GHG Emissions ($MMTCO_2e$)
World (2013)	43,634
United States (2015)	6,587
California (2015)	440
City of Colton (2008)	0.68
$MMTCO_2e$: million metric tons of carbon dioxide equivalent Source: (WRI, 2017); (USEPA, 2017); (CARB, 2017); (City of Colton, 2015c).	

The U.S. contributes approximately 15.1 percent of worldwide GHG emissions per year; California contributes approximately 1.0 percent; and the City of Colton contributes approximately 0.00002 percent. CO_2 constitutes approximately 84 to 85 percent of all GHG emissions in the U.S. and California. The primary contributors to California GHG emissions are (1) transportation; (2) electric power production from both in-state and out-of-state sources; and (3) industrial uses. The primary contributors to City GHG emissions are (1) building energy (60 percent) and (2) transportation (32 percent). The CAP forecasts that, under "Business As Usual" (BAU) conditions, City GHG emissions would increase from 682,418 $MTCO_2e$ per year in 2008 to 732,377 $MTCO_2e$ per year in 2020. (City of Colton, 2015c, p. 3-6)

California GHG emissions have fallen from approximately 1.36% of the global total in 1990 to approximately 1.0% in 2015 (WRI, 2017; CARB, 2017). The annual amount of global C02e emissions increased by 12,936 MtCO2e from 1990 to 2011, or by more than 40% since 1990 (WRI, 2017). For the same period, California's CO2e emissions increased by only 8.3 MTCO2e (2%), and declined by approximately 10.7% from 2007 to 2011 (WRI, 2017). Overall, California accounted for only 0.065% of the net global CO2e emissions increase between 1990 and 2011 (WRI, 2017). Moreover, California emits approximately 50% less CO2e per capita than the rest of the United States, and far less than locations such as Texas or Canada (WRI, 2017). In 2011, California emitted 11.4 metric tons CO2e per capita, whereas the US, Texas, and Canada emitted 22.3, 30.9, and 20.9 metric tons CO2e per capita, respectively (WRI, 2017). Indeed, California's 2011 per capita GHG emission rate was on part with Germany (10.8 MTCO2e per capita), a country widely regarded as a world leader in the development of zero-emission energy sources (WRI, 2017). With implementation of the CAP, the City's annual GHG emissions are expected to be reduced 34.7 percent below 2020 BAU projections (732,377 MTCO2e) to approximately 478,344 MTCO2e. (City of Colton, 2015c, p. 3-6)

2. Project Site

At the time the NOP for this EIR was issued (June 24, 2016) the Project site was undeveloped and vacant with no habitable structures, with the exception of the Roquet Paving Inc. facility located on the southeast portion of the Project site. The GHG emissions generated at the Project site are nominal and, therefore, this analysis conservatively assumes that there are no sources of GHG emissions at the Project site under existing conditions.

D. Potential Effects of Climate Change in California

The California Environmental Protection Agency (CalEPA) published a report titled "Scenarios of Climate Change in California: An Overview" (herein called the "Climate Scenarios report") in February 2006, that is generally instructive about effects of climate change in California. The Climate Scenarios report used a range of emissions scenarios developed by the Intergovernmental Panel on Climate Change (IPCC) to project a series of potential warming ranges (i.e., temperature increases) that may occur in California during the 21st century: lower warming range (3.0-5.5°F); medium warming range (5.5-8.0°F); and higher warming range (8.0-10.5°F). (California Climate Change Center, 2006)

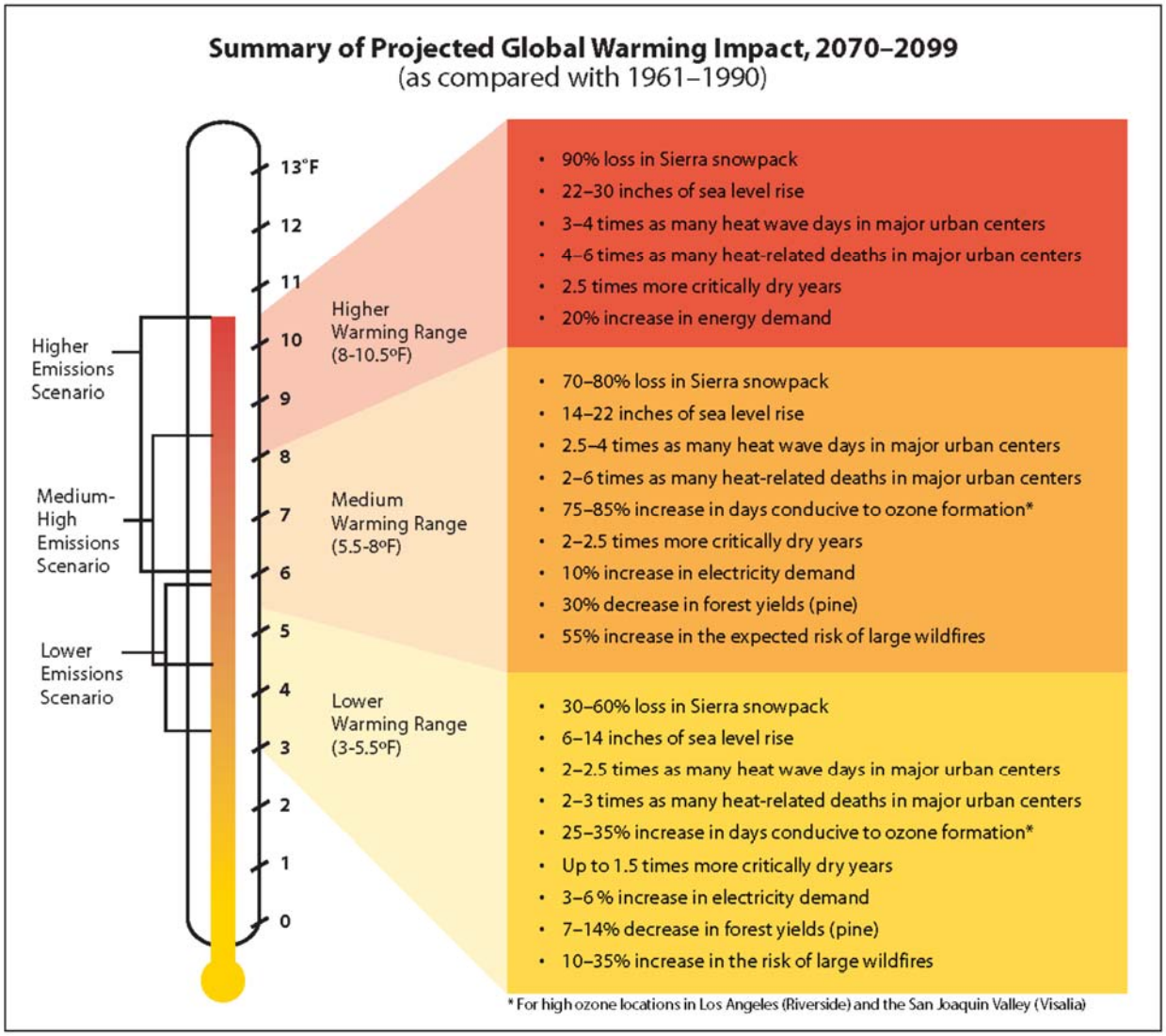
In addition, the California Natural Resources Agency adopted a "California Climate Adaptation Strategy" in 2009. This report details many vulnerabilities arising from climate change with respect to matters such as temperature extremes, sea level rise, wildfires, floods and droughts and precipitation changes, and responds to the Governor's Executive Order S-13-2008 that called on state agencies to develop California's strategy to identify and prepare for expected climate impacts. (California NRA, 2009)

According to these reports, substantial temperature increases arising from increased GHG emissions worldwide could result in a variety of effects to the people, economy, and environment of California,

with the severity of the effects depending upon actual future emissions of GHGs and associated degree of warming. Table 4.6-3, *Summary of Global Warming Impact, 2070-2099 (as compared with 1961-1990)*, presents potential impacts of global warming within California.

Based on the estimated scenarios presented in the Climate Scenario and California Climate Adaption Strategy reports, the climate change impacts in California have the potential to include, but are not limited to, the following areas. For more information, refer to Sections 2.5 and 2.6 of *Technical Appendix E* and the reference sources cited therein.

Table 4.6-3 Summary of Global Warming Impact, 2070-2099 (as compared with 1961-1990)



Source: (Urban Crossroads, Inc., 2016c, Exhibit 2-A)

1. Human Health Effects

The potential human health effects related directly to GHG emissions (including CO_2, N_2O, and CH_4) from development projects are still being debated in the scientific community. The contribution that these GHGs make to GCC have the potential to cause adverse effects to human health in various ways, as discussed in more detail in Section 2.6 of Appendix G. Increases in the Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change also could cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas.

2. Water Resource / Supply Effects

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages. Additionally, if temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 percent to 90 percent. The loss of snowpack could pose challenges to water managers, hamper hydropower generation, and adversely affect winter tourism. The State's water supplies are also at risk from rising sea levels. An influx of salt water could degrade California's estuaries, wetlands, and groundwater aquifers and be a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

3. Agriculture Effects

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. California farmers could face water shortages. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Faster plant growth could worsen the quantity and quality of yield for some crops such as wine grapes, fruit, and nuts. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, there may still be a water shortage for the agricultural industry. In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants.

4. Forest and Landscape Effects

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55-percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds,

temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. Continued GCC also has the potential to alter natural ecosystems and biological diversity, including a decrease in forest productivity, as a result of increasing temperatures.

5. Sea Level Effects

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12 to 14 inches by 2100.[1]

4.6.2 APPLICABLE ENVIRONMENTAL REGULATIONS

Below is an account of the regulatory programs, policies, laws, and regulations that are applicable to GHG emissions and GCC in California. For more information, refer to Section 2.7 of *Technical Appendix E* and the reference sources cited therein.

1. International Regulation and Kyoto Protocol

In 1988, the United Nations established the Intergovernmental Panel on Climate Change to evaluate the impacts of global warming and to assess the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation. In 1992, the United States joined other countries around the world in signing the United Nations' Framework Convention on Climate Change (UNFCCC) agreement with the goal of controlling greenhouse gas emissions. As a result, the Climate Change Action Plan was developed to address the reduction of GHGs in the United States. The Plan currently consists of more than 50 voluntary programs for member nations to adopt. (Urban Crossroads, Inc., 2016c, pp. 20-21)

On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change (UNFCCC). Under the UNFCCC, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

[1] Given the Project site's inland location, it is unlikely to be directly affected by sea level rise associated with global climate change. Moreover, controlling CEQA case law makes clear that the EIR is not required to analyze the potential effects of sea level rise on the Project, since the EIR is intended to identify and analyze the impact of the Project on the environment, not the impact of the environment on the Project. *See, e.g., Ballona Wetlands Land Trust v. City of Los Angeles* (2011) 201, Cal.App.4th 455, 473.

The Kyoto Protocol is an international agreement linked to the UNFCCC. The Kyoto Protocol sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at average of five percent against 1990 levels over the five-year period from 2008 to 2012. The UNFCCC encouraged industrialized countries to stabilize emissions; however, the Kyoto Protocol commits them to doing so (Urban Crossroads, Inc., 2016c, p. 19). The United States has not ratified the Kyoto Protocol. A 2/3 majority vote in the United States Senate is required for approval. As long as the United States has not ratified the treaty, it is not subject to its terms and obligations.

2. 2015 United Nations Paris Climate Change Conference

Parties to the UNFCCC reached a landmark agreement on December 12, 2015 in Paris by signing a new treaty with a common framework that commits all countries to reducing GHG emissions by requiring that all parties report regularly on their emissions and implementation efforts, and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties, or COP 21. Together, the Paris Agreement and the accompanying COP 21 decision establish the following:

- Reaffirm the goal of limiting global temperature increase well below 2 degrees Celsius, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make "nationally determined contributions" (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and "progress made in implementing and achieving" their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they will "represent a progression" beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing $100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address "loss and damage" resulting from climate change, which explicitly will not "involve or provide a basis for any liability or compensation;"
- Require parties engaging in international emissions trading to avoid "double counting;" and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country's NDC. (Urban Crossroads, Inc., 2016c, pp. 19-20)

On June 1, 2017, amidst expressed concerns about the Paris Agreement's purported adverse effects on national economic interests, President Trump announced that the United States would withdraw from the Paris Agreement.

3. Federal Regulation and the Clean Air Act

Coinciding with the 2009 meeting of international leaders in Copenhagen, on December 7, 2009, the EPA issued an Endangerment Finding under § 202(a) of the Clean Air Act (CAA), opening the door to federal regulation of GHGs. The Endangerment Finding notes that GHGs threaten public health and welfare and are subject to regulation under the CAA. To date, the EPA has not promulgated regulations on GHG emissions, but it has begun to develop them. (Urban Crossroads, Inc., 2016c, p. 22)

Previously the EPA had not regulated GHGs under the CAA because it asserted that the Act did not authorize it to issue mandatory regulations to address GCC and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. In Massachusetts v. Environmental Protection Agency et al. (127 S. Ct. 1438 [2007]); however, the U.S. Supreme Court held that GHGs are pollutants under the CAA and directed the EPA to decide whether the gases endangered public health or welfare. The EPA had also not moved aggressively to regulate GHGs because it expected Congress to make progress on GHG legislation, primarily from the standpoint of a cap-and-trade system. However, proposals circulated in both the House of Representative and Senate have been controversial and it may be some time before the U.S. Congress adopts major climate change legislation. The EPA's Endangerment Finding paves the way for federal regulation of GHGs with or without Congress. (Urban Crossroads, Inc., 2016c, p. 22)

At present, the future scope of Federal greenhouse gas regulation is uncertain. On March 27, 2017, President Trump signed an executive order directing the Environmental Protection Agency to commence a process of withdrawing or revising the Obama administration's Clean Power Plan, and directing other agencies to reconsider various rules and rulemaking processes concerning the regulation of greenhouse gas emissions. The scope of federal action and regulatory change in response to such executive order remains to be seen.

4. Center for Biological Diversity v. California Department of Fish and Wildlife ("Newhall Ranch")

In November 2015, the California Supreme Court issued a decision in the *Center for Biological Diversity v. California Department of Fish and Wildlife* ("*Newhall Ranch*") case that upheld: (1) The use of the statewide emissions reduction goal in AB 32 as a significance criterion, and (2) The use of the CARB Scoping Plan's Business-As-Usual (BAU) model "as a comparative tool for evaluating efficiency and conservation efforts" of the Project, and (3) A comparison of the Project's expected emissions to a BAU model rather than a baseline of pre-project conditions. Notwithstanding, however, the Court invalidated the finding that a project-level reduction in comparison to BAU is consistent with achieving AB 32's statewide goal of a 29 percent reduction from BAU. In so doing, the Court in

Newhall Ranch questioned whether "a greater degree of reduction may be needed" from new versus existing development to achieve the statewide goal set forth in AB 32.

The Court in *Newhall Ranch* outlined "potential pathways to compliance" that future EIRs could use to determine if GHG emissions from a given project are significant. These pathways include:

- **Substantiation of Project Reductions from BAU**. A Lead Agency may use a BAU comparison based on the CARB Scoping Plan's methodology if it also substantiates the reduction a particular project must achieve to comply with statewide goals. The Court suggested a Lead Agency could examine the "data behind the Scoping Plan's business-as-usual model" to determine the necessary project-level reductions from new land use development at the proposed location.
- **Compliance with Regulatory Programs or Performance-Based Standards**. A Lead Agency may assess consistency with AB 32's goal by assessing the project's compliance with regulatory programs designed to reduce GHG from particular activities. This may include assessing the degree to which a project's design features comply with or exceed the regulations outlined in the CARB Scoping Plan or other state agencies to achieve performance-based standards to reduce GHG emissions.
- **Compliance with GHG Reduction Plans or Climate Action Plans (CAPs)**. A Lead Agency may utilize geographically-specific GHG emission reduction plans (i.e., climate action plans or GHG emission reduction plans) to provide a basis for the tiering or streamlining of project-level CEQA analysis.
- **Regional Sustainable Community Strategy (SCS):** The Court also articulates that a lead agency need not additionally analyze greenhouse gas emissions from cars and light trucks in CEQA documents for certain residential, mixed use and transit priority projects that are consistent with an applicable SCS adopted pursuant to Senate Bill (SB) 375.
- **Compliance with Local Air District Thresholds**. A Lead Agency may rely on "existing numerical thresholds of significance for greenhouse gas emissions" adopted by, for example, local air districts.

Following the Supreme Court's decision in Newhall, the EIR at issue was set aside on remand by the lower court. On November 2016, the CDFW released a draft Additional Environmental Analysis (AEA) intended to address the agency's CEQA compliance obligations. The AEA does not respond to the Supreme Court's direction to provide substantial evidence supporting the 29% BAU statutory GHG reduction threshold relied upon by the Newhall EIR. The AEA also does not include an assessment of the Newhall project's consistency with any of the Court's suggested GHG CEQA compliance pathways, although referenced documentation in the Newhall administrative record do include and confirm compliance with each pathway. Instead, as described in the AEA, the Newhall project applicant (Five Point LLC) voluntarily modified its project and proposed to achieve "net zero" GHG emissions for the project with the implementation of 13 mitigation measures described in the AEA. The AEA states that the adoption and implementation of the 13 mitigation measures would

reduce mobile source, electricity, natural gas, vegetation removal, and construction-related emissions by the amount of emissions estimated for the project and result in no net contributions of GHG emissions from the project, or "zero net emissions. The AEA further concludes that because the project would result in no net increase of GHG emissions after implementation of the mitigation measures, there would be no contribution of GHG emissions to cumulative GHG emissions influencing global climate change and the Newhall project would not conflict with any plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs. Consequently, the AEA concludes that project GHG and climate change impacts would be less than significant.

Consistent with the Supreme Court's holding in *Newhall Ranch*, the thresholds this EIR Subsection considers in determining the significance of impacts from the Project's GHG emissions include: (1) a quantitative analysis of the Project's compliance with the City of Colton's Climate Action Plan ("CAP"), (2) an analysis of the Project's consistency with the applicable SCS, and (2) a qualitative analysis of the Project's consistency with the ARB's Scoping Plan and with GHG emission reducing regulations.

5. Title 24 Energy Standards

Although GCC did not become an international concern until the 1980s, efforts to reduce energy consumption began in California in response to the oil crisis in the 1970s, resulting in the incidental reduction of GHG emissions. In order to manage the state's energy needs and promote energy efficiency, AB 1575 created the California Energy Commission (CEC) in 1975 (Urban Crossroads, Inc., 2016c, p. 22). The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The CEC adopted the 2008 changes to the Building Energy Efficiency Standards in order to (1) "Provide California with an adequate, reasonably-priced and environmentally-sound supply of energy" and (2) "Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020." The 2013 Building Energy Efficiency Standards were adopted in 2012 and became effective on July 1, 2014. The 2013 Building Energy Efficiency Standards were 25 percent more efficient than the previous 2008 Building Energy Efficiency Standards for residential construction and 30 percent more efficient than the previous 2008 Standards for nonresidential construction (Urban Crossroads, Inc., 2016c, p. 22). The latest revisions (2016 Building Energy Efficiency Standards) became effective on January 1, 2017 and are at least 28 percent more efficient than the 2013 Building Energy Efficiency Standards (CEC, 2017). The requirements of the energy efficiency standards result in the reduction of natural gas and electricity consumption. Both natural gas use and electricity generation result in GHG emissions.

Part 11 of the Title 24 is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality." The CALGreen Code is intended to cause a reduction in GHG emissions from buildings, reduce energy and water consumption, promote environmentally responsible places to live and work and respond to the directives by the Governor. The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code. (Urban Crossroads, Inc., 2016c, p. 22)

The CALGreen Code contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, such as heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

The CALGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, storm water management, building design, insulation, flooring, and framing, among others.

In June 2015, the CEC and the California Public Utilities Commission jointly published the California New Residential Zero Net Energy Action Plan 2015-2020 (ZNE Plan). The ZNE Plan is designed to operationalize the State's goal to have 100% of new homes achieve zero net energy (ZNE) by establishing guiding principles for establishing a regulatory framework achieving that goal by 2020. Starting in 2008, the Title 24 energy efficiency requirements for residential homes have been periodically ratcheted up with the objective of eventually achieving the ZNE goal, with updates adopted in 2013 (effective 2014) and 2016 (effective 2017). With each update, the Title 24 standards efficiency requirements have increased at a rate of 12-15% in each cycle. The 2016 standards that went into effect on January 1, 2017 get still closer to ZNE by requiring, for example, high efficiency lighting, high efficiency walls and attics with increased continuous insulation, and high efficiency water heating systems. According to the ZNE Plan, the 2019 update to Title 24 (effective 2020) will require full ZNE for all new residential construction.

6. *California Assembly Bill No. 1493 (AB 1493)*

AB 1493 requires CARB to develop and adopt the nation's first GHG emission standards for automobiles. The Legislature declared in AB 1493 that global warming was a matter of increasing concern for public health and environment in California. Further, the legislature stated that technological solutions to reduce GHG emissions would stimulate the California economy and provide jobs. (Urban Crossroads, Inc., 2016c, pp. 23-24)

To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards in 2004. Amendments to CCR Title 13 §§ 1900 and 1961 and adoption of § 1961.1 require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016. (Urban Crossroads, Inc., 2016c, pp. 23-24)

In December 2004, a group of car dealerships, automobile manufacturers, and trade groups representing automobile manufacturers filed suit against CARB to prevent enforcement of CCR Title 13 §§ 1900 and 1961 as amended by AB 1493 and CCR Title 13 § 1961.1 (Central Valley Chrysler-Jeep et al. v. Catherine E. Witherspoon, in her official capacity as Executive Director of the California Air Resources Board, et al.). The suit, heard in the U.S. District Court for the Eastern District of California, contended that California's implementation of regulations that in effect regulate vehicle fuel economy violates various federal laws, regulations, and policies. In January 2007, the judge hearing the case accepted a request from the State Attorney General's office that the trial be postponed until a decision is reached by the U.S. Supreme Court on a separate case addressing GHGs. In the Supreme Court Case, Massachusetts vs. EPA, the primary issue in question is whether the federal CAA provides authority for U.S. EPA to regulate CO_2 emissions. In April 2007, the U.S. Supreme Court ruled in Massachusetts' favor, holding that GHGs are air pollutants under the CAA. On December 11, 2007, the judge in the Central Valley Chrysler-Jeep case rejected each plaintiff's arguments and ruled in California's favor. On December 19, 2007, the U.S. EPA denied California's waiver request. California filed a petition with the Ninth Circuit Court of Appeals challenging U.S. EPA's denial on January 2, 2008. (Urban Crossroads, Inc., 2016c, pp. 23-24)

The Obama administration subsequently directed the U.S. EPA to re-examine their decision. On May 19, 2009, challenging parties, automakers, the State of California, and the federal government reached an agreement on a series of actions that would resolve these current and potential future disputes over the standards through model year 2016. In summary, the U.S. EPA and the U.S. Department of Transportation agreed to adopt a federal program to reduce GHGs and improve fuel economy, respectively, from passenger vehicles in order to achieve equivalent or greater greenhouse gas benefits as the AB 1493 regulations for the 2012–2016 model years. Manufacturers agreed to ultimately drop current and forego similar future legal challenges, including challenging a waiver grant, which occurred on June 30, 2009. The State of California committed to (1) revise its standards to allow manufacturers to demonstrate compliance with the fleet-average GHG emission standard by "pooling"

California and specified State vehicle sales; (2) revise its standards for 2012–2016 model year vehicles so that compliance with U.S. EPA-adopted GHG standards would also comply with California's standards; and (3) revise its standards, as necessary, to allow manufacturers to use emissions data from the federal Corporate Average Fuel Economy (CAFE) program to demonstrate compliance with the AB 1493 regulations. Both of these programs are aimed at light-duty auto and light-duty trucks. (Urban Crossroads, Inc., 2016c, pp. 23-24)

7. Executive Order S-3-05

Executive Order S-3-05, which was signed by former Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snow pack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, Executive Order S-3-05 established total GHG emission targets. Specifically, emissions are to be reduced to the 1990 level by 2020 and to 80-percent below the 1990 level by 2050. The Executive Order directed the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce greenhouse gas emissions to the target levels. The Secretary also is required to submit biannual reports to the Governor and state Legislature describing: (1) progress made toward reaching the emission targets; (2) impacts of global warming on California's resources; and (3) mitigation and adaptation plans to combat these impacts. To comply with Executive Order S-3-05, the Secretary of the CalEPA created a Climate Action Team (CAT) made up of members from various state agencies and commission. CAT released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs. (Urban Crossroads, Inc., 2016c, p. 25)

Executive orders do not have the same status as a law because in California's constitutional system, it is the Legislature, not the Governor, who is entrusted with the role of making statewide laws. The Legislature declined to include the Executive Order's 2050 goal in AB 32 (discussed below), and again declined to use the EO's 2050 goal in adopting Senate Bill (SB) 375 (discussed below), nor has it incorporated it in any implementing legislation or applicable plans. Additionally, although CARB has the requisite authority to adopt whatever regulations are necessary beyond the AB 32 horizon year 2020 to meet the target set forth in S-3-05, the agency has not done so. Since the Legislature has never enacted EO S-3-05's 2050 target, and no expert agency has interpreted CEQA to require it, the 2050 target has only the force and effect of an executive order issued by a former Governor. There is no authority that suggests that the constitutional authority to establish CEQA significance thresholds resides in the Governor. CEQA is a statute, and the authority to amend and revise its requirements falls first to the Legislature. The Legislature alone has the authority to enact, amend, or revise legislation, absent some express delegation of authority to the Governor or an executive branch agency through statutory enactments. If the Legislature has delegated any of its authority to define CEQA's requirements, it delegated that authority to OPR and not to the Governor's office.

Moreover, CARB's Scoping Plan to implement AB 32 looked beyond 2020 to assess whether implementing the Scoping Plan would achieve the State's long-term climate goals and determined that it would do the following:

> "Climate scientists tell us that the 2050 target represents the level of greenhouse gas emissions that advanced economies must reach if the climate is to be stabilized in the latter half of the 21st century. Full implementation of the Scoping Plan will put California on a path toward these required long-term reductions. Just as importantly, it will put into place many of the measures needed to keep us on that path."

The 2014 Scoping Plan Update confirms that: "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32," and it recognizes the potential for California to "reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050."

However, the 2014 Scoping Plan Update also concludes that additional actions will be needed to continue reducing emissions and meet the 2050 goals in the face of anticipated population and economic growth. In fact, overwhelming scientific evidence supports the conclusion that significant technological innovation, well beyond the scope of an individual development project, are absolutely necessary components of any plausible path to achieving the EO S-3-05's 2050 target. These new innovations to change fuel technology and energy generation are generally outside the jurisdiction and control of the local government agency such as the City. Achieving these goals will require wholesale shifts in fuel and energy technology, neither of which are currently available, rendering any further analysis of a given development project's impacts relative to the 2050 target too speculative for purposes of determining CEQA significance.

The Court in the *Newhall Ranch* decision noted that an analysis of goals beyond 2020 may be necessary for new development; however, the target set by EO S-3-05 and the interim goal set in EO B-30-15 (discussed below) are not required significance criteria in analyzing impacts related to GHG emissions and climate change under CEQA for the abovementioned reasons.

8. California Assembly Bill 32 (AB 32)

In September 2006, former Governor Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction is to be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32. (Urban Crossroads, Inc., 2016c, pp. 25-26)

AB 32 required that CARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also included guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions. (Urban Crossroads, Inc., 2016c, pp. 25-26)

In November 2007, CARB completed its estimates of 1990 GHG levels. Net emission 1990 levels were estimated at 427 million metric tons (MMTs) (emission sources by sector were: transportation – 35 percent; electricity generation – 26 percent; industrial – 24 percent; residential – 7 percent; agriculture – 5 percent; and commercial – 3 percent). Accordingly, 427 MMTs of CO_2 equivalent was established as the emissions limit for 2020. For comparison, CARB's estimate for baseline GHG emissions was 473 MMT for 2000 and 532 MMT for 2010. "Business as usual" conditions (without the reductions to be implemented by CARB regulations) for 2020 were projected to be 596 MMTs. (Urban Crossroads, Inc., 2016c, pp. 25-26)

In December 2007, CARB approved a regulation for mandatory reporting and verification of GHG emissions for major sources. This regulation covered major stationary sources such as cement plans, oil refineries, electric generating facilities/providers, and co-generation facilities, which comprise 94 percent of the point source CO_2 emissions in the State. (Urban Crossroads, Inc., 2016c, pp. 25-26)

On December 11, 2008, CARB adopted a scoping plan to reduce GHG emissions to 1990 levels by 2020 (Scoping Plan). The Scoping Plan's recommendations for reducing GHG emissions to 1990 levels by 2020 include emission reduction measures, including expanding and strengthening existing energy efficiency programs and building and appliance standards; achieving a statewide renewable energy mix of 33 percent; a cap-and-trade program linked to Western Climate Initiative partner jurisdictions; establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets; adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation. Implementation of individual measures must begin no later than January 1, 2012, so that the emissions reduction target can be fully achieved by 2020. (Urban Crossroads, Inc., 2016c, pp. 25-26)

Table 4.6-4, *Scoping Plan GHG Reduction Measures Towards 2020 Target*, shows the proposed reductions from regulations and programs outlined in the Scoping Plan. While local government operations were not accounted for in achieving the Year 2020 emissions reduction, local land use changes are estimated to result in a reduction of 5 $MMTCO_2e$, which is approximately 3 percent of the 2020 GHG emissions reduction goal. In recognition of the critical role local governments will play in successful implementation of AB 32, CARB is recommending GHG reduction goals of 15 percent of 2006 levels by 2020 to ensure that municipal and community-wide emissions match the state's

reduction target. According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately 2 percent through land use planning, resulting in a potential GHG reduction of 2 $MMTCO_2e$ (or approximately 1.2 percent of the GHG reduction target). (Urban Crossroads, Inc., 2016c, p. 27)

Table 4.6-4 Scoping Plan GHG Reduction Measures Towards 2020 Target

Recommended Reduction Measures	*Reductions Counted toward 2020 Target of 169 MMT CO2e*	*Percentage of Statewide 2020 Target*
Cap and Trade Program and Associated Measures		
California Light-Duty Vehicle GHG Standards	31.7	19%
Energy Efficiency	26.3	16%
Renewable Portfolio Standard (33 percent by 2020)	21.3	13%
Low Carbon Fuel Standard	15	9%
Regional Transportation-Related GHG Targets[1]	5	3%
Vehicle Efficiency Measures	4.5	3%
Goods Movement	3.7	2%
Million Solar Roofs	2.1	1%
Medium/Heavy Duty Vehicles	1.4	1%
High Speed Rail	1.0	1%
Industrial Measures	0.3	0%
Additional Reduction Necessary to Achieve Cap	34.4	20%
Total Cap and Trade Program Reductions	146.7	87%
Uncapped Sources/Sectors Measures		
High Global Warming Potential Gas Measures	20.2	12%
Sustainable Forests	5	3%
Industrial Measures (for sources not covered under cap and trade program)	1.1	1%
Recycling and Waste (landfill methane capture)	1	1%
Total Uncapped Sources/Sectors Reductions	27.3	16%
Total Reductions Counted toward 2020 Target	174	100%
Other Recommended Measures – Not Counted toward 2020 Target		
State Government Operations	1.0 to 2.0	1%
Local Government Operations	To Be Determined[2]	NA
Green Buildings	26	15%
Recycling and Waste	9	5%
Water Sector Measures	4.8	3%
Methane Capture at Large Dairies	1	1%
Total Other Recommended Measures – Not Counted toward 2020 Target	42.8	NA

[1]Reductions represent an estimate of what may be achieved from local land use changes. It is not the SB 375 regional target.

[2]According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately 2 percent through land use planning, resulting in a potential GHG reduction of 2 million metric tons of CO_2e (or approximately 1.2 percent of the GHG reduction target). However, these reductions were not included in the Scoping Plan reductions to achieve the 2020 Target.

Overall, CARB determined that achieving the 1990 emission level in 2020 would require a reduction in GHG emissions of approximately 28.5 percent in the absence of new laws and regulations (referred to as "Business-As-Usual" (BAU). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and CAT early actions and additional GHG reduction measures, identifies additional measures to be pursued as regulations, and outlines the role of the cap-and-trade program. (Urban Crossroads, Inc., 2016c, p. 27)

When the 2020 emissions level projection also was updated to account for implemented regulatory measures, including Pavley (vehicle model-years 2009 - 2016) and the renewable portfolio standard (12% - 20%), the 2020 projection in the BAU condition was reduced further to 507 $MTCO_2e$. As a result, based on the updated economic and regulatory data, CARB determined that achieving the 1990 emissions level in 2020 would now only require a reduction of GHG emissions of 80 $MTCO_2e$, or approximately 16 percent (down from 28.5 percent), from the BAU condition. (Urban Crossroads, Inc., 2016c, p. 28)

On February 10, 2014, CARB released a Draft Proposed First Update of the Scoping Plan. The draft recalculates 1990 GHG emissions using new global warming potentials identified in the IPCC Fourth Assessment Report released in 2007. Using those GWPs, the 427 $MTCO_2e$ 1990 emissions level and 2020 GHG emissions limit identified in the 2008 Scoping Plan would be slightly higher, at 431 $MTCO_2e$. Based on the revised 2020 emissions level projection identified in the 2011 Final Supplement and the updated 1990 emissions levels identified in the discussion draft of the First Update, achieving the 1990 emissions level in 2020 would require a reduction of 78 $MTCO_2e$ (down from 509 $MTCO_2e$), or approximately 15.3 percent (down from 28.5 percent), from the BAU condition. CARB approved the First Update to the Scoping Plan (Update) on May 22, 2014. (Urban Crossroads, Inc., 2016c, p. 28)

CARB is moving forward with a second update to the Scoping Plan to reflect the 2030 target established in Executive Order B-30-15 and in Senate Bill 32 (discussed below). This second Scoping Plan update is titled the "2030 Target Scoping Plan Update" and its development was formally initiated in October 2015 in coordination with various state agencies. On December 2, 2016, CARB published an incomplete "discussion draft" of the 2030 Target Scoping Plan Update and plans to publish a complete "proposed draft" for 45-day public comment in early January 2017. CARB currently estimates that adoption of the final 2030 Target Scoping Plan Update will be considered by the CARB board at a public hearing conducted in Summer 2017.

9. California Senate Bill No. 1368 (SB 1368)

In 2006, the State Legislature adopted Senate Bill 1368 (SB 1368), which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission (CPUC) to adopt a greenhouse gas emission performance standard (EPS) for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant.

Due to the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the new law will effectively prevent California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. Thus, SB 1368 will lead to dramatically lower greenhouse gas emissions associated with California energy demand, as SB 1368 will effectively prohibit California utilities from purchasing power from out of state producers that cannot satisfy the EPS standard required by SB 1368. (Urban Crossroads, Inc., 2016c, pp. 28-29)

10. Executive Order S-01-07

On January 18, 2007, former California Governor Schwarzenegger, through Executive Order S-01-07, mandated a statewide goal to reduce the carbon intensity of California's transportation fuel by at least 10 percent by 2020. The order also requires that a California specific Low Carbon Fuel Standard be established for transportation fuels. (Urban Crossroads, Inc., 2016c, p. 30) CARB identifies the Low Carbon Fuel Standard (LCFS) as a Discrete Early Action item under AB 32.

In 2009, CARB approved for adoption the LCFS regulation, which became fully effective in April 2010 and is codified in the *California Code of Regulations* (CCR, specifically Title 17, Sections 95480–95490). The LCFS will reduce greenhouse gas emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. Carbon intensity is a measure of the GHG emissions associated with the various production, distribution, and use steps in the "lifecycle" of a transportation fuel. Following a federal lawsuit challenging the LCFS, on September 25, 2015, CARB re-adopted the LCFS regulation.

11. Senate Bills 1078 and 107 and Executive Order S-14-08

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, former Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Energy Standard to 33 percent renewable power by 2020. (Urban Crossroads, Inc., 2016c, p. 30)

12. Senate Bill 375 (SB 375)

SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in that MPO's regional transportation plan. CARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight (8) years but can be updated every four (4) years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its

assigned targets. If MPOs did not meet the GHG reduction targets, transportation projects are not eligible for funding programmed after January 1, 2012. The Scoping Plan, adopted by CARB in December 2008, relies on the requirements of SB 375 to implement the carbon emissions reductions anticipated from land use decisions. The Southern California Association of Governments (SCAG) 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is applicable to the Project area (Urban Crossroads, Inc., 2016c, pp. 31-32). For the area under SCAG's jurisdiction, including the Project area, CARB adopted a regional reduction target of 8 percent for 2020 and 13 percent for 2035. On February 15, 2011, the CARB's Executive Office approved the final targets. CARB filed a Notice of Decision two days later on February 17, 2011.

13. Executive Order B-30-15

On April 29, 2015, Governor Brown issued Executive Order B-30-15, which sets an "interim" goal to reduce GHG emissions in California to 40 percent below 1990 levels by 2030. The 2030 target serves as a benchmark goal on the way to achieving the GHG reductions goal set by former Governor Schwarzenegger via Executive Order S-3-05 (i.e., 80 percent below 1990 greenhouse gas emissions levels by 2050). Executive Order B-30-15 also directs state agencies with jurisdiction over greenhouse gas emissions to implement measures pursuant to statutory authority to achieve the 2030 and 2050 targets. Specifically, the Executive Order directs CARB to update the Scoping Plan to express this 2030 target in metric tons. Since CARB has not yet adopted a GHG inventory for 2030, it is not possible to prepare a numeric analysis that incorporates the 2030 target. Executive Order B-30-15 is subject to all the same limitations as discussed above for Executive Order S-3-05 and is disclosed herein for informational purposes. (Urban Crossroads, Inc., 2016c, pp. 30-31)

14. Senate Bill 32 and Assembly Bill 187

SB 32, signed into law on September 8, 2016, requires CARB to ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the 1990 statewide greenhouse gas level no later than December 31, 2030. Per SB 32, CARB is to achieve this 2030 GHG reduction target by "adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions" (see Health & Safety Code Section 38566). The new SB 32 GHG reduction mandate is the same as the GHG reduction included in Executive Order B-30-15 of 40 percent below 1990 levels by 2030. As discussed above, CARB is the process of preparing the 2030 Target Scoping Plan Update, which is intended to build upon and leverage the framework for achieving California's GHG reduction mandate established in the initial Scoping Plan and its first update, and to define the state's climate change priorities for the next 14 years and beyond.

AB 197 is a companion to, and was enacted on the same day as, SB 32 (i.e., September 8, 2016). AB 197 adds two non-voting members to the CARB board, establishes certain qualifications for CARB board membership, and creates a six-member Joint Legislative Committee on Climate Change Policies to determine facts and make recommendations to the Legislature regarding California climate change policy. Under AB 197, the CARB Chair is required to appear before this committee on an annual basis and present annual information regarding GHG emissions, toxic air contaminants, and criteria

pollutants generated by all economic sectors covered by the Scoping Plan. AB 197 further authorizes the committee to establish an expert panel to independently analyze the state's climate change policies. In addition, AB 197 requires CARB to make available on its website, and updated annually, all GHG emissions, criteria pollutants, and toxic air contaminant information broken down to a local level for stationary sources and sub-county level for mobile sources. AB 197 also obligates CARB, when adopting rules and regulations that achieve emission reductions beyond statewide GHG emission limits to consider "social costs" and to prioritize (a) emissions reductions from large stationary sources of GHG emissions, and (b) direct emission reductions from mobile sources. For purposes of AB 197, "social costs" is defined to mean "an estimate of the economic damages, including, but not limited to, changes in net agricultural productivity; impacts to public health; climate adaptation impacts, such a property damages from increased flood risk; and changes in energy system costs, per metric ton of greenhouse gas emissions per year." Finally, AB 197 requires each Scoping Plan update to identify for each of its emission reduction measures (i) the range of air pollution reductions and GHG emissions reductions projected to result from each measure, and (ii) the cost-effectiveness, including avoided social costs, of each measure.

15. Senate Bill 1

Senate Bill 1 of 2006 (SB 1) established the statewide California Solar Initiative, also known as the Million Solar Roofs Initiative, and required the CEC to implement regulations that require sellers of production homes to offer a solar energy system option to all prospective homebuyers. Besides offering solar as an option to prospective homebuyers, sellers of homes constructed on land for which an application for a tentative subdivision map has been deemed complete on or after January 1, 2011, must disclose to the prospective homebuyer the total installed cost of the solar option, the estimated cost savings associated with the solar energy system option, information about California solar energy system incentives, and information about the Go Solar California website. Sellers of production homes affected by this law may opt for the solar offset program rather than offer solar as an option to prospective homebuyers. The solar offset program requires sellers to install a solar system elsewhere which is equivalent to the aggregate capacity of solar that would have been installed in an affected subdivision if 20 percent of the buyers had opted for the solar option.

16. Assembly Bill 1009

Assembly Bill 1109 (AB 1109), the Lighting Efficiency and Toxic Reduction Act, requires the establishment of minimum energy efficiency standards for all general purpose lights. The standards are structured to reduce average statewide electrical energy consumption by not less than 50 percent from the 2007 levels for indoor residential lighting and not less than 25 percent from the 2007 levels for indoor commercial and outdoor lighting by 2018.

17. Senate Bill 350

Senate Bill (SB) 350. Signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. SB 350 is the implementation of some of the goals of EO B-30-15. The objectives of SB 350 are,

(1) To increase from 33 percent to 50 percent, the procurement of our electricity from renewable sources.
(2) To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

18. CARB's Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model year 2017 through 2025. The program combines the control of smog, soot and GHGs with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions. The program also requires car manufacturers to offer for sale an increasing number of zero-emission vehicles (ZEVs) each year, including battery electric, fuel cell, and plug-in hybrid electric vehicles. In December 2012, CARB adopted regulations allowing car manufacturers to comply with California's GHG emissions requirements for model years 2017–2025 through compliance with the EPA GHG requirements for those same model years.

19. Cap and Trade

Pursuant to AB 32, CARB was allowed, but not required, to include among mechanisms intended to reduce GHG emissions a "system of market-based declining annual aggregate emission limits.". As noted above, CARB developed a Scoping Plan that directed CARB staff to develop, among other programs, a cap-and-trade mechanism that would apply a declining aggregate cap on GHG emissions and provide a flexible compliance system using tradable instruments. On October 20, 2011, CARB adopted the final cap-and-trade regulation (17 CCR Title 17, Subchapter 10, Article 5). The program imposes a "cap" on the total GHG emissions from covered entities in the state, and the quantity of emissions allowed under the cap will decrease each year, ultimately reaching the goal of returning state-wide GHG emissions to 1990 levels by 2020. The quantity of allowed emissions actually increased between 2014 and 2015, but that is to account for the addition of the fuel importers and distributors and additional electricity importers to the program as discussed below. The net effect is to reduce overall GHG emissions.

The cap-and-trade program started on January 1, 2012, and will proceed in "compliance phases," the first of which began on January 1, 2013. In the first phase, the program applies to electric utilities, importers of electricity, and specified industries, including refineries. Approximately 350 electric utilities and approximately 600 industrial facilities were included in the initial phase of the program. On January 1, 2015, cap-and-trade compliance obligations were phased in for suppliers of natural gas, reformulated gasoline blendstock for oxygenate blending (RBOB), distillate fuel oils, and liquefied petroleum gas that meet or exceed specified emissions thresholds. The threshold that triggers a cap-and-trade compliance obligation for a fuel supplier is 25,000 metric tons or more of CO2e annually from the GHG emissions that would result from full combustion or oxidation of quantities of fuels (including natural gas, RBOB, distillate fuel oil, liquefied petroleum gas, and blended fuels that contain these fuels) imported and/or delivered to California. Phasing in of cap-and-trade compliance

obligations for transportation fuel providers further reduces GHG emissions attributable to mobile sources, beyond the GHG emissions reductions achieved by the Pavley Standard, LCFS, and Advanced Clean Cars Program discussed above. This analysis does not incorporate GHG emissions reductions based on cap-and-trade compliance obligations applicable to transportation fuel suppliers.

20. California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (California Public Resources Code, Sections 40000 et seq.) requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities; and (2) diversion of 50 percent of all solid waste on and after January 1, 2000, through source reduction, recycling, and composting facilities. Additionally, jurisdictions are not prohibited from implementing source reduction, recycling, and composting activities designed to exceed these requirements.

21. Assembly Bill 341

Assembly Bill 341 amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is a policy goal of the State that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the sState's policy goal. CalRecycle conducted several stakeholder workshops and published a discussion document in May 2012 titled California's New Goal: 75 Percent Recycling, which identifies concepts that CalRecycle believes would assist the State in reaching the 75 percent goal by 2020.

22. Assembly Bill 1826

In October 2014 Governor Brown signed AB 1826 requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units (however, multifamily dwellings are not required to have a food waste diversion program). Organic waste (also referred to as organics) means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

23. State Model Water Efficient Landscape Ordinance (MWELO) and Executive Order B-29-15

In accordance with Assembly Bill 1881, the MWELO (23 CCR Title 23, Division 2, Chapter 2.7) establishes an outdoor water budget for new landscaped areas that are 500 square feet or larger, and rehabilitated landscaped areas that are 2,500 square feet or larger. Executive Order B-29-15 called for revisions to the MWELO in order to increase water efficiency standards for new and rehabilitated landscapes through more efficient irrigation systems, greywater usage, on-site storm water capture, and by limiting the portion of landscapes that can be covered in turf. It also established a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013. The California Department of Water Resources (DWR) updated the MWELO in December 2015 to incorporate these elements and the emergency drought regulations set forth by EO B-29-15, which establish improved efficiency standards for water appliances.

24. Senate Bill X7-7 (Water Conservation Act of 2009)

The Water Conservation Act of 2009 sets an overall goal of reducing per-capita urban water use by 20 percent by December 31, 2020. The State is required to make incremental progress toward this goal by reducing per-capita water use by at least 10 percent by December 31, 2015. This in an implementation measure of the Water Sector of the AB 32 Scoping Plan. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convey, treat, and distribute the water; it also reduces emissions from wastewater treatment.

The Department of Water Resources adopted a regulation on February 16, 2011, that sets forth criteria and methods for exclusion of industrial process water from the calculation of gross water use for purposes of urban water management planning. The regulation would apply to all urban retail water suppliers required to submit an Urban Water Management Plan, as set forth in the California Water Code, (specifically, Division 6, Part 2.6, Sections 10617 and 10620).

25. Senate Bill 97 (State CEQA Guidelines)

SB 97 required OPR to prepare amended the State CEQA Guidelines for submission to the California Natural Resources Agency (CNRA) regarding GHG analysis and feasible mitigation of the effects of GHG emissions as required by CEQA. These amendments became effective as of March 18, 2010. The adoption of SB 97 and subsequent CEQA amendments are widely recognized as confirmation that lead agencies are required to include an analysis of climate change impacts in CEQA documents.

26. CEQA Amendments

Pursuant to SB 97, the Office of Planning and Research (OPR) developed proposed amendments to the State CEQA Guidelines (CEQA Amendments) for the feasible mitigation of GHG emissions and their effects, which it first submitted to the Secretary of the CNRA on April 13, 2009. After a public review and comment period, on December 30, 2009, the CNRA adopted the CEQA Amendments, which became effective on March 18, 2010.

The CEQA Amendments for Greenhouse Gas Emissions state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Amendments note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards". Section 15064.4(b) provides that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment:

- The extent a project may increase or reduce GHG emissions as compared to the environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

In addition, Section 15064.7(c) of the CEQA Amendments specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." Similarly, the revisions to Appendix G, Environmental Checklist Form, which is often used as a basis for lead agencies' selection of significance thresholds, does not prescribe specific thresholds. Rather, Appendix G asks whether the project would conflict with a plan, policy or regulation adopted to reduce GHG emissions or would generate GHG emissions that would significantly affect the environment, indicating that the determination of what is a significant effect on the environment should be left to the lead agency.

Accordingly, the CEQA Amendments do not prescribe specific methodologies for performing an assessment; they do not establish specific thresholds of significance; and they do not mandate specific mitigation measures. Rather, the CEQA Amendments emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA.

The CEQA Amendments indicate that lead agencies should consider all feasible means, supported by substantial evidence and subject to monitoring and reporting, of mitigating the significant effects of GHG emissions. As pertinent to the Project, these potential mitigation measures, set forth in Section 15126.4(c), may include (1) measures in an existing plan or mitigation program for the reduction of GHG emissions that are required as part of the lead agency's decision; (2) reductions in GHG emissions resulting from a project through implementation of project design features; (3) off-site measures, including offsets, to mitigate a project's emissions; and (4) carbon sequestration measures.

27. South Coast Air Quality Management District

On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold for projects where the SCAQMD is the lead agency. Currently, the SCAQMD Governing Board has only adopted thresholds relevant to industrial (stationary source) projects. To achieve a policy objective of capturing 90 percent of GHG emissions from new residential/commercial development projects and implement a "fair share" approach to reducing emission increases from each sector, SCAQMD staff have proposed as a draft approach combining performance standards and screening thresholds. At this time, the SCAQMD has not adopted any significance thresholds for new residential, commercial, or mixed use development projects.

28. San Bernardino Regional Greenhouse Gas Reduction Plan

In March 2014, the San Bernardino Associated Governments (SANBAG) and Participating San Bernardino County Cities Partnership (Partnership) created a final draft of the San Bernardino County Regional Greenhouse Gas Reduction Plan (Reduction Plan). This Reduction Plan was created in accordance to AB 32, which established a greenhouse gas limit for the state of California. The Reduction Plan seeks to create an inventory of GHG gases and develop jurisdiction-specific GHG reduction measures and baseline information that could be used by the 21 Partnership Cities of San Bernardino County (which includes the City of Colton) to create community climate action plans (CAPs). (Urban Crossroads, Inc., 2016c, p. 34)

29. City of Colton Climate Action Plan

The City of Colton adopted a Climate Action Plan (CAP) on November 3, 2015. The CAP contains further guidance on the City of Colton's GHG Inventory reduction goals, policies, guidelines, and implementation programs. The purpose of the CAP is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City of Colton. The CAP builds upon the Reduction Plan to address City-specific information and City-specific GHG reduction measures. The Reduction Plan was utilized by the City's CAP for the following purposes (City of Colton, 2015c, pp. 1-2 through 1-3):

- Establish a baseline GHG inventory for the City and the region as a whole;
- Provide a template for the CAP document;
- Provide a forecast of future GHG emissions;
- Identify a GHG reduction goal;
- Establish measures to reduce GHG emissions;
- Implement actions to ensure the effectiveness of the GHG reduction measures;
- Monitor success of the CAP; and
- Methods for adapting and revising the plan to meet adopted goal(s).

Additionally, the City's CAP tiers from the Programmatic EIR for environmental review of the City's CAP.

To address the state's requirement to reduce GHG emissions, the City prepared its CAP with the goal of reducing City-wide GHG emissions by 15 percent below 2008 levels by the year 2020. The City's target is consistent with the AB 32 target and ensures that the City of Colton will be providing GHG reductions locally that will complement state efforts to reduce GHG emissions.

As part of the CAP, the City of Colton published a guidance document titled "Greenhouse Gas Emissions, Screening Tables." As part of this guidance, the City determined the size of proposed development that is too small to be able to provide the level of GHG emission reductions expected from the Screening Tables or alternate emissions analysis method. The City's analysis determined that the 3,000 $MTCO_2e$ per year value be used in defining small projects that are considered less than significant and do not need to use the Screening Tables or alternative calculations.

In addition to establishing a City-wide GHG reduction goal of 15 percent below 2008 levels by 2020, the CAP establishes a GHG performance standard specifically applicable to new development projects. Pursuant to section 4.4.8.1 of the City's CAP, proposed projects that would exceed the 3,000 $MTCO_2e$ of GHG emissions per year must reduce their GHG emissions by 25 percent below year 2008 BAU emission levels (the "Performance Standard"). Per the CAP, a project can demonstrate compliance with the Performance Standard by achieving a minimum of 75 points pursuant to the CAP Screening Tables. The CAP Screening Tables include a menu of energy-efficiency and GHG-reduction measures from which project applicants can choose so as to tailor GHG reduction options to the project's needs, rather than subject every project to one-size fits all reduction measures that may be inappropriate for any particular project. (Urban Crossroads, Inc., 2016c, p. 39)

30. City of Colton General Plan

The City of Colton General Plan establishes various goals and policies intended to increase energy efficiency, conserve water resources, reduce air emissions, enhance solid waste recycling, and promote land use patterns that reduce vehicular airborne emissions. EIR Subsection 4.9, *Land Use and Planning*, discusses these goals and policies in further detail, and also evaluates the Project's consistency with these policies. Refer to EIR Subsection 4.9 for additional detail on the General Plan goals and policies that pertain to greenhouse gas emissions.

31. City of Colton Municipal Code

The purpose of Chapter 13.28 of the Colton Municipal Code is to adopt a Water Conservation Plan that establishes mandatory water conservation measures aimed at conserving City water supplies for the greatest public benefit and reducing the quantity of water used by the City's water customers. Chapter 13.28 contains criteria for determining water supply conditions in the City that require implementation or termination of each water conservation stage (i.e., Stage I, Stage II, and Stage III). Stage I is in effect at all times unless the Colton City Council otherwise declares that another water conservation stage is in effect. Stage III ("Water Warning") was added to the City's Water Conservation Plan in response to the issuance of Executive Order B-29-15 in April 2015, and identifies

mandatory measures to be implemented during drought periods when the City is not able to meet all of the water demands of its customers. (City of Colton , 2016a, Chapter 13.28)

Additionally, Section 12.20.040 of the City of Colton Municipal Code includes a Street Tree Ordinance (Chapter 12.20, *Trees and Shrubs*) which requires permission from the Recreation and Parks Director be obtained to disturb or modify any tree, shrub or plant within a public street, planting strip, parkway or alley in the City (City of Colton, 2016a, Section 12.20.040).

4.6.3 METHODOLOGY FOR CALCULATING GREENHOUSE GAS EMISSIONS

Per CEQA Guidelines § 15064.4(b)(1), a CEQA lead agency may use a model or methodology to quantify GHG emissions associated with a project. On October 2, 2013, the California Air Pollution Control Officers Association (CAPCOA) released the latest version (v2013.2.2.) of the California Emissions Estimator Model (CalEEMod). The purpose of this model is to more accurately calculate construction-source and operational- source criteria pollutant (NO_x, VOC, PM_{10}, $PM_{2.5}$, SO_x, and CO) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. As such, the October 2013 (v2013.2.2.) CalEEMod was used to estimate Project-related emissions to determine construction and operational air quality emissions. The CalEEMod trip length default values were used for calculating the Project's vehicle-related greenhouse gas emissions. Output from the model runs for both Project-related construction and operational activity are provided in Appendix 3.1 of *Technical Appendix E*. (Urban Crossroads, Inc., 2016c, p. 43)

Due to the lack of consensus scientific guidance on life-cycle analysis (LCA) methodology, Urban Crossroads, Inc. did not conduct a LCA, which assesses economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the project development and infrastructure. A LCA depends on emission factors or econometric factors that are not well established for all processes as of the date this EIR was written (2016); accordingly, a LCA would be extremely speculative. Additionally, the science to calculate life-cycle emissions is not yet established or well defined, therefore SCAQMD has not recommended and is not requiring life-cycle emissions analysis. (Urban Crossroads, Inc., 2016c, p. 43)

4.6.4 METHODOLOGY FOR CALCULATING PROJECT-RELATED CONSTRUCTION EMISSIONS

Construction activities associated with the proposed Project would result in emissions of CO_2 and CH_4. The Project's construction activities are described in EIR Section 3.0, *Project Description.* The activities that would produce air pollutant emissions would include but not be limited to mass/fine grading, building construction, architectural coatings (painting), paving, and construction worker commuting.

Information about the Project's anticipated construction schedule and equipment fleet, as supplied by the Project Applicant and summarized in EIR Section 3.0, was input into the CalEEMod model and defaults for all other assumptions were utilized. Refer to Appendix 3.1 of *Technical Appendix E* of

this EIR for more details on the construction emissions estimate methodology. Refer also to the specific detailed modeling inputs/outputs contained in Appendix 3.1 of *Technical Appendix E.* A summary of the construction equipment assumptions by phase that were used as model inputs is provided in Section 3.0, *Project Description*.

For construction-phase Project GHG emissions, the Project's emissions were quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by the a 30-year project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. (Urban Crossroads, Inc., 2016c, p. 43)

4.6.5 METHODOLOGY FOR CALCULATING PROJECT-RELATED OPERATIONAL EMISSIONS

Operational activities associated with the proposed Project would result in emissions of CO_2, CH_4, and N_2O from the following primary sources.

- Area Source Emissions (fuel used for fireplaces, landscaping equipment)
- Energy Source Emissions (electricity and natural gas use)
- Mobile Source Emissions (motor vehicle operation)
- Solid Waste (waste deposited at landfills)
- Water Supply, Treatment and Distribution (electricity used to provide water and wastewater services)

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in the CalEEMod model. (Urban Crossroads, Inc., 2016c, p. 44)

Combustion Emissions Associated with Natural Gas and Electricity

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Unless otherwise noted in Appendix 3.1 of *Technical Appendix E*, CalEEMod default parameters were used. (Urban Crossroads, Inc., 2016c, p. 44)

Vehicles

GHG emissions would result from mobile sources associated with the Project. These mobile source emissions would result from the typical daily operation of motor vehicles by Project residents.

Information related to the Project's daily vehicle trip generation rates was obtained from the Project's traffic impact analysis (refer to *Technical Appendix L*). (Urban Crossroads, Inc., 2016c, p. 44)

Solid Waste

Residential land uses will result in the generation and disposal of solid waste. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed Project were calculated by the CalEEMod model using default parameters. (Urban Crossroads, Inc., 2016c, p. 44)

Water Supply, Treatment, and Distribution

Indirect GHG emissions result from the production of electricity used to convey, treat and distribute water and wastewater. The amount of electricity required to convey, treat and distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used in the Project's GHG analysis (*Technical Appendix E*). (Urban Crossroads, Inc., 2016c, p. 45)

4.6.6 BASIS FOR DETERMINING SIGNIFICANCE

In order to assess the significance of a proposed Project's environmental impacts it is necessary to identify quantitative or qualitative thresholds which, if exceeded, would constitute a finding of significance. As discussed above in Subsection 4.6.1, while estimated Project-related GHG emissions can be quantified, the direct impacts of such emissions on GCC and global warming cannot be determined on the basis of available science. There is no evidence at this time that would indicate that the emissions from a project the size of the proposed Project would directly or indirectly affect the global climate.

AB 32 states, in part, that "[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." Because global warming is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, the proposed Project would have no potential to result in a direct impact to global warming; rather, Project-related contributions to GCC, if any, only have potential significance on a cumulative basis. Therefore, the analysis below focuses on the Project's potential to contribute to GCC in a cumulatively considerable way.

The CEQA Guidelines indicate that a project would result in a significant impact on climate change if a project were to:

> *a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or*

b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Neither the CEQA statute nor the CEQA Guidelines prescribe specific methodologies and significance criteria for determining the significance of GHG emissions impacts. The CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate thresholds consistent with the manner in which other impact categories are handled in CEQA. CEQA case law has upheld local agencies' discretion to determine the significance of GHG emissions impacts.

Under "Threshold a)" this impact analysis evaluates consistency with the City of Colton's CAP and consistency with SCAG's RTP/SCS as the primary significance criteria. Under "Threshold b)," this impact analysis evaluates consistency with regulatory programs designed to reduce GHG emissions and that contribute to the achievement of AB 32's greenhouse gas reduction goals as the primary significance criterial. Therefore, this impact analysis utilizes the "potential compliance pathways" described by the California Supreme Court in the *Newhall Ranch* decision, namely compliance with a local climate action plan and/or other geographically specific GHG emission reduction plans (i.e., the City of Colton CAP, the SCAG RTP/SCS); and compliance with regulatory programs designed to reduce GHG emissions and that contribute to the achievement of AB 32's goals.

4.6.7 IMPACT ANALYSIS

Threshold a)	***Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

As discussed in the *Newall Ranch* court decision, a Lead Agency may assess the significance of GHG emissions by determining a project's consistency with a local GHG reduction plan or CAP that qualifies under Section 15183.5 of the CEQA Guidelines, and/or other geographically specific GHG emission reduction plans. The City of Colton's CAP and the SCAG RTP/SCS serves to fulfill this role. (Urban Crossroads, Inc., 2016c, p. 47)

Project Consistency with the City of Colton CAP

The City of Colton CAP is designed to ensure that the development accommodated by the buildout of the Colton General Plan supports the goals of AB 32, which, in conjunction with CARB's Climate Change Scoping Plan (Scoping Plan), aims to reduce GHG statewide emissions to 1990 levels by 2020. The City of Colton CAP includes strategies that will achieve this target through aiming to reduce City-wide emissions to 15 percent below 2008 levels by 2020, which is the amount recommended in the CARB Scoping Plan for local government. This is roughly equivalent to 28.4 percent overall reduction in statewide emissions from BAU in 2020. The strategy will continue to provide reductions past 2020 and includes a commitment to update the CAP in 2017. The updated CAP will include a specific target for GHG reductions for 2035 and 2050 which will be consistent with broader state and federal reduction targets for reductions by 2050. The CAP includes analysis that includes the conceptual reductions required to achieve the percent reductions that would be required to achieve the levels needed to achieve the 2050 target outlined in Executive Order S-3-05, but the CAP does not include a

comprehensive strategy to achieve the later targets pending adoption of a statewide strategy for those later years. (Urban Crossroads, Inc., 2016c, p. 47)

As discussed above, the CAP also establishes a GHG-reduction Performance Standard specifically applicable to new development projects. Per the CAP, if a proposed project would exceed 3,000 $MTCO_2e$ of GHG emissions per year, the CAP requires the project to reduce its GHG emissions by 25 percent below year 2008 BAU emission levels. Per the CAP, a new development project can demonstrate compliance with the Performance Standard by achieving a minimum of 75 points pursuant to the CAP Screening Tables. The CAP Screening Tables include a menu of energy-efficiency and GHG-reduction measures from which project applicants can choose so as to tailor GHG reduction options to the project's needs, rather than subject every project to one-size fits all reduction measures that may be inappropriate for any particular project. The point values in the CAP Screening Tables were derived from the projected emissions reductions that would be achieved by each of the GHG reduction measures associated with new development within the City of Colton and described in the CAP Screening Tables.

The points within the Screening Tables were proportioned by residential unit or square feet of commercial/industrial uses. This was accomplished by taking the predicted growth in households and commercial uses in 2020 and proportioning the appropriate reduction quantities for new development to the residential, commercial, and industrial land use sectors within the Screening Table. The result is point values that are proportioned by residential unit or commercial/industrial square feet. Because of this, the size of a project is not relevant to the Screening Table. Regardless of size, to demonstrate compliance with the Performance Standard using the CAP Screening Tables, each project needs to select and implement a suite of GHG-reduction measures from the Screening Table List that would collectively achieve 75 points. (Urban Crossroads, Inc., 2016c, p. 49)

Within the City, approximately 3,618 $MTCO_2e$ of city-wide greenhouse gas emissions will be reduced by requiring new development to achieve the Performance Standard described in the CAP. The Performance Standard is implemented through use of the point allocation system within the CAP Screening Tables, which amounts to a 3,618 $MTCO_2e$ reduction in GHG emissions. (Urban Crossroads, Inc., 2016c, p. 49)

The first step in allocating point values is to determine the number of new homes and commercial buildings that are anticipated to be built within the City by the year 2020. The City predicts that 2,887 new residential units will be needed by 2020 to accommodate the population growth by 2020 and a total of approximately 1,506,000 square feet of new commercial and industrial buildings within the City is needed to accommodate anticipated job growth. (Urban Crossroads, Inc., 2016c, p. 49)

Approximately 2,887 new residential units and 1,506,000 square feet of new commercial and industrial buildings within the City is anticipated to either use the screening tables or provide an independent analysis demonstrating reductions needed to achieve the Performance Standard. Evaluating the growth in residential and commercial/industrial land uses, approximately 78% is attributable to residential and

22% attributable to commercial/industrial land uses. Using those land use growth ratios, the Performance Standard will reduce 2,822 $MTCO_2e$ from new residential development and 796 $MTCO_2e$ from new commercial/industrial development by 2020. (Urban Crossroads, Inc., 2016c, p. 49)

Dividing the 2,822 $MTCO_2e$ reductions of emissions afforded by the Screening Table implementation of the Performance Standard for new residential development by the anticipated 2,887 new residential units that will be built by 2020 yields a reduction of 0.97 $MTCO_2e$ per residential unit to fulfill GHG emissions reduction proposed by the City's CAP. A similar process was performed for commercial/industrial uses, which resulted in a necessary reduction of 0.54 $MTCO_2e$ per 1,000 gross square feet of commercial/industrial building area. (Urban Crossroads, Inc., 2016c, pp. 49-50)

Levels of reduction efficiency for typical residential units within this climate zone yields 0.012 $MTCO_2e$ per point per residential unit and 0.007 $MTCO_2e$ per point per 1,000 square feet of gross commercial/industrial building area. Accordingly, since each residential unit needs to reduce 0.97 $MTCO_2e$ and each 1,000 square feet of commercial/industrial building area needs to reduce 0.54 $MTCO_2e$, each project needs to achieve a Screening Table score of 75 points to achieve the GHG reductions prescribed in the Performance Standard. (Urban Crossroads, Inc., 2016c, p. 50)

Pursuant to the CAP, projects that achieve at least 75 points based on the City's screening tables are determined to be consistent with the reduction quantities anticipated in the City's CAP, and further project-specific GHG quantification would not be required. Consistent with CEQA guidelines and the *Newhall Ranch* decision, such projects determined to be consistent with the CAP would have a less-than-significant impact for GHG emissions. (Urban Crossroads, Inc., 2016c, p. 50)

In order to enforce the requirements of the CAP Screening Tables, Mitigation Measure MM 4.6-1 requires that the Project implement a suite of GHG-reduction measures as necessary to achieve a score of at least 75 points from the City of Colton GHG Emissions Screening Tables. Therefore, with implementation of Mitigation Measure MM 4.6-1, the Project would be required implement a suite of GHG-reducing project design features that together achieve a minimum 75-point screening table score and therefore satisfy the CAP Performance Standard. (Urban Crossroads, Inc., 2016c, p. 50)

A summary of the proposed Project's estimated annual operational GHG emissions, including the amortized construction emissions is provided in Table 4.6-5, *2008 Total Project GHG Emissions (Annual)*. This represents the BAU scenario, which does not take into account applicable regulatory developments since 2008 (as discussed in Subsection 4.6.6, above) and the Project design features (discussed in EIR Subsection 4.2, *Air Quality*) or mitigation measures that would reduce GHG emissions from direct and indirect sources. As summarized in Table 4.6-5, GHG emissions for the Project's BAU scenario are calculated to be 22,259.91 total CO_2e per year. The primary source of Project-related GHG emissions would occur from mobile sources (i.e., passenger cars traveling to and from the Project site).

Table 4.6-5 2008 Total Project GHG Emissions (Annual)

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total CO_2E
Annual construction-related Emissions amortized over 3 years	251.98	0.03	--	252.51
Area	343.54	0.35	7.57E-03	353.33
Energy	4,247.98	0.14	0.05	4,267.77
Mobile Sources	15,892.26	1	--	15,913.26
Waste	367.57	21.72	--	823.74
Water Usage	575.54	2.56	0.06	649.3
Total CO_2E (All Sources)	**22,259.91**			

Note: Totals obtained from CalEEMod modeling data and may not total 100% due to rounding.
Table results include scientific notation *e* is used to represent times ten raised to the power of (which would be written as x 10^{b}") and is followed by the value of the exponent.
[a] Includes emissions of landscape maintenance equipment and architectural coatings emissions
[b] Includes emissions of natural gas consumption
[c] Includes emissions of vehicle emissions and fugitive dust related to vehicular travel
Source: (Urban Crossroads, Inc., 2016c, Table 3-1)

Project compliance with applicable regulatory requirements that have gone into effect since 2008 (discussed below) would reduce the Project's annual GHG emissions by approximately 5,778.76 total CO_2e, which corresponds to an approximately 25.96-percent reduction in GHG emissions as compared to the BAU scenario, thereby satisfying the GHG emissions reduction mandate of the Colton of Colton's CAP. Because the modeling utilized in this analysis is based on 2013 CALGreen building requirements, and because the 2016 CALGreen building requirements are more stringent, the development of the Project based on 2016 CALGreen requirements would result in a corresponding decrease in GHG emissions compared to the quantities identified in this analysis. The Project's total annual GHG emissions, when accounting for applicable regulatory requirements that have gone into effect since 2008, Project design features, and the mitigation measures set forth in this EIR, are calculated to be 16,481.15 total CO_2e or approximately 25.96 percent below the Project's 2008 GHG emissions levels (BAU scenario) (see Table 4.6-6, *2020 Total Project Greenhouse Gas Emissions (Annual)*, for detail). Because the Project would be required by Mitigation Measure MM 4.6-1 to demonstrate that the Project would implement Project design features that together achieve at least 75 points from the City of Colton's Greenhouse Gas Emissions Screening Tables, the Project would satisfy the CAP Performance Standard for new development and thus would be consistent with the CAP. In accordance with the CEQA guidelines and the *Newhall Ranch* decision, projects determined to be consistent with an applicable climate action plan would have a less-than-significant impact for GHG emissions.

Table 4.6-6 2020 Total Project Greenhouse Gas Emissions (Annual)

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total CO_2E
Annual construction-related emissions amortized over 30years	251.98	0.03	--	252.51
Area	269.84	2.00E-02	4.62E-03	271.73
Energy	3,028.99	0.13	0.05	3,046.17
Mobile Sources	12,050.94	0.41	--	12,059.58
Waste	183.78	10.86	--	411.87
Water Usage	365.71	2.56	0.06	439.29
Total CO_2E (All Sources)	**16,481.15**			

Source: (Urban Crossroads, Inc., 2016c, Table 3-2)

Project Consistency with the SCAG RTP/SCS

As discussed in Section 4.9.3, the Project is consistent with the 2016 RTP/SCS, as demonstrated by its inclusion within the growth projections for the City of Colton assumed by the 2016 RTP/SCS. The 2016 RTP/SCS projects a 1.1% average annual population growth rate in the City between 2012 (population 52,800) and 2040 (population 69,100), which includes a projected 2030 population of 64,361 (SCAG, 2016a, Appendix Table 11). According to the City of Colton General Plan, which has a planning horizon that extends to 2030, buildout of the City planning area will accommodate a population of 67,182 (City of Colton, 2013a, Table LU-1). Thus, the City population growth projected by the 2016 RTP/SCS during the period in which the Project would be constructed and become operational is accommodated by the capacity of the General Plan. Moreover, the 2016 RTP/SCS includes population projections in Traffic Analysis Zone (TAZ) maps. The TAZ area that includes the Project site is projected to grow in population from 4,489 in 2020 to 6,901 in 2035 (SCAG, 2016a, Background Documentation Appendix). This represents an average annual growth rate of 2.28% within the TAZ, almost three times the City annual average growth rate. Indeed, the resident population of the Project at buildout (i.e., 3,633) represents only 52.6% of the projected resident population of the TAZ by 2035. Accordingly, the Project is consistent with TAZ projections for the area that includes the Project site, which are also reflected in in the corresponding figures included in SCAG's 2016 RTP/SCS (SCAG, 2016a, Background Documentation Appendix). Since Project development is within the growth projections assumed by the 2016 RTP/SCS, the Project is consistent with the 2016 RTP/SCS and would not conflict with its greenhouse gas reduction goals. Consistent with CEQA guidelines and the *Newhall Ranch* decision, projects determined to be consistent with the applicable sustainable communities strategy prepared in accordance with SB 375 would have a less-than-significant impact for GHG emissions.

Threshold b) Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

AB 32 is the State of California's primary GHG emissions regulation. The City of Colton's CAP was designed to further GHG emissions reduction efforts at the local level and to ensure compliance with the emissions reductions requirements outlined in AB 32. Therefore, if a project reduces its GHG emissions to a level that is 25-percent below its 2008 GHG emissions levels, it can be assumed to comply with both the City's CAP and AB 32. Because the proposed Project would reduce its GHG emissions to a level that is approximately 25.96-percent below its 2008 GHG emissions levels (refer to the analysis under Threshold a) above) the Project would not conflict with the City of Colton's CAP or with the State's ability to achieve the reduction targets defined in AB 32.

A. Consistency with the CARB Scoping Plan

In addition, to comply with the City of Colton CAP (discussed under "Threshold a)", above), the Project would comply with applicable regulations designed to reduce GHG emissions, thus contributing to the achievement of the GHG reduction goals of AB 32 and the Scoping. Some regulatory measures were promulgated prior to or independently of AB 32, and others were identified in CARB's 2008 Scoping Plan and promulgated subsequent to approval of the Scoping Plan.

The CARB Scoping Plan provides the State's overall strategy in the form of measures that apply to emission sectors that comprise the State's greenhouse gas emission inventory. The Scoping Plan is designed to achieve the AB 32 mandates through implementing source-specific regulations adopted by State agencies such as CARB, and the California Energy Commission (CEC). The Scoping Plan envisions a limited role for local government in implementing the State's GHG reduction strategy focusing on local government's authority over land use and some transportation projects. (Urban Crossroads, Inc., 2016c, p. 53)

Under the CARB Scoping Plan, development projects are assessed for direct emissions from combustion of fuels for heating buildings and indirect emissions for fuel use from transportation activities associated with the project. Development projects are also end users of electricity that is often generated by power plants that are located far from the project site. Project emissions from electricity consumption are based on the projected use and the average emission rate for the electric utility serving the project. (Urban Crossroads, Inc., 2016c, pp. 52-53)

The regulations implementing the Scoping Plan apply directly to the Project in regards to energy efficiency of the buildings, water conservation, and refrigerant usage. Scoping Plan measures regarding motor vehicle fuel efficiency apply to vehicle manufacturers, but result in lower emissions from vehicles accessing the project site. The Renewable Portfolio Standard applies to electric utilities, but reduce emissions related to electricity used by the Project. Transportation sector measures from the Scoping Plan are also implemented through SB 375 ("The Sustainable Communities and Climate Protection Act of 2008") which targets emissions from the transportation system through actions that make transportation more efficient at the regional level. Individual development projects have no

direct requirements from SB 375 but may benefit from being located in areas designated as Transit Priority Areas and from system-wide infrastructure improvements that reduce congestion and improve traffic flow for all system users. (Urban Crossroads, Inc., 2016c, p. 53)

Development projects are constructed to accommodate California's population and economic growth accounted for by the Scoping Plan. As described above, the regulations implementing the Scoping Plan touch many of the operations of the buildings and the day-to-day activities of people that will work and shop at the Project. The Project Applicant is directly impacted by building energy efficiency and conservation regulations that must be followed during construction activities. (Urban Crossroads, Inc., 2016c, p. 53)

The Project's significance with respect to consistency with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions have been evaluated below and is organized by the following emission source categories:

- Transportation/Mobile Sources
- Energy Use
- Water Supply, Treatment, and Distribution
- Waste Diversion

1. Transportation/Mobile Sources

Approximately 70 percent of the Project's opening year GHG emissions as summarized in Table 4.6-6 are from transportation (mobile sources). Transportation emissions are heavily regulated at the source, including, but not limited to engine emissions standards and fuel requirements. Because these regulations and policies reduce GHG emissions at the source, the Project will be subject to and therefore not conflict with these transportation measures. Adopted regulations that will reduce the Project's GHG emissions through engine emission standards and fuel requirements include the California Light-Duty Vehicle Greenhouse Gas Standards, which would require any passenger vehicles associated with construction and operation of the Project to comply with the Pavley emissions standards. Additionally, the Project would comply with Executive Order S-01-07 (Low Carbon Fuel Standard [LCFS]) through utilizing the emissions reductions through 2020 that result from a reduction in the carbon intensity of transportation fuels used in California by at least 10 percent by 2020, which would reduce GHG emissions from all operational mobile emissions sources. Motor vehicles associated with construction and operation of the project would utilize low carbon transportation fuels as required under this measure. The Project would also reduce its GHG emissions through compliance with the Heavy-duty Vehicle Greenhouse Gas Regulation (Drayage Truck Regulation and Truck and Bus Regulation), which were collectively adopted to address and reduce emissions from medium and heavy-duty vehicles. The Project is consistent with this measure and its implementation as medium and heavy-duty vehicles associated with construction and operation of the Project would be required to comply with the requirements of this regulation. (Urban Crossroads, Inc., 2016c, pp. 54-55)

The Cap-and-Trade Program under the CARB Scoping Plan covers transportation fuel suppliers to address emissions from fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. Accordingly, virtually all of GHG emissions from the Project associated with vehicle miles traveled (VMT) are covered by the Cap-and-Trade Program. However, based on policies put forward by the San Joaquin Valley Air Pollution Control District (SJVAPCD), GHG emissions associated with VMT cannot constitute significant increases under CEQA. Since the proposed Project has a large mobile source component and Cap-and-Trade emission reductions are difficult to calculate on a project-level, the proposed Project's mobile source emissions are very conservative, making the total emission calculations conservative. The phase-in of the Cap-and-Trade Program compliance obligations for transportation fuel providers further reduces GHG emissions attributable to mobile sources, beyond the GHG emissions reductions achieved and modeled by the Pavley Standard and LCFS. (Urban Crossroads, Inc., 2016c, pp. 55-56)

2. Energy

Energy consumption from electricity and natural gas makes up the second largest source of the Project's GHG emissions (almost 20 percent) shown in Table 4.6-6. State Regulations/Scoping Plan Measures that address energy-related GHG emissions are heavily regulated at the source, and include, but are not limited to energy efficiency standards and renewable energy requirements. Because these regulations and polices reduce GHG emissions at the source, the Project will be subject to, and required to implement, these energy measures. (Urban Crossroads, Inc., 2016c, p. 56)

Energy Efficiency – Title 24/CALGreen

The CEC indicates that the 2013 Title 24 standards will reduce energy consumption by 30 percent above that achieved by 2008 Title 24. More specifically, based on a comparison of the required Title 24 reductions between 2008 and 2013, newly-constructed non-residential buildings result in an overall reduction of approximately 22 percent energy demand. Additionally, the 2013 Title 24 standards currently in effect yield an approximately 68 percent energy savings when compared with the 2005 Title 24 standards (pre-AB 32). (Urban Crossroads, Inc., 2016c, pp. 56-57)

The 2013 Title 24 standards was in effect when the NOP for this EIR was released in 2016; however, by the time the building permits are processed for the proposed Project, the 2016 Title 24 standards will have taken effect (the 2016 Title 24 standards took effect on January 1, 2017). The GHG analysis herein did not take any credit for implementation of the more restrictive 2016 Title 24 standards, which the CEC estimates will provide 5 percent electric energy savings from non-residential buildings compared to the 2013 Title 24 standards. The proposed Project is also subject to the CALGreen Code Title 24 building energy efficiency requirements that require upgraded windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. (Urban Crossroads, Inc., 2016c, p. 57)

Renewable Portfolio Standard

California's Renewable Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy sources to 33 percent of total retail sales by 2020 as established under SB 1078 and accelerated under SB 107 and SBX1-2. Additionally, SB 1368 prohibits any retail seller of electricity in California from entering into a long-term financial commitment for baseload generation if the GHG emissions are higher than those from a combined-cycle natural gas power plant. As a customer of Southern California Edison, the proposed Project would purchase from an increasing supply of renewable energy sources and more efficient baseload generations and thereby reduce GHG emissions. (Urban Crossroads, Inc., 2016c, p. 57)

Million Solar Roofs Program

The Million Solar Roofs Program set a goal to install 3,000 megawatts (MW) of new solar capacity by 2017. The Million Solar Roofs Initiative is a ratepayer-financed incentive program aimed at transforming the market for rooftop solar systems by driving down costs over time. The Project is consistent with this scoping plan measure as the Project will construct solar-ready roofs. (Urban Crossroads, Inc., 2016c, p. 57)

3. Water

GHG emissions also result from electricity consumption related to water supply, treatment, and distribution, as well as wastewater treatment. Less than 3 percent of total GHG emissions from the Project (see Table 4.6-6) would be related to water consumption. The RPS would increase electricity production from eligible renewable power sources to 33 percent by 2020. As a customer of Southern California Edison, the proposed Project would purchase from an increasing supply of renewable energy sources and more efficient baseload generations consistent with RPS and thereby reduce GHG emissions. The Model Water Efficient Landscape Ordinance (MWELO) was required by AB 1881, and required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. New development projects that include landscape areas of 500 square feet or more are subject to the Ordinance. The Project is required to comply with the MWELO (as required by the City of Colton) which would result in a minimum of 20 percent reduced water use for outdoor irrigation. The Project is consistent with this measure as it would result in a minimum 20 percent reduced water use pursuant to the Project design features identified herein (Urban Crossroads, Inc., 2016c, p. 58). The Project would also comply with the Title 24 Green Building Standards which include water efficiency requirements for new residential and non-residential structures, including the requirement that indoor potable water use be reduced by 20 percent through the use of water saving fixtures and/or flow restrictors, which compliance would further Project GHG emissions associated with water use.

4. Waste Diversion

Less than 3 percent of the Project-related GHG emissions shown on Table 4.6-6 are associated with disposal of solid waste in landfills. The CARB Scoping Plan recommends three measures for reducing

emissions from Municipal Solid Waste at the state level, including: 1) landfill methane control; 2) increase the efficiency of landfill methane capture; and 3) high recycling/zero waste. CARB is in the process of developing a discrete early action program for methane recovery (1), which was adopted in early 2010. This measure is expected to result in a 1.0 $MMTCO_2e$ reduction by 2020. Other measures proposed by CARB include increasing efficiency of landfill methane capture and instituting high recycling/zero waste policies. Implementation of the CALGreen code and state measures also reduce the amount of solid waste disposed of in landfills. The CALGreen code requires jurisdictions to divert a minimum of 50% of their nonhazardous construction and demolition waste from landfills. In addition, SB 341 amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the State that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter. The proposed Project is subject to these regulations as well as SB 341's policy goal and thereby would reduce GHG emissions through compliance with these regulations. (Urban Crossroads, Inc., 2016c, pp. 58-59)

B. Consistency with Executive Orders S-3-05 and B-30-15

Executive Orders S-3-05 and B-30-15 are orders from the State's Executive Branch for the purpose of reducing GHG emissions. The goal of Executive Order S-3-05 is to reduce GHG emissions to 1990 levels by 2020, which was codified by the Legislature as the 2006 Global Warming Solutions Act (AB 32). The Project, as analyzed above, is consistent with AB 32. Therefore, the Project does not conflict with this component of Executive Order S-3-05. The Executive Orders also establish goals to reduce GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. Demonstrating compliance with AB 32's target for 2020 also would show that the Project would not inhibit the City of Colton's ability to achieve the 2030 target established by SB 32, as the bulk of GHG reductions needed by 2030 would occur at the state and regional levels and compliance with the AB 32 threshold would demonstrate that the Project is on a trajectory to meet the 2030 SB 32 target.

The Scoping Plan recognizes that AB 32 establishes an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target set by these Executive Orders, and many of the emission reduction strategies recommended by CARB would serve to reduce the proposed Project's post-2020 emissions level to the extent applicable by law. These measures include: continued improvements in California's appliance and building energy efficiency programs and initiatives; additions to California's renewable resource portfolio; deployment of improved vehicle efficiency, zero emission technologies, lower carbon fuels, and improvement of existing transportation systems; further advancements in water conservation technologies; and improved programs associated with recycling, reuse and reduction of solid waste. Accordingly, taking into account the proposed Project's emissions, Project design features, standard measures and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the Project furthers the State's goals of reducing GHG emissions to 1990 levels by 2020 and achieving an 80-percent reduction below 1990 levels by 2050, and would not obstruct attainment of these GHG reduction goals. (Urban Crossroads, Inc., 2016c, pp. 59-60)

As evaluated herein, the Project is consistent with all applicable Scoping Plan goals and policies, and incorporates Project design features (discussed in EIR Subsection 4.2, *Air Quality*) and mitigation measures that go beyond the Scoping Plan requirements that would further minimize GHG emissions. The Project promotes the goals of the Scoping Plan and other regulatory programs to reduce GHG emissions through implementation of design measures that reduce energy consumption, and water consumption, and reduction in VMT. In addition, the Project is required to comply with the regulations described in this section that have been adopted to implement the CARB Scoping Plan and to achieve the AB 32 2020 GHG emissions reduction target and SB 32 2030 target. Therefore, the Project does not conflict with any plans to reduce GHG emissions and furthers the State's goals relative to GHG emissions reductions. Additionally, as discussed in Threshold a), the Project would not conflict with the City of Colton's CAP (with implementation of Mitigation Measure MM 4.6-1) or the SCAG RTP/SCS, or with the State's ability to achieve the reduction targets defined in AB 32 and SB 32, and would be consistent with the policies and plans listed above. Accordingly, impacts would be less than significant.

4.6.8 CUMULATIVE IMPACT ANALYSIS

GCC occurs as the result of global emissions of GHGs. An individual project such as the proposed Project does not have the potential to result in direct and significant GCC-related effects in the absence of cumulative sources of GHGs. The CEQA Guidelines also emphasize that the effects of GHG emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis (See CEQA Guidelines §15130[f]).

Accordingly, the Project-specific impact analysis provided within this Subsection reflects a cumulative impact analysis of the Project's GHG emissions, and concludes that because the proposed Project would achieve the City of Colton CAP's GHG emissions reduction goal through implementation of Mitigation Measure MM 4.6-1 and a 25.96 percent reduction in GHG emissions compared to BAU conditions. Additionally, the Project would not conflict with the GHG emissions reduction goals of the CARB Scoping Plan, AB 32, or SB 32. Through implementation of Mitigation Measure MM 4.6-1, the Project would not result in a cumulatively considerable emission of GHGs or a cumulatively considerable conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

4.6.9 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a): Potentially Significant Impact. The City's CAP identified screening tables where Projects that achieve at least 75 points are determined to be consistent with the reduction quantities specified in the City's CAP. If the Project does not achieve the 75 points outlined in the CAP's screening tables, the Project would result in significant impacts with respect to GHG emissions. The Project's annual GHG emissions are calculated to be approximately 16,481.15 total CO_2e, or 25.96-percent less than 2008 BAU conditions, which meet the minimum GHG emissions reduction (25 percent) required by the City's CAP. As such, the Project would not generate substantial GHG emissions – either directly or indirectly – that would have a significant impact on the environment.

Threshold b): Less-than-Significant Impact. The Project would meet the City's goal of reducing GHG emissions to a level that is 15 percent below BAU as established by their CAP via a 25.96 percent reduction in the Project's GHG emissions compared to 2008 BAU emissions. The City of Colton's CAP was designed to ensure compliance with AB 32, which is the primary plan for reducing GHG emissions in the State of California. Therefore, the Project would be consistent with the GHG reduction mandates of the AB 32. The Project would also be consistent with all other applicable plans, policies, and regulations related to the reduction of GHGs.

4.6.10 MITIGATION

To ensure that the Project would comply with the City's CAP over the lifetime of the Project buildout, the following mitigation measure is identified.

MM 4.6-1 Prior to issuance of building permits for each planning area, the Project Applicant shall provide documentation to the City of Colton Planning Division demonstrating that each planning area will implement Project design features that will achieve at least 75 points from the City of Colton's Greenhouse Gas Emissions Screening Tables, which shall include at least the following or equivalent to the following Screening Table measures:

Insulation

- Install "Modestly Enhanced," "Enhanced," or "Greatly Enhanced" insulation in walls, roof/attic of proposed structures.

Windows

- Install "Modestly Enhanced," "Enhanced," or "Greatly Enhanced" window insulation of proposed structures.

Cool Roof

- Install "Modest," "Enhanced," or "Greatly Enhanced" cool roofs at proposed structures.

Air Infiltration

- Install air barrier in exterior walls and caulking of proposed structures.
- Install Home Energy Rating Systems (HERS)-verified envelope leakage or equivalent in proposed structures.

Thermal Storage

- Install "Modest" or "Enhanced" thermal mass in proposed structures.

Heating / Cooling Distribution System

- Install "Modest (R-6)" or "Enhanced (R-8)" duct insulation in proposed structures.

- Install distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent).

Space Heating/ Cooling Equipment

- Install "Improved Efficiency," "High Efficiency," or "Very High Efficiency" HVAC systems in proposed structures.

Water Heaters

- Install "Improved Efficiency," "High Efficiency," or "Very High Efficiency" water heaters in proposed structures.
- Install Solar Pre-Heat System in proposed structures.

Daylighting

- Ensure all living spaces within the proposed residential structures have daylight (through use of windows, solar tubes, skylights, etc.).

Artificial Lighting

- Equip proposed residential structures with Efficient lights (25% of in-unit fixtures considered "high efficacy"), High Efficiency lights (50% of in-unit fixtures are high efficacy), or Very High Efficiency lights (100% of in-unit fixtures are high efficacy).

Appliances

- Install new Energy Star appliances (i.e., refrigerator dishwasher, or washing machine) at proposed residential structures.

Building Placement

- Design proposed buildings with north/south alignment to optimize natural heating, cooling, and lighting.

Shading

- Design proposed buildings so that at least 90% of south-facing glazing would be shaded by vegetation or overhangs at noon on June 21st.

Energy Star Homes

- Earn EPA Energy Star for Homes (version 3 or above) certification.

Independent Energy Efficiency Calculations

- Earn points through equipping proposed structures with other energy efficient design features that provide for greater efficiency beyond Title 24 Energy Efficiency Standards.

Photovoltaic Power

- Ensure that proposed residences are solar-ready homes.
- Utilize photovoltaic-generated energy to meet 10 percent or more of the project's power needs.

Wind Turbines

- Implement individual wind turbines at homes or collective neighborhood arrangements of wind turbines that would provide 10 percent or more of the project's power needs.

Off-site renewable energy project

- Supply an off-site renewable energy project that would provide the City with renewable energy.

Other Renewable Energy Generation

- Implement other innovative designs that would allow the project to source electricity from the generation of renewable energy.

Water Efficient Landscaping

- Limit conventional turf to less than 25% of required landscape area of the Project.
- Prohibit conventional turf (warm season turf to less than 50% of required landscape area and/or low water using plants are allowed).
- Plant only California Native Plants that require no irrigation or some supplemental irrigation.

Water Efficient Irrigation Systems

- Install low precipitation spray heads that dispense less than 0.75 inches per hour or utilize drip irrigation.
- Install weather-based irrigation control systems or moisture sensors (demonstrate 20% reduced water use).

Recycled Water

- Install recycled water connections (purple pipe) to irrigation system on-site.

Water Reuse

- Install gray water reuse system to collect gray water from clothes washers, showers and faucets for irrigation use.

Storm Water Reuse Systems

- Utilize innovative on-site storm water collection systems that filter and allow for reuse of storm water for other functions (i.e., supplemental irrigation water).

Potable Water

- Install water efficient showerheads (2.0 gallons per minute [gpm]).
- Install water efficient toilets (1.5 gpm).
- Install water efficient faucets (1.28 gpm).
- Install water efficient dishwasher (6 gallons per cycle or less).
- Install water efficient washing machine (water factor less than 5.5).
- Earn EPA WaterSense Certification.

Mixed-Use

- Provide a development pattern that includes a mix of complementary land uses that would reduce the need for vehicle trips.

Locate Residential Development near Local Retail Uses

- Locate residential developments within walking and biking distance of local retail to facilitate reduction of vehicle trips and/or vehicle miles traveled (VMT).

Other Trip Reduction Measures

- Implement other measures that reduce vehicle trips or VMT (must be supported with data from the project's TIA or other traffic data).

Bicycle Infrastructure

- Provide bicycle paths within Project boundaries.
- Provide bicycle path linkages between residential and other land uses.
- Provide bicycle path linkages between residential and transit.

Electric Vehicle Charging Infrastructure

- Accommodate for, or equip residential garages with, electric vehicle charging stations.

4.6.11 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a): Less-than-Significant Impact with Mitigation Incorporated. Through the Project's achievement of at least 75 points per the City of Colton CAP screening tables (ensured through

implementation of Mitigation Measure MM 4.6-1) and a 25.96-percent reduction in GHG emissions compared to 2008 BAU conditions, the Project would achieve consistency with the City of Colton CAP. Accordingly, with implementation of Mitigation Measure MM 4.6-1, the Project would result in a less-than-significant impact to climate change resulting from GHG emissions.

4.7 HAZARDS AND HAZARDOUS MATERIALS

The information and analysis presented in this Subsection is based in part on a technical study that was prepared for the Roquet Ranch Project by Leighton and Associates, Inc. (hereafter, "LAI"), titled "Phase I Environmental Site Assessment, Roquet Ranch, Northwest and Southeast of 2699 Maryknoll Drive, APNs 1167-021-05, 1167-011-02 and Portions of 1167-011-01 and 1167-021-01, City of Colton, San Bernardino County, California" (dated January 22, 2015) and available as *Technical Appendix H* to this EIR. This Subsection also is based on information contained in the City of Colton General Plan Land Use Element (City of Colton, 2013a), City of Colton General Plan Update EIR (City of Colton, 2013c), and Google Earth Pro (Google, 2016).

For the purposes of this EIR, the term "toxic substance" is defined as a substance which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may present an unreasonable risk of injury to human health or the environment. Toxic substances include chemical, biological, flammable, explosive, and radioactive substances.

For purposes of this EIR, the term "hazardous material" is defined as a substance which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may: 1) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, disposed of, or otherwise mismanaged; or 2) cause or contribute to an increase in mortality or an increase in irreversible or incapacitating illness. Hazardous waste is defined in the California Code of Regulations, Title 22, § 66261.3. The defining characteristics of hazardous waste are: ignitability (oxidizers, compressed gases, and extremely flammable liquids and solids), corrosivity (strong acids and bases), reactivity (explosives or generates toxic fumes when exposed to air or water), and toxicity (materials listed by the United States Environmental Protection Agency (USEPA) as capable of inducing systemic damage to humans or animals). Certain wastes are called "Listed Wastes" and are found in the California Code of Regulations, Title 22, §§ 66261.30 through 66261.35. Wastes appear on the lists because of their known hazardous nature or because the processes that generate them are known to produce hazardous wastes (which are often complex mixtures).

4.7.1 EXISTING CONDITIONS

A. Historical Review, Archival Review, Regulatory Records Review, and Field Reconnaissance

As part of the Phase I ESA, LAI assessed the site conditions on the Roquet Paving Company facility and surrounding property, located at 2699 Maryknoll Drive, which comprise a 25-acre portion of the southern area of the Project site. No site-specific investigation was performed on the remaining areas of the Project site due to the vacant nature of these remaining areas. Where applicable, information regarding the site characteristics of the remaining areas of the site were drawn from site photography, aerial maps, and available historical information.

1. Historical Review

LAI conducted a review of various sources of information to determine the historical use of the 25-acre southern portion of the Project site located at 2699 Maryknoll Drive, including a review of historical aerial photographs, historical USGS topographic maps, and the Environmental Data Resources (EDR)-Sanborn collection of maps. Please refer to *Technical Appendix H* for a detailed description of the historical research methodology and results of this research.

Based on a review of the historical aerial photographs included in *Technical Appendix H*, the southern and eastern portions of the Project site appear to have been used for agricultural purposes from as early as 1938 to as recently as 1966. The Roquet Paving Company facility appears on the southeast portion of the Project site from as early as 1973 to present day. Based on a review of the historical aerial photographs, the remaining portions of the Project site to the north remained undeveloped from the time of the first available aerial photograph taken in 1938 up to the present, and were not historically used for agricultural purposes. (LAI, 2015, p. 17)

2. Archival Review

In accordance with the American Society for Testing and Materials (ASTM) E-1527-13 standard for conducting Environmental Site Assessments, LAI reviewed available archival information pertaining to the Project site. A detailed description of the results of the archival research is provided in *Technical Appendix H*. No previous environmental reports were provided to LAI for review during preparation of the Phase I ESA (LAI, 2015, p. 13).

3. Regulatory Records Review

According to a review of regulatory records searched during the preparation of the Phase I ESA, the on-site Roquet Paving Company facility was listed as a small quantity hazardous waste generator; was listed as possessing an active San Bernardino County hazardous materials handler permit; and listed as having previously operated three underground storage tanks (USTs). The database listings did not identify the size, age, or contents of the USTs. As part of the Phase I ESA, LAI also requested records from the following regulatory agencies: DTSC (Cypress and Chatsworth Divisions), National Pipeline Mapping System (NPMS), RWQCB – Santa Ana Region, San Bernardino County Fire Department (SBCFD), and SCAQMD. Records were not found at the agencies contacted, with the exception of the SBCFD which reported possessing permits for the operation and removal of four USTs at the Roquet Paving facility located at 2699 Maryknoll Drive. LAI reviewed these records in more detail, which indicated the subject site operated four USTs: one 6,000-gallon motor vehicle fuel tank, one 1,000-gallon motor vehicle fuel tank, one 500-gallon motor oil tank, and one 500-gallon waste oil tank. The records review conducted by LAI also revealed applications for permits to remove four USTs in February 1989; however, no tank removal report(s) or soil investigation report(s) was identified during the file review. No other evidence of releases or violations at the subject site were identified during the regulatory records review conducted for the subject site. (LAI, 2015, p. 12)

4. Field Reconnaissance

Representatives of LAI conducted a site reconnaissance at the Project site on January 5, 2015 as part of Phase I ESA preparation. At the time of the site reconnaissance, the Project site was observed to be undeveloped except for the Roquet Paving Company facility and a water tank to the north of the Roquet Paving Company facility used for providing irrigation water to the Project site. According to the Phase I ESA, the Roquet Paving Company consisted of six structures which included two temporary construction trailer buildings used as offices; one workshop structure adjacent to the west of the offices that was being used for storage of parts and construction equipment and vehicle repair activities; and three cargo containers located to the west of the workshop building being used for records storage. The structures were located within a fenced, paved, construction yard.

A hazardous waste storage area was observed at the Roquet Paving Company facility that contained several drums of used motor oil, anti-freeze, and oil filters. A flammable materials storage cabinet was observed within the automotive repair shop on the Roquet Paving Company facility, which contained small quantities of acetone, mineral spirits, paint, and brake fluid. Within the automotive repair shop, two small aboveground storage tanks containing hydraulic fluid and motor oil were observed. Numerous smudge pots were observed on the Roquet Paving Company facility. The Phase I ESA also reported observing oil-stained soil in the equipment storage area on the south side of the Roquet Paving facility. A large stockpile of waste asphalt and soil was also observed on the Project site during the site reconnaissance, which according to the facility operator, is typically hauled off-site for disposal on a periodic basis. (LAI, 2015, pp. 18-21)

B. Airport Hazards

The Project site is located approximately 4.0 miles northeast from Flabob (private) Airport and approximately 6.0 miles southwest of the nearest runway at the San Bernardino International Airport. The Project site is not located within the Airport Influence Area (AIA) for the San Bernardino International Airport (City of San Bernardino, 2005, Figure LU-4).

C. Wildland Fire Hazards

According to the City's General Plan Update EIR, the Project site is located within a "Very High Fire Hazard Severity Zone" of a Local Responsibility Area (City of Colton, 2013c, Exhibit 4.8-2).

D. Applicable Environmental Regulations

Hazardous materials and hazardous wastes are regulated by various federal, state, and local regulations to protect public health and the environment. The section summarizes the overall regulatory framework governing hazardous materials management.

1. Federal Regulations

The United States Environmental Protection Agency (USEPA) is responsible for enforcing federal regulations that affect public health or the environment. The primary federal laws and regulations

related to hazardous materials include: the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); and the Superfund Act and Reauthorization Act (SARA). Federal regulations pertaining to hazardous materials and wastes are contained in the Code of Federal Regulations (40 CFR).

RCRA, which was enacted in 1976, is the principal federal law that regulates the generation, management, and transportation of hazardous materials and hazardous wastes. Other specific areas covered by the amendment include regulation of carcinogens; listing of hazardous wastes; permitting for hazardous waste facilities; and leaking underground storage tanks. The USEPA maintains lists of the facilities that generate or transport large quantities of hazardous materials.

CERCLA, enacted in 1980, is a federal law enacted to address abandoned hazardous substance facilities. This act also is referred to as the Superfund Act, and the sites listed under it are referred to as Superfund sites. In 1986, Congress passed the SARA. The SARA required Superfund actions to consider the standards and requirements found in other State and Federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased State involvement in every phase of the Superfund program; and increased the focus on human health problems posed by hazardous waste sites. SARA also required EPA to revise the Hazard Ranking System (HRS) to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the National Priorities List (NPL).

2. State Regulations

The California Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Boards (RWQCBs) are the primary state agencies charged with regulating hazardous materials in California. The RWQCBs are authorized to enforce the provisions of the Porter-Cologne Water Quality Control Act of 1969. The Porter-Cologne Water Quality Control Act gives the RWQCBs authority to require water quality investigations and remediation, if necessary, if groundwater or surface water of the state is threatened. The DTSC is authorized by the USEPA to regulate the management of hazardous waste.

California's hazardous materials laws incorporate federal standards but are often more stringent than comparable federal laws. The primary laws regulating hazardous materials in California include the California Hazardous Waste Control Law (HWCL), the state equivalent of RCRA, and the Carpenter-Presley-Tanner Hazardous Substance Account Act (HSAA), the state equivalent of CERCLA. State hazardous materials and waste laws are contained in the California Health and Safety Code and the California Water Code, and these regulations are contained in the California Code of Regulations, Titles 22 and 26.

The California Health and Safety Code (Division 20, Chapter 6.95, § 25500) establishes minimum statewide standards for Hazardous Materials Business Emergency Plans (HMBEPs). HMBEPs contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the state. Businesses are required to prepare a HMBEP if that business uses, handles,

or stores a hazardous material or an extremely hazardous material in quantities greater than or equal to the following: 1) 500 pounds of a solid substance; 2) 55 gallons of a liquid; 3) 200 cubic feet of compressed gas; 4) a hazardous compressed gas in any amount; or 5) hazardous waste in any quantity.

3. Local Regulations

Federal and state hazardous materials regulations require all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials to obtain a hazardous materials permit and submit a business plan to its local Certified Unified Program Agency (CUPA). The CUPA also ensures local compliance with all applicable hazardous materials regulations. The CUPA with responsibility for the City of Colton is the San Bernardino County Fire Department, Hazardous Materials Division (City of Colton, 2013c, p. 4.8-9). The San Bernardino County Fire Department, Hazardous Materials Division also manages the following hazardous waste programs: 1) Hazardous Materials Release Response Plans and Inventory; 2) California Accidental Release Program; 3) Underground Storage Tanks; 4) Aboveground Petroleum Storage Act/Spill Prevention, Control, and Countermeasure Plan; 5) Hazardous Waste Generation and Onsite Treatment; and 6) Hazardous Materials Management Plans and Inventory.

The City of Colton General Plan Safety Element includes principles and standards designed to minimize loss due to fires. Standard 1 limits development in high fire hazard areas. As shown on Exhibit 4.8-2 of the City of Colton General Plan Update EIR, the Project site is located within a "Very High Fire Hazard Severity Zone" of a Local Responsibility Area (City of Colton, 2013c, Exhibit 4.8-2). Standard 2 defines major arterials and freeways as evacuation routes during emergency situations.

The City of Colton has adopted the 2007 California Building Code, which defines specifications for exterior materials and construction methods for structures located in Wildland Urban Interface (WUI). These regulations pertain to any new building located within a "Very High Fire Hazard Severity Zone" of a Local Responsibility Area, or within a State Responsibility Area "Moderate-", "High-", or "Very High Fire Hazard Severity Zone". As stated above, the Project site is located within a "Very High Fire Hazard Severity Zone" of a Local Responsibility Area according to the City's General Plan Update EIR (City of Colton, 2013c, Exhibit 4.8-2).

4.7.2 BASIS FOR DETERMINING SIGNIFICANCE

The Project would be considered to have a significant impact associated with hazards and hazardous materials if it or any Project-related components would:

a. *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;*

b. *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;*

c. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;*

d. *Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, would it create a significant hazard to the public or the environment;*

e. *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 for people residing or working in the project area;*

f. *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;*

g. *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or*

h. *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.*

4.7.3 IMPACT ANALYSIS

Threshold a)	***Would the Project create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?***

Impacts Associated with Existing Site Conditions

Based on the Phase I ESA (*Technical Appendix H*) prepared for the Project site, the Project site contains hazardous materials associated with operations at the Roquet Paving Company facility. Through conducting a review of historical records, a regulatory database search, a site reconnaissance, and interviews with knowledgeable parties, the site-specific Phase I ESA identified several environmental concerns at the Project site that occur in the existing condition, which are described below.

The existing Roquet Paving facility contains structures and other improvements that were constructed in the 1970s. Due to the age of these structures, there is a potential that asbestos containing materials (ACMs) are present in the buildings. Asbestos is a carcinogen and is categorized as a hazardous air pollutant by the federal EPA. Federal asbestos requirements are found in National Emission Standards for Hazardous Air Pollutants (NESHAP) within the Code of Federal Regulations (CFR) Title 40, Part 61, Subpart M, and are enforced in the Project area by the SCAQMD. In conformance with the NESHAP, SCAQMD Rule 1403 establishes survey requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities. In the event that ACMs are present in the existing structures located on the property, then Rule 1403 requires notification of the SCAQMD prior to commencing any demolition or renovation activities. Rule 1403 also sets forth specific procedures for the removal of asbestos, and requires that an onsite representative trained in the requirements of Rule 1403 be present during the stripping, removing, handling, or disturbing of ACM. Mandatory compliance with the provisions of Rule 1403

would ensure that construction-related grading, clearing and demolition activities do not expose construction workers or nearby sensitive receptors to significant health risks associated with ACMs. Because the Project would be required to comply with AQMD Rule 1403 during demolition activities, impacts due to the potential presence of asbestos would be less than significant.

Additionally, one or more of the existing on-site structures also could contain lead based paint (LBP) due to the age of the structures. If LBP is present in one or more buildings at the Project site, there is a potential for exposure of construction workers to health hazards associated with lead during the demolition phase of construction. Title 17, California Code of Regulations (CCR), Division 1, Chapter 8: Accreditation, Certification and Work Practices for Lead-Based Paint and Lead Hazards, defines and regulates lead-based paint. Any detectable amount of lead is regulated. The demolition and construction phases of the Project would be required to comply with Title 17, California Code of Regulations (CCR), Division 1, Chapter 8, which includes requirements such as employer provided training, air monitoring, protective clothing, respirators, and hand washing facilities. Compliance with these mandatory requirements would ensure that construction workers are not exposed to substantial LBP-related health hazards during demolition, and would reduce impacts to a level below significant.

According to the Phase I ESA prepared for the Project site, portions of the site were historically used for agricultural purposes. Due to the timeframe of historical agricultural activities at the Project site (ceased prior to 1946), it is not likely that the soil at the site is impacted with organochlorine pesticides; as such, the Phase I ESA does not recommend conducting any soil sampling activities to evaluate the pesticide content of on-site soils. The regulatory records search indicated that the Roquet Paving Company facility was previously the site of four USTs. There is a potential that soil contamination could be present within or near the location of the four UST sites, which, absent mitigation, could result in potentially significant impacts during construction and operation of the Project site with respect to transport, use, or disposal of hazardous materials. Additionally, the previous Phase I ESA (*Technical Appendix H*) indicated that soil staining was observed in the vehicle storage areas and the smudge pot storage area within the Roquet Paving Company facility during the site investigation. The stained soils could indicate the presence of petroleum contamination within the soils, which, absent mitigation, could result in potentially significant impacts during the Project's construction activities (through disturbance, handling, transport and disposal of contaminated soils) and operational activities. Implementation of Mitigation Measure MM 4.7-1 would reduce impacts associated with potentially contaminated soils to levels that are less than significant since treatment/remediation would be required to be completed prior to building new occupied structures on any impaired areas of the site.

In the existing condition, limited amounts of common hazardous materials (petroleum, solvents, anti-freeze, etc.) were identified within the Roquet Paving Company facility. Prior to the demolition of the facility, the operator would be required to remove and dispose of these materials in accordance with applicable federal, State, and local regulations. Compliance with these mandatory requirements would ensure that impacts associated with limited amounts of common hazardous materials at the on-site facility would be less than significant and no mitigation is required.

Temporary Construction Related Activities

Heavy equipment that would be used during construction of the proposed Project would be fueled and maintained by substances such as oil, diesel fuel, gasoline, hydraulic fluid, and other liquid materials that would be considered hazardous if improperly stored or handled. In addition, materials such as paints, roofing materials, solvents, and other substances typically used in building construction would be located on the Project site during construction. Improper use, storage, or transportation of hazardous materials could result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with future development that would be a reasonably consequence of the proposed Project than would occur on any other similar construction site. Thus, impacts due to construction activities would not cause a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. A less-than-significant impact would occur.

Long-Term Operation

The proposed Project consists of a proposal to change the site's existing General Plan and zoning designations to allow for the development of up to 1,050 residential dwelling units, a 10.3-acre school site, a 0.8-acre fire station site, a 3.0-acre RV Parking Area, and 1.2 acres of commercial-retail use. Residential, school, fire station, and commercial retail uses are not typically associated with the transport, use, or disposal of hazardous materials. Household goods used by residential homes, schools, and retail spaces that contain toxic substances are usually low in concentration and small in amount; therefore, there is no significant risk to humans or the environment from the use of such household goods. Residents and office personnel are required to dispose of household hazardous waste, including pesticides, batteries, old paint, solvents, used oil, antifreeze, and other chemicals, at a Household Hazardous Waste Collection Facility. Also, as of February 2006, fluorescent lamps, batteries, and mercury thermostats can no longer be disposed in the trash. Furthermore, the transport, use, and disposal of hazardous materials are fully regulated by the EPA, State of California, and/or San Bernardino County. Operation of the proposed fire station site may entail the use and storage of diesel fuel and other materials which are categorized as hazardous substances. Any such substances would be stored in approved fuel tanks, and the risk of an accidental release occurring would be considered minimal since all employees associated with the functions that require the use of hazardous materials are required to be properly trained to handle such materials. Accordingly, with mandatory regulatory compliance, potential hazardous materials impacts associated with long-term operation of the Project would be less than significant.

Threshold b)	***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?***

As indicated under the discussion and analysis Threshold a), potential soil contamination exists at the site associated with the former USTs, existing smudge pot/hazardous materials storage areas, and

vehicle storage areas operated by the Roquet Paving Company facility. The potential soil contamination present at the Project site could potentially generate a significant hazard if such materials were released into the environment during an upset and/or accident condition during the Project's construction activities. As such, absent mitigation, the Project would result in a significant impact with respect to Threshold b). Accordingly, implementation of Mitigation Measure MM 4.7-1 would address potential soil contamination at the Project site through requiring additional soil investigation activities and mandating soil remediation activities be undertaken (if deemed necessary based on the results of the soil investigation). Furthermore, mandatory compliance with applicable federal, State, and local regulations related to the transport and disposal of hazardous materials would further ensure that such impacts would be less than significant.

Additionally, LBP and ACMs may be present in existing on-site structures. Mandatory compliance with the provisions of AQMD Rule 1403 would ensure that construction-related grading, clearing and demolition activities do not expose construction workers or nearby sensitive receptors to significant health risks associated with LBP or ACMs. Therefore, with compliance with AQMD Rule 1403, it is unlikely that the Project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of LBP or ACMs into the environment during construction activities.

As indicated under the discussion and analysis Threshold a), outside of the potential soil contamination issues identified above, the Project's near-term construction activities would not have a significant impact associated with hazardous materials handling or disposal. The potential for an accidental release of hazardous materials into the environment is no greater than the potential on any other construction site. Thus, the hazard due to the foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant.

Long-term operation of the proposed Project would not result in any significant adverse effects associated with hazardous materials handling or disposal. Residential, school, and commercial retail land uses are not associated with the transport, use, or disposal of hazardous materials. Household goods used by residential homes, schools, and retail spaces that contain toxic substances are usually low in concentration and small in amount; therefore, there is no significant risk to humans or the environment from the use of such household goods. The proposed fire station site may entail the use and storage of diesel fuel and other materials which are categorized as hazardous substances. Any such substances would be stored in approved fuel tanks, and the risk of an accidental release occurring would be considered minimal since all employees associated with the functions that require the use of hazardous materials would be properly trained to handle such materials. Accordingly, the proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, and impacts would be less than significant.

Threshold c)	***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?***

Under existing conditions, no schools are located within 0.25-mile of the Project site. The nearest schools to the Project site are Grand Terrace High School, (located approximately 0.4-mile east of the Project site), Terrace Mills Middle School (located approximately 1.6 miles east of the Project site), and Patricia Beatty Elementary School (located approximately 1.8 miles southwest of the Project site) (Google, 2016). According to the City of Colton General Plan, City of Riverside General Plan, County of Riverside, and City of Grand Terrace General Plan, there are no school sites planned within 0.25-mile of the Project site (City of Colton, 2013a, Figure LU-6; City of Riverside, 2013, Figure LU-2; City of Grand Terrace, 2010, Exhibit 2-2; Riverside County, 2016).

The proposed Project is a master-planned community comprising residential and commercial/retail land uses, as well as a school site (Planning Area 12) and fire station site (Planning Area 13). Operations at the Project site would not entail the use of acutely hazardous materials, or the use of hazardous materials within 0.25 miles of the school site. Emissions associated with passing motor vehicles would occur in the vicinity of the school site, however, such emissions would not pose a significant health hazard to sensitive receptors. Accordingly, there is no potential for the proposed development on the Project site to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impact would occur.

Threshold d)	***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 would it create a significant hazard to the public or the environment?***

The Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code § 65962.5 (Cal. EPA, n.d.; Cal. EPA, 2011; SWRCB, n.d.; DTSC, 2016; SWRCB, 2016). Accordingly, no impact would occur.

Threshold e)	***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 for people residing or working in the project area?***

The Project site is located approximately 6.0 miles southwest of the nearest runway at the San Bernardino International Airport, and approximately 4.0 miles from the smaller Flabob Airport. The Project site is not located within the Airport Influence Area (AIA) for the San Bernardino International Airport (City of San Bernardino, 2005, Figure LU-4) or any other airports within the Project vicinity. Therefore, future development on the Project site would not conflict with the San Bernardino International Airport airspace or interfere with flight operations at San Bernardino International Airport, thereby ensuring that Project-related development would not result in safety hazards for people residing or working in the Project area. No impact would occur.

Threshold f) ***For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?***

There are no private airfields or airstrips in the vicinity of the Project site (Google Earth, 2016). As such, implementation of the Project would not expose on-site residents or workers to safety hazards associated with private airfields or airstrips. No impact would occur.

Threshold g) ***Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

Under existing conditions, the Project site is primarily vacant (with the exception of the Roquet Paving Inc. facility located on the southeast portion of the site), and does not contain any emergency evacuation routes due to the lack of public streets on-site. The Project proposes a 0.8-acre fire station within Planning Area 13, which would be accessible from La Cadena Drive. As part of the City's discretionary review process, construction plans would be required to demonstrate ingress and egress to the fire station site provide adequate emergency vehicle access, if the Fire Department elects to utilize the site for the operation of a fire station.

According to the City of Colton General Plan, all major arterials and freeways are required to be designated as emergency evacuation routes. The Project would be directly accessible from La Cadena Drive, and the Project proposes to construct half-width improvements along the portion of La Cadena Road that fronts the Project. La Cadena Road is designated as a major arterial on the City's Existing Circulation Plan, and could therefore be utilized as an evacuation route in the event of an emergency (City of Colton, 2013c, Exhibit 4.16-4). Improvements to La Cadena Road would be designed in a manner that would accommodate emergency vehicle access, which would be ensured through the City's discretionary review of construction plans.

During construction and long-term operation, the Project would be required to maintain adequate emergency access for emergency vehicles. A Construction Management and Traffic Control Plan which conforms to the applicable City of Colton requirements would be required to be prepared by the Project Applicant and approved by the City of Colton prior to issuance of building permits for the Project. The Construction Management and Traffic Control Plan would identify whether restriping of lanes would be required (in order to avoid lane closures) and other specific measures intended to minimize safety hazards and traffic disruptions along public roadways during any temporary roadway lane closures that may be necessary in order to accommodate the installation of utilities or other improvements associated with the Project. Traffic control during lane closures would be coordinated with the City of Colton Public Works Department. As part of the City's discretionary review process, the City of Colton is required by its Municipal Code to review future Project development to ensure that appropriate emergency ingress and egress would be available to-and-from the Project site. Accordingly, implementation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and no impact would occur.

Threshold h) ***Would the Project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?***

According to the City's General Plan Update EIR, the Project site is located within a "Very High Fire Hazard Severity Zone" of a Local Responsibility Area (City of Colton, 2013c, Exhibit 4.8-2). Potential impacts associated with siting development within an area prone to wildland fires include property damage and personal injury. The Roquet Ranch Specific Plan details development standards and design guidelines to address wildland fire hazards, including the installation and maintenance of brush management zones. Additionally, the proposed open space areas on-site would be subject to regular weed abatement activities, in conformance with the City of Colton Fire Department requirements, in order to minimize any potential fire risk. Future implementing projects (e.g., building permits, landscape plans, etc.) would be reviewed by the City of Colton Fire Department to ensure the safety of future Project residents and structures. The City has adopted Section 701A of the California Building Code, which establishes measures to minimize the potential for property destruction due to wildland fires by requiring materials and construction methods that are fire resistant (City of Colton, 2013c, p. 4.8-17). Accordingly, compliance with the regulatory requirements discussed above would reduce impacts due to wildland fires to less than significant.

4.7.4 CUMULATIVE IMPACT ANALYSIS

All demolition, construction, and long-term activities on the Project site would be required to comply with applicable federal, State, and local regulations related to the handling, use, storage, disposal, and transportation of hazardous materials to preclude impacts to the public and the environment. In addition, all development proposals within the Project's cumulative area would similarly be required to comply with applicable hazardous materials regulations. Therefore, the potential for release of toxic substances or hazardous materials into the environment, either through accidents or due to routine transport, use, or disposal of such materials, would be reduced to a less-than-cumulatively- significant level. Accordingly, the Project would not contribute a cumulatively considerable impact due to the transport, use, or disposal of hazardous materials.

The Project site is not located within one-quarter mile of an existing or planned school; therefore, there is no potential for future development on the Project site to cumulatively contribute to substantial safety hazards related to the handling, use, storage, disposal and/or transportation of hazardous materials within one-quarter-mile of a school site.

The Project site is not located on the list of hazardous materials sites compiled pursuant to Government Code § 65962.5. Therefore, development of the Project site would not contribute to a cumulatively significant hazardous materials impact associated with a listed hazardous materials site.

As discussed above under Threshold e), the Project site is not located within two miles of an airport, nor is it subject to any airport land use compatibility plans. As such, the Project would not result in any cumulatively considerable impacts associated with airport-related hazards.

The proposed Project site is not located within close proximity of any private airstrips. Therefore, development of the Project site has no potential to contribute to cumulatively significant impacts associated with such facilities.

The Project site does not serve as an emergency evacuation route. The Project includes a 0.8-acre fire station site within Planning Area 13, which would allow for adequate ingress and egress of emergency vehicles from La Cadena Road. The City's development review process would ensure that construction plans demonstrate that ingress and egress from the Project site complies with all relevant standards and regulations with respect to emergency access. With mandatory compliance with the City of Colton's emergency access requirements, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, there is no potential for the proposed Project to contribute to any cumulative impacts regarding emergency management planning.

As discussed above under the analysis of Threshold h), according to the City's General Plan Update EIR, the Project site is located within a "Very High Fire Hazard Severity Zone" of a Local Responsibility Area. However, with mandatory compliance with the regulatory requirements discussed in Threshold h), impacts due to wildland fires would be reduced to less than significant. Additionally, as Project area and surrounding area continue to develop, lands that are currently vacant would be developed in a manner consistent with jurisdictional requirements for fire protection, and would generally decrease the fire hazard potential in the local area. Accordingly, within the cumulative context of the Project vicinity, fire hazards are anticipated to decline over time, and the Project's contribution to cumulative wildfire potential is less than cumulatively considerable.

4.7.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a) and b) Potentially Significant Direct Impact. Project construction activities may entail the transport and/or disposal of hazardous materials associated with potential soil contamination at the site. Additionally, the potential presence of hazard materials in the soil may create the potential for the release of such hazardous materials into the environment during Project construction activities.

Through mandatory compliance with applicable regulations addressing the proper use, storage, and disposal of hazardous substances, no other significant hazards to the public or the environment would occur during the Project's construction or operational activities.

Threshold c): No Impact. The Project site is not located within one-quarter mile of any existing or planned school, and is not anticipated to cause the use of hazardous materials within one-quarter mile of the proposed Project school site. Accordingly, the Project would not expose any nearby school to potential impacts related to hazardous materials.

Threshold d): No Impact. The Project site is not listed on any list of hazardous materials compiled pursuant to Government Code §65962.5. No impact would occur.

Threshold e): No Impact. The Project site is not located within two miles of an airport, nor is it located within an airport land use compatibility plan. No impact would occur.

Threshold f): No Impact. There are no private airstrips located within the vicinity of the Project site; therefore, no impact would occur.

Threshold g): No Impact. Project-related development would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. The Project site does not serve as an emergency evacuation route. No impact would occur.

Threshold h): Less-than-Significant Impact. The Project site is located within a "Very High Fire Hazard Severity Zone" of a Local Responsibility Area. Mandatory compliance with the fuel modification requirements and building design requirements of the City of Colton Fire Department, as well as compliance with Section 701A of the California Building Code, would reduce impacts to less than significant with respect to wildland fire hazards.

4.7.6 MITIGATION

MM 4.7-1 Prior to the issuance of a demolition permit or a grading permit for the Project involving the portion of the Project site subject to the current or former operation of the Roquet Paving Company facility, the Project Applicant shall provide a Phase II soil investigation report to the Building Official or their designee and Public Works Director or City Engineer or their designee for review and approval. The Phase II soil investigation shall be conducted by a qualified professional in accordance with local, State, and federal regulations to confirm whether hazardous materials are present within the portion of the Project site containing the Roquet Paving Company facility. If the Phase II soil investigation report demonstrates that hazardous materials are present in the soils above levels considered safe by local, State, and federal regulations for residential occupancy of the property, a treatment/remediation plan shall be developed by the hazardous materials professional to bring contaminant levels within the local, State, and federal requirements for the proposed residential, commercial, and public/institution land uses in the Specific Plan. The treatment/remediation plan may include soil removal, encapsulation, and/or onsite treatment such as in situ treatments and natural degradation; groundwater management and treatment; and institutional controls. Any remediation measures identified in the treatment/remediation plan shall be imposed as condition(s) of approval for the demolition or grading permit. The treatment/remediation plan shall be implemented under the oversight of the City, and at the City's direction include oversight by a state environmental agency. A final report documenting implementation of any required treatment and achievement of the remediation levels required for the safe reuse of the site, shall be submitted to the City of Colton for review and approval prior to issuance of building permits for occupied structures on areas of the site identified in the treatment/remediation plan as requiring remediation.

4.7.7 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a) and b): Less-than-Significant Impact. Implementation of MM 4.7-1 requires that a Phase II soil investigation is conducted on the Project site, and that hazardous materials, if found to be present, are treated/remediated to levels considered safe for residential occupancy of the property. With implementation of the required mitigation, future development on the Project site would result in less-than-significant impacts to the public or the environment.

4.8 HYDROLOGY AND WATER QUALITY

The following analysis is based on a study entitled, "Drainage Report for Roquet Ranch – TTM 19983," prepared by K&A Engineering, Inc., dated February 2016 (K&A Engineering, Inc., 2016a) which is included as *Technical Appendix I1* to this EIR. The purpose of this study was to support the drainage system design of the Roquet Ranch – TTM 19983 development. The Drainage Report identifies drainage patterns and offsite flow tributary to the Project site and evaluates potential runoff from the Project site with implementation of the proposed development Project. The Drainage Report produced hydraulic calculations intended to be used to design the Project's storm drain system. This study was based upon a conceptual development scenario that was used as the basis for the developed hydrology and the post-development water quality solution. The ultimate size, location, and configuration of storm water drainage conveyance and water quality features will be based upon detailed hydrology and hydraulic studies prepared in conjunction with the final subdivision of each Planning Area within the Project site. A supplemental "Drainage Memo for Roquet Ranch – TTM 19983" prepared by K&A Engineering, Inc. and dated November 2016 (K&A Engineering, Inc., 2016b) was also relied upon to conduct the analysis within this subsection, and is included as *Technical Appendix I2* to this EIR. The analysis in this section is also based on the proposed Project's Water Supply Assessment (WSA). This report is entitled, "Roquet Ranch Project City of Colton Water Supply Assessment," prepared by Carollo Engineers, Inc., and dated June 2016 (Carollo, 2016a). This report is included as *Technical Appendix M* to this EIR. All references used in this Subsection are listed in EIR Section 7.0, *References*.

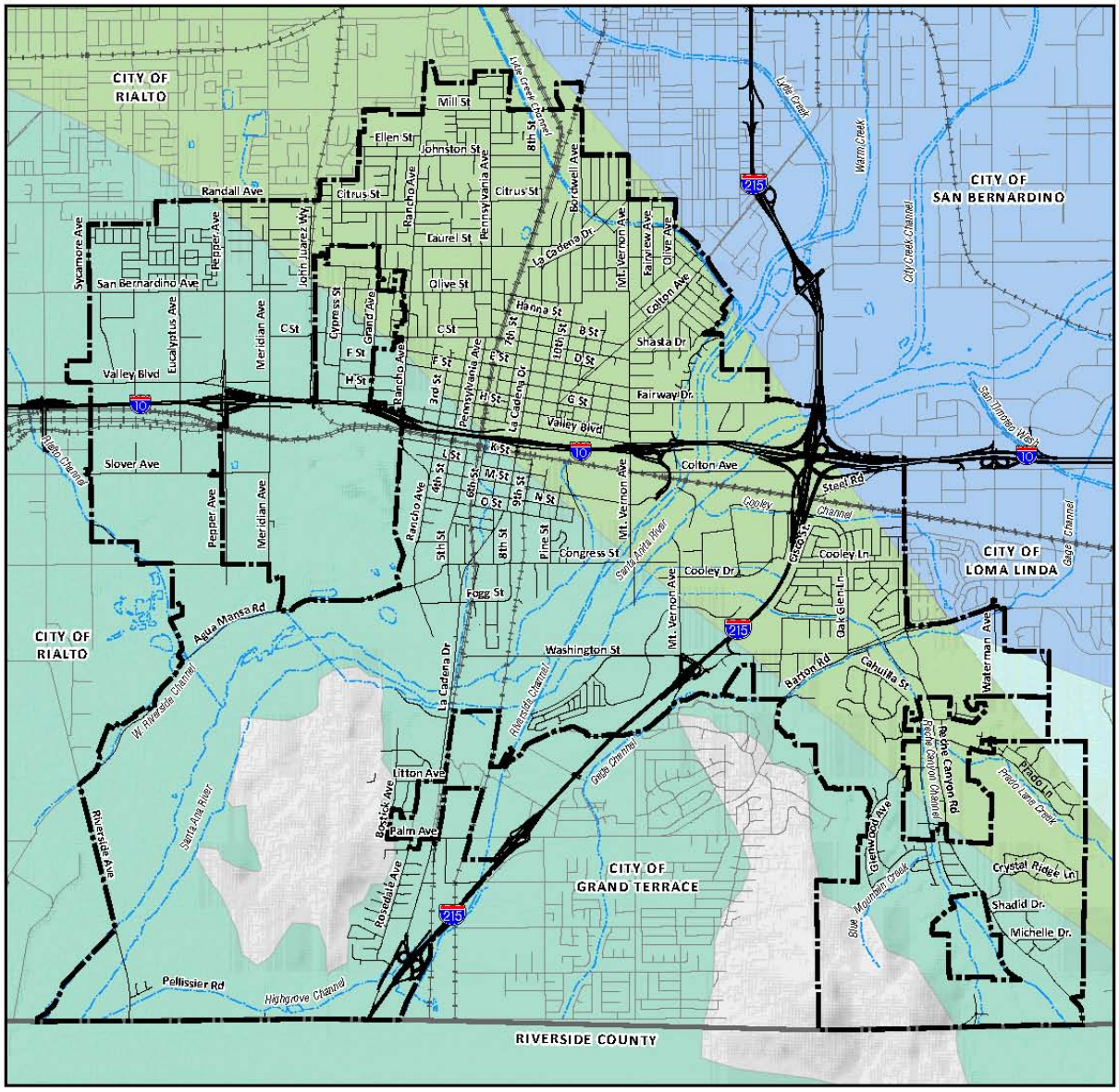
4.8.1 EXISTING CONDITIONS

A. *Regional Hydrology*

1. *Groundwater*

The Project site is located within the Upper Santa Ana Valley Groundwater Basin, which is divided into numerous subbasins based on geologic formations (such as faults or impervious rocks) that prevent or limit groundwater movement. The southern portion of the Project site is underlain by the Riverside-Arlington groundwater subbasin, which is bound by the Box Spring Mountains to the southeast, the Arlington Mountains to the south, La Sierra Heights and Mount Rubidoux to the northwest, the Jurupa Mountains to the north and the Rialto-Colton Fault to the northeast. The Riverside-Arlington groundwater subbasin is primarily recharged from the Santa Ana River, underflow past the Rialto-Colton Fault, underflow from the Chino subbasin, return irrigation flow, and deep percolation of precipitation. (City of Colton, 2013c, pp. 4.9-3-4.9-4)

The Upper Santa Ana Valley Groundwater Basin is depicted in Figure 4.8-1, *Groundwater Basins.* Groundwater in the Riverside-Arlington subbasin is found chiefly in alluvial deposits. Quaternary age alluvial deposits in the subbasin consist of sand, gravel, silt, and clay deposited by the Santa Ana River and its tributaries. Riverside Public Utilities and the Colton Water District extract groundwater from



Source(s): City of Colton General Plan EIR (2013)

Figure 4.8-1

NOT TO SCALE

GROUNDWATER BASINS

the Riverside-Arlington Groundwater subbasin; groundwater pumping rates are managed to bring extraction to the safe yield of the basin. (USGS, 2004)

Groundwater was not encountered as part of the geotechnical evaluation of the Project site conducted by Leighton and Associates, Inc. (Leighton) (*Technical Appendix H*). Leighton's review of a regional groundwater map indicated that historic depth to groundwater is approximately 70 feet below ground surface (bgs). The area nearest the Santa Ana Rivers (along the westerly boundary of the Project site) is generally expected to exhibit relatively shallow (<30 feet bgs) groundwater conditions. (LAI, 2014, p. 7) A water supply well currently exists on the Project site, and provides water for limited domestic water production.

2. Surface Water

The southern portion of the City of Colton is transected by Reach 4 of the Santa Ana River, which adjoins the northwest portion of the Project site (Planning Area 14B). Much of Reach 4 of the Santa Ana River is operated as a flood control facility, and flows in Reach 4 are perennial. The City of Colton of Water Department does not divert surface water flows from the Santa Ana River for municipal uses. (City of Colton, 2013c, p. 4.9-2)

The Santa Ana River watershed is the largest stream system in Southern California. The headwaters originate in the San Bernardino Mountains and are discharged to the Pacific Ocean approximately 100 miles to the southwest between Newport Beach and Huntington Beach. The watershed covers over 2,650 square miles of land in San Bernardino, Riverside, and Orange Counties, and a small portion of Los Angeles County. The portion of the Santa Ana River that adjoins the Project site to the northwest is part of the Upper Santa Ana River Watershed, which encompasses Big Bear Lake and the headwaters of the Santa Ana River until it reaches the Riverside Narrows and includes the cities and communities of San Bernardino, Yucaipa, Redlands, Highland, Rialto, Colton, Grand Terrace, Loma Linda, and Riverside. According to the San Bernardino Municipal Water District, the Upper Santa Ana River Watershed covers 824 square miles (approximately 32% of the total Santa Ana River watershed), and is located in San Bernardino and Riverside Counties. (SBVMWD, 2015, p. 2-1)

The Highgrove Channel is a trapezoidal concrete-lined flood channel that is owned and maintained by the Riverside County Flood Control & Water Conservation District, and is located downstream from the Project site to the west of Orange Street. Additionally, Cadena Creek is located to the immediate south of the Project site and traverses the southern portion of the Project site (within Planning Area 20E).

B. Project Site Hydrology

Based on the hillside setting of the Project site, the existing drainage pattern across the Project is a variable sheet flow condition. According to the Project's Drainage Report (Technical Appendix I1) and the supplemental Drainage Memo (Technical Appendix I2), under existing conditions, there are three (3) primary drainage subareas that comprise the Project site:

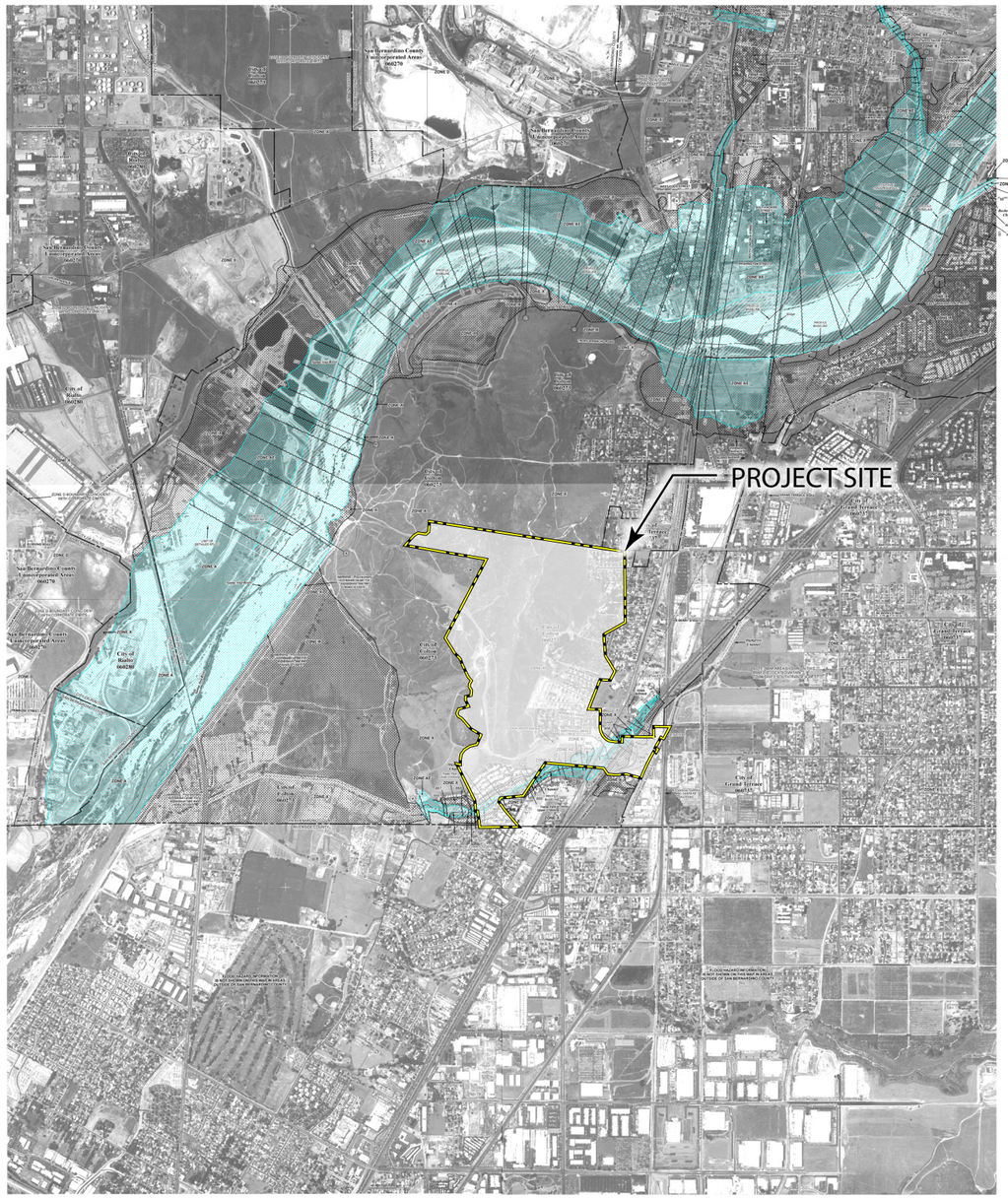
- North Subarea: encompasses approximately 157.2 acres of the northern portion of the Project site and is tributary to the Santa Ana River;
- West Subarea: encompasses approximately 110.8 acres of the central portion of the Project site and drains westerly across low-lying property towards the Santa Ana River; and
- South Subarea: encompasses approximately 79.3 acres of the southern portion of the Project site and drains southerly and westerly toward Cadena Creek and the Highgrove Channel. (K&A Engineering, Inc., 2016b, p. 1)

C. *Flood Hazards*

Flooding potential within the City of Colton is minimal, with the Santa Ana River representing the primary threat of flooding within the City, and to a lesser extent Lytle Creek, Reche Canyon, and Prado Lane Creek. Flood control facilities have been constructed to contain 100-year flood events within drainage channels such as the Lytle Creek Channel and the Reche Canyon Channel. Flood Insurance Rate Maps (FIRMs) produced by Federal Emergency Management Agency (FEMA) show portions of the City near the Santa Ana River are subject to 100-year floods. Flood hazard areas are mapped in Exhibit 4.9-3, *Hydrologic Hazards*, of the City's General Plan Update EIR. (City of Colton, 2013c, pp. 4.9-5 - 4.9-6)

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06071C8688H (dated August 28, 2008), FIRM No. 06071C8686H (dated August 28, 2008, and FIRM No. 06071C8689H (dated August 28, 2008), the Project site is not located within a special flood hazard area subject to inundation by a 1-percent annual flood (100-year flood), with the exception of portions of the easterly and southerly areas of the Project site which are located in Zone AE. Zone AE is described as "the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1 percent annual chance flood can be carried without substantial increases in flood heights." The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. The majority of the Project site is located within FEMA Flood Zone X (Unshaded), which is generally correlated with areas of minimal flood hazard (outside of the 0.2-percent annual chance of floodplain). Small portions of the easterly and southerly areas of the Project site are located within FEMA Flood Zone X (Shaded), which is generally correlated with areas of moderate flood hazard (greater than 0.2 percent annual chance), usually consisting of the area between the limits of the 100-year and 500-year floods. Zone X (Shaded) also is used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year floods, or shallow flooding areas with average depths of less than one (1) foot or drainage less than one (1) square mile. The applicable FEMA FIRMs for the Project area (FIRMs No. 06071C8688H, No. 06071C8686H, and No. 06071C8689H) are depicted in relation to the Project site on Figure 4.8-2, *FEMA Flood Insurance Rate Map (FIRM)*. (FEMA, 2008a; FEMA, 2008b; FEMA, 2008c)

According to Exhibit 4.9-3, *Hydrologic Hazards*, of the City's General Plan Update EIR, a levee exists along the eastern bank of the Santa Ana River adjacent to the Project site. (City of Colton, 2013c, Exhibit 4.9-3)



Source(s): FEMA (August 2008)

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 11 North. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from digital orthophotography collected by the U.S. Department of Agriculture Farm Service Agency. This imagery was flown in 2005 and was produced with a 1-meter ground sample distance.

This map may reflect more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to confirm to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov.

WARNING: This map contains levees, dikes, or other structures that have been provisionally accredited and mapped as providing protection from the 1-percent–annual-chance flood. To maintain accreditation, the levee owner or community is required to submit documentation necessary to comply with 44 CFR Section 65.10 by August 8, 2009. Because of the risk of overtopping or failure of the structure, communities should take proper precautions to protect lives and minimize damages in these areas, such as issuing an evacuation plan and encouraging property owners to purchase flood insurance.

LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	1% annual chance floodplain boundary
	0.2% annual chance floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

A — A	Cross section line
23 — 23	Transect line
87°07'45", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
3776000mN	1000-meter Universal Transverse Mercator grid values, zone 11N
600000 FT	5000-foot grid ticks: California State Plane coordinate system, zone V (FIPSZONE 0405), Lambert Conformal Conic projection
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
●M1.5	River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
March 18, 1996

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
August 28, 2008 - to update corporate limits, to change Base Flood Elevations and Special Flood Hazard Areas, to update map format, to add roads and road names, and to incorporate previously issued Letters of Map Revision.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'
250 0 500 1000 FEET
150 0 150 300 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

SAN BERNARDINO COUNTY, CALIFORNIA
AND INCORPORATED AREAS
PANEL 8686 OF 9400
PANEL 8687 OF 9400
PANEL 8688 OF 9400
PANEL 8689 OF 9400

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
COLTON, CITY OF	060273	8686	H
RIALTO, CITY OF	060280	8686	H
SAN BERNARDINO COUNTY	060270	8686	H

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP REVISED
AUGUST 28, 2008

Federal Emergency Management Agency

Figure 4.8-2

FEMA FLOOD INSURANCE RATE MAP (FIRM)

D. Water Resources

According to the 2010 San Bernardino Valley Regional Urban Water Management Plan (UWMP), all of Colton's water supply is sourced from local groundwater extracted from the San Bernardino Basin Area (SBBA), the Rialto-Colton subbasin, and the Riverside North subbasin (Kennedy/Jenks Consultants, 2012, p. 13-28). The City of Colton provides water service to a majority of the residents and businesses located within Colton's corporate boundary, as well as to other adjacent unincorporated areas of San Bernardino County (Kennedy/Jenks Consultants, 2012, p. 1-21).

E. Water Quality

1. Surface Waters

As discussed above, the southern portion of the City of Colton is transected by Reach 4 of the Santa Ana River. According to the Integrated Regional Water Management Plan for the Upper Santa Ana River Watershed, the Upper Santa Ana River Watershed is listed on the State's 303(d) list for water quality impairments related to pathogens (SBVMWD, 2015, p. 2-26). Additionally, the Water Quality Control Plan for the Santa Ana River Basin also establishes water quality objectives for total dissolved solids (TDS), total inorganic nitrogen (TIN), and chemical oxygen demand (COD) for Reach 4 of the Santa Ana River (SBVMWD, 2015, p. 2-27).

2. Groundwater

As discussed above, all of Colton's water supply is sourced from local groundwater extracted from the San Bernardino Basin Area (SBBA), the Rialto-Colton subbasin, and the Riverside North subbasin, all of which are part of the Upper Santa Ana Watershed (Kennedy/Jenks Consultants, 2012, p. 13-28). Chemical elements (also known as 'trace elements") are naturally present in the minerals in rocks and soils and in the water that comes into contact with those materials; their concentrations can be affected by human activities. The United States Geological Survey (USGS) concluded that trace elements were present at high concentrations in about 7% of the Upper Santa Ana Watershed's primary aquifers, with arsenic, boron, and molybdenum the most frequently occurring high concentration trace elements. Aluminum, fluoride, lead, uranium, and vanadium also were detected at high concentrations, but each of them were detected at high concentrations in less than 2% of the primary aquifers. (USGS, 2012, p. 2)

Perchlorate, an inorganic constituent, is also a chemical of concern for groundwater in the Upper Santa Ana Watershed. According to USGS, perchlorate (an ingredient in rocket fuel, fireworks, safety flares, fertilizer, and other products), has been detected at high concentrations in about 11% of the primary aquifers, and at moderate concentrations in about 53% of the primary aquifers. (USGS, 2012, p. 2)

Solvents were present at high concentrations in about 3% of the primary aquifers in the Upper Santa Ana Watershed. Solvents are predominantly used for in manufacturing and cleaning. The solvents found at high concentrations were tetrachloroethene (PCE), trichloroethene (TCE), and carbon

tetrachloride. Solvents were present at moderate concentrations in about 9% of the primary aquifers, and were low or not detected in about 88%. (USGS, 2012, p. 3)

F. Seiches, Tsunami, and Mudflow Hazards

Seiches are standing waves oscillating in a body of water that are caused when strong winds and rapid changes in atmospheric pressure push water from one end of a body of water to the other. When the wind stops, the water rebounds to the other side of the enclosed area. The water then continues to oscillate back and forth for hours or even days. In a similar fashion, earthquakes, tsunamis, or severe storm fronts may also cause seiches along ocean shelves and ocean harbors. Tsunamis are giant waves caused by earthquakes or volcanic eruptions under the sea. Out in the depths of the ocean, tsunami waves do not dramatically increase in height, but as the waves travel inland, they build up to higher and higher heights as the depth of the ocean decreases. (NOAA, 2015)

In and near the City of Colton, there are no open reservoirs, lakes, or other large bodies of water; therefore, substantial impacts from seiche could not occur. Lake Evans is located approximately 2.25 miles southwest of the Project site. The Project site is located more than 42 miles northeast of the Pacific Ocean; therefore, the potential for a tsunami to affect the Project site is non-existent. (Google Earth Pro, 2016)

The Project site is underlain by plutonic rock and is located in a hillside setting; therefore, mudflow from landslides and slope instability is a potential hazard at the Project site.

4.8.2 APPLICABLE ENVIRONMENTAL REGULATIONS

The following is a brief description of the federal, state, and local environmental laws and related regulations associated with hydrology and water quality.

A. Federal Clean Water Act

The Clean Water Act (CWA) is the principal federal law that provides for the protection of water quality. The primary objectives of the CWA are to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters," and to make all surface waters "fishable" and "swimmable." The Environmental Protection Agency (EPA) is the designated federal agency responsible for implementing the CWA and it has further delegated authority to the State Water Resources Control Board (SWRCB) and associated Regional Water Quality Control Boards (RWQCB) for compliance with the Act. Relevant programs identified in the Act include the National Pollution Discharge Elimination System (NDPES) program which regulates discharge of pollutants from known sources (point sources), as well as non-point sources, into waters of the United States through the issuance of permits. As part of the NPDES program, a Storm Water Pollution Prevention Plan (SWPPP) must be prepared for construction activities affecting greater than one acre because the discharge of storm water during construction is considered a non-point source of water pollution.

Under Section 404 of the CWA, the ACOE is delegated the authority to regulate discharges of dredged or fill material into "Waters of the United States," including wetlands. A discussion of Waters of the United States on the Project site is included in Section 4.3, *Biological Resources*.

B. California Porter-Cologne Water Control Act

The SWQCB essentially is sanctioned under the California Porter-Cologne Water Control Act, providing the agency with the authority to adopt, review, and revise policies for all waters of the state as well as directing the RWQCB to develop regional Basin plans.

C. California Water Code

The California Water Code is the principle state law regulating water quality in California. Water quality provisions must be complied with as contained in numerous code sections including: 1) the Health and Safety Code for the protection of ground and surface waters from hazardous waste and other toxic substances; 2) the Fish and Game Code for the prevention of unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life; 3) the Harbors and Navigation Code for the prevention of the unauthorized discharge of waste from vessels into surface waters; and 4) the Food and Agriculture Code for the protection of groundwater which may be used for drinking water supplies.

The California Department of Fish and Wildlife (CDFW), through provisions of the Fish & Game Code (§§1601 - 1603) is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFW.

Surface water quality is the responsibility of the RWQCB, water supply and wastewater treatment agencies, and city and county governments. The principal means of enforcement by the RWQCB is through the development, adoption, and issuance of water discharge permits. RWQCB basin plans establish water quality objectives that are defined as the limits or levels of water quality constituents or characteristics for the reasonable protection of beneficial uses of water.

D. Applicable General Plan EIR Mitigation Measures

The Colton General Plan Update EIR does not identify any mitigation measures pertaining to hydrology or water quality (City of Colton, 2013c).

E. Colton Municipal Code

The following sections of the City of Colton's Municipal Code address hydrology and water quality issues:

- Title 14, Storm Drains and Floodplain Management: Title 14 of the City's Municipal Code regulates discharges into the City's storm drain system. Title 14 eliminates all non-permitted discharges to the municipal separate storm sewers, controlling the discharge to the municipal separate storm sewers from spills, dumping or disposal of materials other than storm water,

and reducing pollutants in storm water discharges to the maximum extent practicable. Title 14 also addresses residential, commercial, industrial, and construction activities pursuant to the Countywide NPDES permit requirements.

- Chapter 15.04, California Codes: The City has adopted the 2013 California Building Code (CBC) and other applicable building codes. The CBC includes grading and erosion control provisions requiring implementation of erosion control measures, as necessary.

- Chapter 15.18, Floodplain Management Regulations: This chapter addresses standards for construction, utilities, subdivisions, and manufactured homes located within flood hazard areas.

F. National Flood Insurance Program (NFIP)

FEMA is responsible for managing the National Flood Insurance Program (NFIP) which makes Federally-backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. The NFIP, established in 1968 under the National Flood Insurance Act, requires that participating communities adopt certain minimum floodplain management standards, including restrictions on new development in designated floodways, a requirement that new structures in the 100-year flood zone be elevated to or above the 100-year flood level (known as base flood elevation), and a requirement that subdivisions be designed to minimize exposure to flood hazards. To help identify areas with flood potential, FEMA has developed FIRMs that can be used for planning purposes, including floodplain management, flood insurance, and enforcing mandatory flood insurance purchase requirements.

4.8.3 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would have a significant impact on hydrology and water quality if construction and/or operation of the Project would:

a. *Violate any water quality standards or waste discharge requirements.*

b. *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).*

c. *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site.*

d. *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site.*

e. Create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

f. Otherwise substantially degrade water quality.

g. Place housing within a 100-year flood hazard as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

h. Place within a 100-year flood hazard area structures, which would impede or redirect flood flows.

i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

j. Expose people or structures to inundation by seiche, tsunami, or mudflow.

The above-listed thresholds are derived directly from Section I of Appendix G to the CEQA Guidelines and address typical adverse effects to hydrology and water quality.

4.8.4 IMPACT ANALYSIS

Threshold a) Would the Proposed Project violate any water quality standards or waste discharge requirements?

A. Construction-Related Water Quality Impacts

Construction of the proposed Project would involve clearing, grading, paving, utility installation, landscaping activities and the building of homes and other non-residential structures, which would generate potential water quality pollutants such as silt, debris, chemicals, paints, and other solvents with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction of the Project in the absence of any protective or avoidance measures.

Pursuant to Santa Ana RWQCB and City of Colton regulatory requirements, the Project would be required to obtain a NPDES Municipal Storm Water Permit for construction activities. The NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or excavation which disturb at least one (1) acre of total land area. As part of the NPDES requirements, a Notice of Intent (NOI) would be required to be submitted to the SWRCB providing notification and intent to comply with the State of California general permit. In addition, the Project would be required to comply with the provisions of the Santa Ana Region Basin Plan. Compliance with the NPDES permit involves preparation of a SWPPP for construction-related activities. The SWPPP is required to specify Best Management Practices (BMPs) that the Project is required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the Project site. Examples of BMPs that may be used during construction include, but are not limited to, sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, and hydroseeding.

Mandatory compliance with the SWPPP would ensure that the proposed Project would not violate any water quality standards or waste discharge requirements during construction activities. Therefore, water quality impacts associated with construction activities would be less than significant and no mitigation is required.

B. Post-Development Water Quality Impacts

Storm water pollutants commonly associated with the land uses proposed by the Project (i.e. residential community) include: bacterial indicators, nutrients, pesticides, sediments, trash/debris, and oil/grease. As discussed in EIR Section 3.0, *Project Description*, storm water is proposed to be collected by roadway curbs and gutters and conveyed into the Project's drainage system. The Project proposes to construct a network of drainage lines and water quality basins and water quality/detention basins throughout the Project site to accommodate storm water runoff flows. The proposed basins have been designed in accordance with the City of Colton standards to detain and slowly release storm water to allow particles and associated pollutants to settle out. A total of four (4) water quality basins are proposed within the Project site, one of which would be located in the northwest portion of the Project site to the north of Planning Area 4, and the other three (3) located in the southern portion of the Project site. Additionally, two (2) water quality/detention basins would be located in the southern portion of the Project site. Storm drains are proposed within Roquet Ranch Road, Pellissier Road, Orange Street, and local roads which would convey storm water into the proposed water quality/detention basins and water quality basins. Additionally, an open flood channel is proposed in the southern portion of the Project site within Planning Area 20E. Storm water that would be collected from the hillsides north of Planning Area 14B would be discharged to a proposed storm drain system that would convey storm water to the WQMP basin located north of Planning Area 4. Storm water that collects from the Planning Areas within the central, southern, and western portions of the Project site would discharge to a system of interceptor drains and storm drains that would convey storm water to proposed WQMP basins on the southern portion of the Project site. Additionally, storm water collected on the southeast portion of the Project site would also be discharged to the existing off-site storm drain in La Cadena Drive to the east of the Project site and the existing Cadena Creek channel to the south of the Project site. The construction and operation of the proposed storm drain facilities on the Project site would ensure that storm water originating from off-site sources north and east of the Project site would be conveyed through the Project site to offsite facilities to the south of the Project without any affect to water quality. The proposed detention basins on the Project site would detain and treat the captured storm water flows that originate from within the Project site, which would ensure that the proposed Project's storm water is treated and result in less-than-significant water quality impacts. The basins would be maintained by the homeowner's association, which would ensure their continued effectiveness over the Project's lifetime.

Based on the foregoing analysis, the Project would not violate any water quality standards or waste discharge requirements during long-term operation. Impacts would be less than significant.

Threshold b)	***Would the Proposed Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?***

The Project would not substantially deplete groundwater supplies. The Project would not directly extract groundwater and no potable ground water wells are proposed by the Project. Under existing conditions, a groundwater extraction well exists on the Project site. The Project may continue to extract groundwater from this well at current extraction rates in order to irrigate landscaping on the Project site. Under existing conditions, the City of Colton acquires 100 percent of its potable water supply from groundwater in the following three basins: San Bernardino Basin Rialto-Colton Basin, and the Bunker Hill basin. The Project-specific Water Supply Assessment (WSA) conducted by Carollo Engineers (Technical Appendix M) concluded that the City has sufficient groundwater to meet existing and future demands, based on a review of the City's water supply entitlements, water rights, and water service contracts (Carollo, 2016a, p. 19). Accordingly, the potential for the Project to substantially deplete groundwater supplies through means of groundwater extraction or increasing consumption of potable groundwater is less than significant.

The proposed Project would convert a portion of the Project site from a vacant, permeable surface that could accommodate groundwater recharge to a planned residential community that would include large amounts of impermeable sources, which may affect the ability for groundwater recharge to occur at the Project site. However, the storm water flows that originate at the Project site would be collected by a drainage system and conveyed to onsite detention basins, where groundwater recharge would occur before remaining flows are conveyed offsite. Additionally, the Project's conveyance of storm water flows to properties south of the Project site after discharge from the onsite detention basins would allow for the continued sheet flow of storm water over vacant land to the south, which would allow for groundwater recharge similar to the existing conditions. Accordingly, the Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Impacts would be less than significant.

Threshold c)	***Would the Proposed Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?***
Threshold d)	***Would the Proposed 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 substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?***

No permanent streams or rivers occur on the Project site. The Santa Ana River is located immediately west of Planning Area 14B, the northwesterly area of the Project site. Under existing conditions, sheet

flow at the Project site is variable due to the hillside topography at the Project site, with storm water from the southern portion of the Project site draining to the Highgrove Channel along the southern boundary of the Project site, and storm water from the northern portion of the site draining northwest toward the Santa Ana River. Upon development of the Project, storm water would be conveyed as shown on Figure 4.8-3, *Conceptual Drainage Plan* and Figure 4.8-4, *Preliminary Onsite Development Conditions Hydrology Map*. Drainage and flood control facilities and improvements would be provided in accordance with the standards and requirements of the City of Colton Master Plan of Drainage.

As described in the Project's Drainage Report (*Technical Appendix I1*) and the supplemental Drainage Memo (*Technical Appendix I2*), the Project site has been divided into three primary drainage subareas:

- North Subarea: encompasses approximately 157.2 acres of the northern portion of the Project site and is tributary to the Santa Ana River;
- West Subarea: encompasses approximately 110.8 acres of the central portion of the Project site and drains westerly across low-lying property towards the Santa Ana River; and
- South Subarea: encompasses approximately 79.3 acres of the southern portion of the Project site and drains southerly and westerly toward Cadena Creek and the Highgrove Channel. (K&A Engineering, Inc., 2016b, pp. 1-2)

Table 4.8-1, *Existing Drainage Conditions vs. Proposed Drainage Conditions*, illustrates the change in the 100-year storm peak discharge (Q_{100}) for each of the three primary on-site drainage subareas in the existing condition versus the proposed conditions. As shown in Table 4.8-1, the proposed condition would result in a reduction in the 100-year storm peak discharge (Q_{100}) in the North subarea and the West subarea, but would result in an increase of 50.9 cubic feet per second (cfs) in the South subarea. Although the Project would result in an increase in the Q_{100} from the South subarea (tributary to Cadena Creek and the Highgrove Channel), the time of concentration for the peak flows to reach the portion of Cadena Creek adjacent to the Project site from the upstream portions of the watershed would be approximately 60 minutes, whereas peak flows from the Roquet Ranch Project tributary to Cadena Creek would have a time of concentration of approximately 20 minutes. Because the peak flows would reach Cadena Creek prior to the arrival of peak flows from upstream portions of the Cadena Creek watershed, the proposed Project would not substantially increase the rate or amount of surface runoff that is discharged to Cadena Creek in a manner that would result in flooding on- or off-site. (K&A Engineering, Inc., 2016b, p. 3)

Table 4.8-1 Existing Drainage Conditions vs. Proposed Drainage Conditions

Drainage Subarea	Existing Condition Q100 (cfs)	Proposed Condition Q100 (cfs)	Delta Q100 (cfs)
North	312.9	256.7	-56.2
West	262.2	252.9	-9.3
South	189.3	240.2	50.9

Source: (K&A Engineering, Inc., 2016b, p. 2)

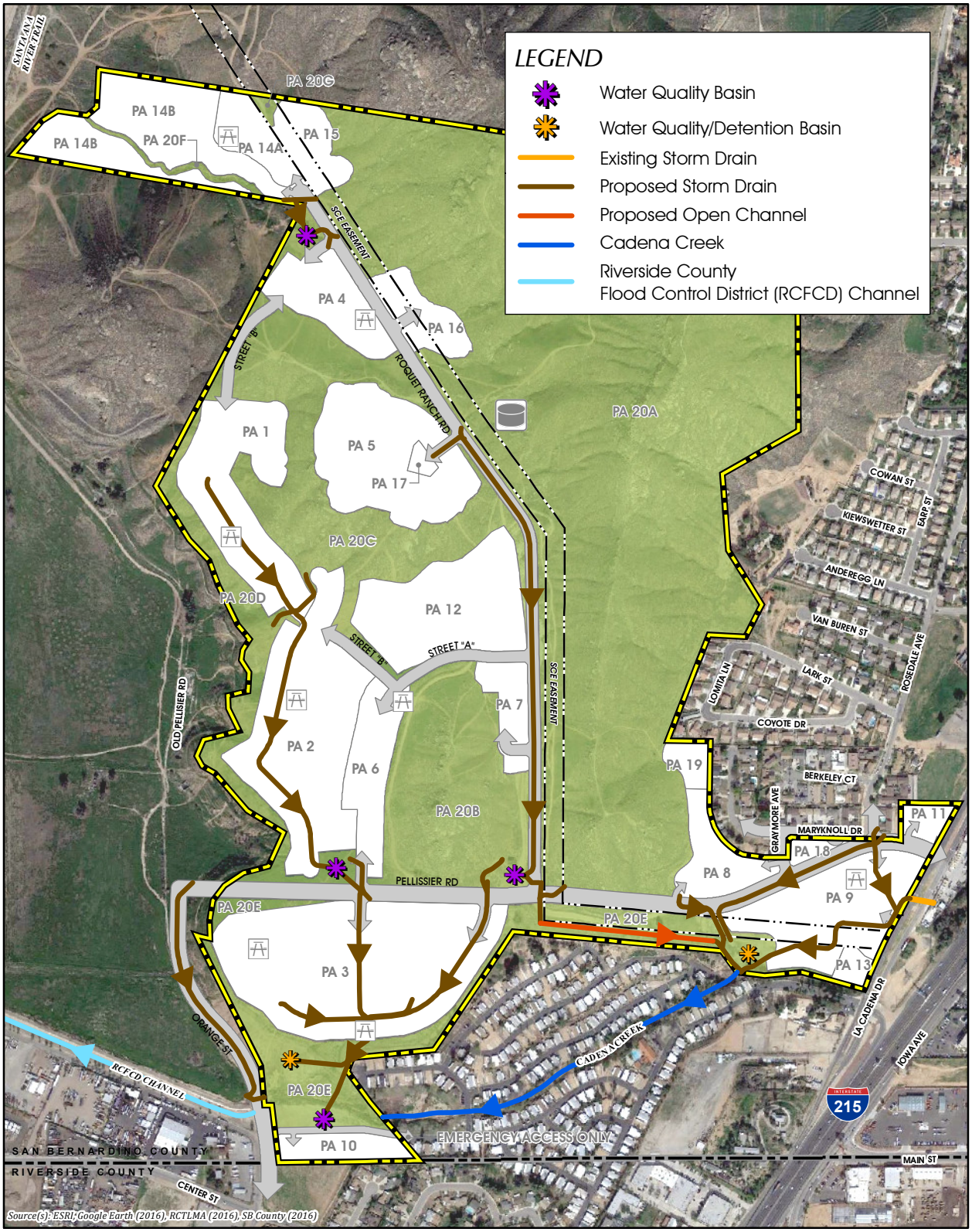
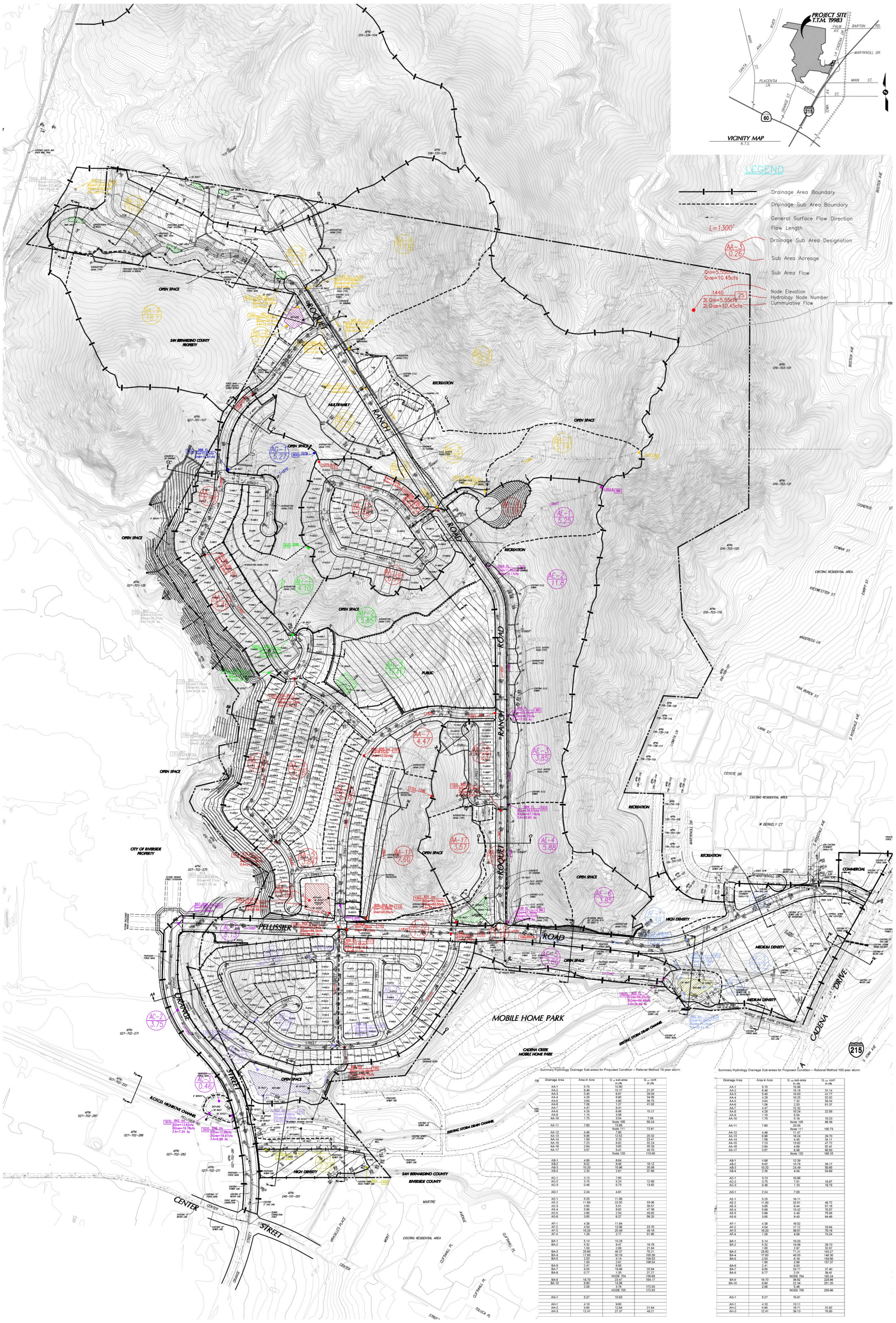


Figure 4.8-3

CONCEPTUAL DRAINAGE PLAN



Source(s): K&A Engineering (February 2016)

Figure 4.8-4

NOT TO SCALE

PRELIMINARY ONSITE DEVELOPED CONDITIONS HYDROLOGY MAP

Storm water is proposed to be collected by a system of interceptor drains and storm drains that would convey storm water to the proposed four (4) water quality basins and two (2) water quality/detention basins located throughout the Project site. The basins are designed to treat and temporarily detain storm water runoff to ensure that post-development discharge from the Project site is less than, or equal to, pre-development conditions. Outflow from the basins would be controlled by an outlet structure to ensure that the rate of discharge is within the capacity of the off-site facilities. The conveyance of off-site flows through the Project site would not alter the drainage pattern of the area, because this pattern occurs under existing conditions.

A detailed analysis of the Project's storm water drainage system was conducted by K&A Engineering Inc., which is appended to this EIR as *Technical Appendix I1* (K&A Engineering, Inc., 2016a). Based on the offsite and onsite post-development condition hydrology and unit hydrograph analyses, K&A Engineering concluded that the Project's proposed storm drain system would adequately convey and protect the proposed Project up to the 100-year storm event. (K&A Engineering, Inc., 2016a, p. 27)

The increase in runoff due to the proposed development would be accommodated using two (2) proposed onsite detention basins, which would detain the flows and discharge water at the rate necessary to ensure adequate capacity upstream and downstream of the Project site. BMPs would reduce or eliminate adverse hydraulic impacts to any existing storm drain facilities, and no offsite flooding would occur as a result of the Project. The Project's proposed hydrology conditions are depicted on Figure 4.8-4.

After the implementation of the proposed drainage improvements, the Project would alter the drainage pattern at the developed portions of the Project site resulting in an integrated system of underground storm drain pipes and water quality detention basins to capture on-site storm water runoff flows, convey the runoff across the site, and treat the runoff with BMPs to minimize the amount of sediment carried from the Project site. Because all on-site storm water runoff would be treated by BMPs designed to remove sediment, the Project would not result in substantial erosion or siltation on-site or off-site. The proposed drainage improvements would reduce erosion and sedimentation compared to existing conditions because the addition of paved surfaces and landscaping on the Project site would substantially reduce the area of bare, uncovered soils on the Project site and proposed BMPs would remove sediment from storm water runoff before it is discharged from the Project site. The basins would be maintained by the homeowner's association, which would ensure their continued effectiveness over the Project's lifetime. Accordingly, impacts would be less than significant.

Threshold e)	***Would the Proposed Project create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?***

As discussed in the impact analysis for Thresholds c) and d), the Project's proposed storm drain improvements would have sufficient capacity to convey storm water runoff generated by the Project, and the Project would not increase the rate of storm water discharge that is conveyed from the Project

site in the existing condition. Table 4.8-1, *Existing Drainage Conditions vs. Proposed Drainage Conditions*, illustrates the change in the 100-year storm peak discharge (Q_{100}) for each of the three primary on-site drainage subareas in the existing condition versus the proposed conditions. As shown in Table 4.8-1, the proposed condition would result in a reduction in the 100-year storm peak discharge (Q_{100}) in the North subarea and the west subarea, but would result in an increase of 50.9 cubic feet per second (cfs) in the South subarea. However, although the Project would result in an increase in the Q_{100} from the South subarea (tributary to Cadena Creek and the Highgrove Channel), the time of concentration for the peak flows to reach the portion of Cadena Creek adjacent to the Project site from the upstream portions of the watershed would be approximately 60 minutes, whereas peak flows from the Roquet Ranch Project tributary to Cadena Creek would have a time of concentration of approximately 20 minutes. Because the peak flows would reach Cadena Creek prior to the arrival of peak flows from upstream portions of the Cadena Creek watershed, the proposed Project would not substantially increase the rate or amount of surface runoff that is discharged to Cadena Creek in a manner that would result in flooding on- or off-site. Accordingly, the Project would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Therefore, impacts would be less than significant. (K&A Engineering, Inc., 2016b, p. 3)

As discussed under the impact analysis for Threshold a), the proposed Project would be required to comply with a SWPPP as well as incorporate BMPs to ensure that short-term construction activities and long term post-development activities of the Project would not result in substantial amounts of polluted runoff. Accordingly, with mandatory compliance with the Project's SWPPP and incorporation of BMPs, the proposed Project would not create or contribute substantial additional sources of polluted runoff. Thus, impacts would be less than significant and no mitigation is required.

Threshold f) Would the Proposed Project otherwise substantially degrade water quality?

There are no other conditions associated with the proposed Project that could result in the substantial degradation of water quality beyond what is described above in the impact analyses for Thresholds a), c), and e). Accordingly, no additional impacts would occur and no mitigation is required.

Threshold g) Would the Proposed Project place housing within a 100-year flood hazard as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

As depicted by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM, Map Number 06071C8688H), portions of the eastern and southern areas of the Project site are located within the 100-year floodplain (Zone AE) and/or Zone X (shaded). Figure 4.8-2, depicts the relevant FIRMs which show the location of flood hazards in relation to the Project site. Because the Project proposes to place residential structures (Planning Areas 9 and 10) within a 100-year floodplain (as depicted on Figure 4.8-2), the Project would result in a potentially significant impact with respect to Threshold g) prior to mitigation.

In order to ensure that no housing would be placed in the FEMA floodplain, the Project necessitates a floodplain map revision. The Project is required to secure a Conditional Letter of Map Revision (CLOMR) and Permanent Letter of Map Revision (LOMR) from FEMA, without which a significant impact would occur. To obtain a CLOMR, the Project Applicant must prepare detailed construction drawings and flood hazard analyses as well as a standard application package (including project information forms, exhibits, etc.) for review by FEMA. If the proposed Project meets the minimum floodplain management criteria of the National Flood Insurance Program (NFIP), then FEMA will issue a CLOMR, which would allow full construction activities to occur on-site and upon issuance of the appropriate permits by the City of Colton. Upon completion of construction activities, but prior to occupancy of any homes in the mapped floodplain, the Project Applicant must provide FEMA with detailed "as-built" drawings and flood hazard analyses, as well as a standard application package, to demonstrate that the Project was constructed in accordance with preliminary plans reviewed and approved by FEMA as part of the CLOMR process. If FEMA determines that the Project is consistent with the original CLOMR approval and meets the minimum floodplain management criteria of the NFIP, then a LOMR is issued and the Flood Insurance Rate Map (FIRM) is officially revised to remove the affected areas of the subject property from the floodplain. Prior to issuance of building permits for structures located within the 100-year flood plain, Mitigation Measures MM 4.8-1 and MM 4.8-2 would be imposed to ensure that the CLOMR and LOMR are in place at the time of need. With issuance of a CLOMR and LOMR from FEMA, impacts would be reduced to below a level of significance.

Threshold h)	***Would the Proposed Project place within a 100-year flood hazard area structures, which would impede or redirect flood flows?***

As previously discussed in Threshold g), portions of the easterly and southerly areas of the Project site are located within the 100-year floodplain (Zone AE) and/or Zone X (shaded) (0.2% annual chance flood) under existing conditions. Implementation of Mitigation Measures MM 4.8-1 and MM 4.8-2 would require the Project Applicant to secure a Conditional Letter of Map Revision (CLOMR) and Permanent Letter of Map Revision (LOMR) from FEMA to verify that that flood control measures have been completed and the residential development areas are permanently removed from the FEMA 100-year floodplain. After the floodplain map revision, no portions of the Project would be located in the FEMA 100-year floodplain. Therefore, with implementation of Mitigation Measures MM 4.8-1 and MM 4.8-2, impacts would be less than significant with respect to Threshold h).

Threshold i)	***Would the Proposed Project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?***

As discussed above in Thresholds g) and h), small portions of the eastern and southern parts of the Project site are located within a FEMA 100-year floodplain (Zone AE) and/or Zone X (shaded; 0.2% annual chance flood). However, implementation of Mitigation Measures MM 4.8-1 and MM 4.8-2 would ensure that the CLOMR and LOMR are in place at the time of need and effectively reduce impacts associated with on-site flood hazards below a level of significance.

As discussed in Thresholds c), d) and e), the Project has been designed with a storm drain system that would adequately handle the increase in storm water runoff generated at the Project site as a result of implementation of the development plan. In effect, the Project would not result in a substantial increase in off-site storm water runoff to the extent that would result in exposure of people or structures to a significant risk involving flooding.

The Project does not propose to install a levee or dam and would have no physical effects on any existing levee or dam. The nearest dam to the Project site is the Seven Oaks Dam, located approximately 15 miles to the northeast of the Project site. As shown on Exhibit 4.9-3, *Hydrologic Hazards*, of the City's General Plan Update EIR, the Project site is not located in an area that is subject to inundation due to failure of any dams (City of Colton, 2013c, Exhibit 4.9-3). As such, the Project would have no impact with respect to exposing people or structures to a significant risk involving flooding associated with dam failure.

As shown on Exhibit 4.9-3, *Hydrologic Hazards*, of the City's General Plan Update EIR and FEMA FIRM Number 06071C8688H, a levee is present along the eastern bank of the Santa Ana River (to the west of the Project site); however, the Project site is not depicted as being located within the levee inundation area (FEMA, 2008b; City of Colton, 2013c, Exhibit 4.9-3). Additionally, levees in the Colton area are subject to recertification by San Bernardino County and accreditation by FEMA. The Project would not interfere with recertification or maintenance of the levee in accordance with Federal law to provide sufficient safeguards against potential damage due to levee failure. The Project also would not authorize any flood control solutions that would fail to meet federal and County flood control standards. Impacts due to levee failure would be less than significant.

As discussed in Thresholds g) and h), and shown on Figure 4.8-2, *FEMA Flood Insurance Rate Map (FIRM)*, portions of the easterly and southerly areas of the Project site are located within 100-year flood zones. As such, without mitigation the Project would have potentially significant impacts associated with exposure of people or structures to a significant risk involving flooding. However, with implementation of Mitigation Measures MM 4.8-1 and MM 4.8-2, impacts would be reduced to less than significant.

Threshold j) Would the Proposed Project Expose people or structures to inundation by seiche, tsunami, or mudflow?

The Project does not propose to construct any large bodies of water that could be affected by a seiche or tsunami. The Project also would have no physical effects on existing water bodies. The Project site is not located near any large water bodies, including reservoirs that could result in potential indirect impacts associated with a seiche. The closest water body that has the potential to produce a seiche is Lake Evans, which is located approximately 2.25 miles southwest of the Project site. Due to the 2.25-mile distance to Lake Evans (a man-made feature within Fairmount Park in the City of Riverside) from the Project site, the Project would not be subject to inundation by seiches associated with the California Aqueduct. Although the Santa Ana River is located to the immediate west of the northwesterly portion

of the Project site, it is not an enclosed or semi-enclosed basin that would be conducive to reverberation and creation of a seiche.

The Project site is located more than 42 miles northeast of the Pacific Ocean; therefore, the potential for a tsunami to affect the Project site is non-existent (Google Earth Pro, 2016). As such, the Project would have no impact with respect to exposing people or structures to inundation by tsunami.

As discussed under EIR Subsection 4.5, *Geology and Soils*, the Project site is located within an area susceptible to earthquake-induced landslides and slope instability at the Project site is considered moderate to high (LAI, 2014, p. 14). As such, the potential exists for mudflow events to occur at the site during construction activities. However, implementation of the BMPs recommended in the Project-specific Water Quality Management Plan (WQMP; *Technical Appendix J*) and SWPPP during construction activities would reduce the potential for mudflow events to occur, and impacts would be less than significant. In the post-development condition, the potential for the occurrence of mudflow events is low due to the presence of engineered slopes and flood control features. Accordingly, impacts associated with mudflow are less than significant.

4.8.5 CUMULATIVE IMPACT ANALYSIS

The cumulative impact analysis considers construction and operation of the proposed Project in conjunction with other development projects in the vicinity of the Project site and resulting from full General Plan buildout in the City of Colton and surrounding areas. The analysis of potential cumulative impacts to hydrology and water quality is divided into five general topics of discussion by combining Thresholds of Significance (as listed in Subsection 4.8.3) into groupings of like topics as follows:

A. Water Quality

During Project construction, the proposed Project and any other development projects under construction in the Upper Santa Ana Valley Groundwater Basin has the potential to result in a cumulative water quality impact, including erosion and sedimentation. Pursuant to the requirements of the State Water Resources Board and the Santa Ana RWQCB, all construction projects that disturb one (1) or more acres of land are required to obtain a NPDES permit and obtain coverage for construction activities. In order to obtain coverage, an effective site-specific SWPPP is required to be developed and implemented for all development projects. The SWPPP must identify potential on-site pollutants and identify and implement an effective combination of erosion control and sediment control measures (i.e., BMPs) to reduce or eliminate discharge of pollutants to surface water from storm water and non-storm water discharges. In addition, the Project and all cumulative developments (refer to Table 4.0-1 of this EIR) would be required to comply with the Water Quality Control Plan for the Santa Ana Region (Basin Plan). Compliance with these mandatory regulatory requirements would ensure the Project's contribution to water quality impairments during Project construction would be less than cumulatively considerable and no mitigation is required.

B. *Groundwater Supply and Recharge*

As discussed under Threshold b), the City extracts groundwater from three basins: the San Bernardino Basin, the Rialto-Colton Basin, and the Bunker Hill basin. The Project-specific WSA concluded that the City currently has sufficient groundwater to meet existing and future demands, based on a review of the City's water supply entitlements, water rights, and water service contracts (Carollo, 2016a, p. 19). Accordingly, because the Project has a reliable source of water, the Project would have no potential to deplete groundwater supplies, and would therefore have no potential to have a cumulatively considerable adverse impact to groundwater supplies. The cumulative projects identified in Table 4.0-1 of this EIR could result in a cumulatively considerable impact to groundwater supplies; however, other cumulative projects would be required to implement mitigation measures to reduce potential impacts to groundwater supplies.

Although the proposed Project (similar to other development projects throughout the City of Colton) would increase the quantity of impervious surfaces, the Project proposes to include water quality detention basins and permeable landscape areas that would allow for the percolation of on-site storm water runoff into the groundwater basin. Accordingly, the Project would not result in a cumulatively considerable impact to groundwater recharge in the Upper Santa Ana Valley Groundwater Basin. Other cumulative projects in the vicinity of the proposed Project (see Table 4.0-1 of this EIR) could result in a cumulatively considerable impact regarding groundwater recharge; however, the proposed Project as well as other cumulative projects would be required to implement mitigation measures to reduce potential impacts regarding groundwater recharge.

C. *Erosion and Siltation*

The Project's proposed drainage plan has been designed to generally maintain the existing drainage pattern related to storm water runoff originating from offsite upstream properties. Additionally, all on-site runoff would be treated by the Project's BMPs which were identified based on their ability to remove sediment from storm water runoff. Other development projects identified on the cumulative projects list (see Table 4.0-1 of this EIR) would be required to meet the same construction-related and operational water quality requirements as the proposed Project. Accordingly, due to the design of the proposed Project, there is a less-than-significant potential for the Project to cause a cumulatively considerable impact associated with substantial alterations to the existing drainage pattern of the Project site or area which could result in substantial erosion or siltation on-site or off-site.

D. *Flood Hazards*

The proposed Project would generally maintain the existing drainage pattern of the Project site and the proposed Project would not affect the course of any streams or rivers. In addition, the Project's storm water drainage system is designed to ensure that peak flood volumes and flows are not significantly increased in comparison to those that occur under existing conditions and can be safely accommodated by existing, proposed, and planned master storm drain facilities. Accordingly, because the Project would not increase flooding potential either on-site of off-site, the Project, when considered with other

cumulative projects (see Table 4.0-1 of this EIR), would have a less-than-significant cumulatively considerable impact associated with flooding.

As shown on Figure 4.8-2, *FEMA Flood Insurance Rate Map (FIRM)*, small portions of the eastern and southern parts of the Project site are located within a 100-year flood hazard zone (Zone AE); consequently, the Project has the potential to place housing within a 100-year flood hazard area without mitigation. However, implementation of Mitigation Measures MM 4.8-1 and MM 4.8-2 would ensure that the CLOMR and LOMR are in place at the time of need. Implementation of these Mitigation Measures would reduce flood-related impacts to below a level of significance.

Accordingly, the Project has no potential to contribute to a cumulatively considerable impact associated with placing housing in a 100-year flood zone.

The Project is not subject to flood hazards associated with failure of a levee or a dam. As such, the Project has no potential to contribute to a cumulative considerable impact associated with the failure of a levee or a dam.

E. Seiches, Tsunami, or Mudflow

The Project is not subject to hazards associated with seiches or tsunamis. There are no components of the proposed Project that would increase the potential for seiches or tsunamis. Accordingly, the proposed Project has no potential to contribute to a cumulatively considerable impact associated with seiches or tsunamis. Due to the high topographic relief at the Project site, the site may be subject to hazards associated with mudflows, particularly during significant precipitation events. However, with implementation of the BMPs recommended by the Project-specific WQMP (*Technical Appendix J*) and SWPPP, impacts associated with mudflows would be reduced to less than significant during construction activities. Due to the presence of engineered slopes and flood control features throughout the Project site in the post-development condition, the likelihood of mudflow events at the Project site is considered to be very low. Accordingly, potential Project impacts associated with mudflow-related hazards is considered less than significant, and would not result in a cumulatively considerable impact with respect to mudflow.

4.8.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a): Less-than-Significant Impact. The Project would not violate any water quality standards or waste discharge requirements on a direct or cumulatively considerable basis. The Project is required to prepare a Storm Water Pollutant Prevention Plan (SWPPP) to address construction-related water quality issues and proposes design features including water quality basins and water quality/detention basins to address long-term water quality, and the impact would be less than significant.

Threshold b): Less-than-Significant Impact. The Project has a reliable source of domestic water and does not propose any new potable water wells that would directly extract groundwater, nor would it increase the current rate of extraction at the on-site domestic water well. Groundwater recharge would

occur in onsite detention basins and landscaped areas, and water conveyed off-site would have the ability to percolate into the groundwater table. The Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level, and the impact would be less than significant.

Threshold c): Less-than-Significant Impact. The Project would not result in substantial erosion or siltation on- or off-site, so the impact would be less than significant.

Threshold d): Less-than-Significant Impact. The Project proposes to install a storm water drainage system that would convey upstream and onsite water in concurrence with the existing drainage pattern. 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. The impact would be less than significant.

Threshold e): Less-than-Significant Impact. The Project proposes to install a storm water drainage system that includes a series of water quality basins and water quality/detention basins. The Project's storm water runoff would not exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. The impact would be less than significant.

Threshold f): No Impact. There are no other conditions associated with the proposed Project that would otherwise result in the substantial degradation of water quality. There would be no impact.

Threshold g): Potentially Significant Impact. Under existing conditions, small portions of the southerly and easterly areas of the Project site are located within a 100-year flood hazard zone. Accordingly, the Project would place housing within an existing 100-year flood hazard area prior to mitigation.

Threshold h): Potentially Significant Impact. Under existing conditions, small portions of the southerly and easterly areas of the Project site are located within a 100-year flood hazard zone. Accordingly, the Project would place structures within an existing 100-year flood hazard area which could impede or redirect flood flows absent mitigation.

Threshold i): Potentially Significant Impact. The Project site is not located within an inundation area associated with a dam or levee. As such, the Project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or a dam. However, as discussed under Thresholds g) and h), portions of the easterly and southerly areas of the Project site are located within an existing 100-year flood hazard area. Therefore, the Project's potential to expose people or structures to a significant risk involving flooding is considered potentially significant prior to mitigation.

Threshold j): Less-than-Significant Impact. The Project site is located too far away from enclosed water bodies and the ocean to be subjected to hazards associated with seiches or tsunamis. Due to the

steep topographic relief at the Project site and the potential for landslides previously discussed in EIR Subsection 4.5, *Geology and Soils*, the potential exists for mudflow events to occur at the site during construction activities absent implementation of BMPs. However, implementation of the BMPs from the Project-specific WQMP and SWPPP during construction activities would reduce the potential for mudflow events to levels below significant. In the post development condition, the potential for the occurrence of mudflow events is low due to the presence of engineered slopes and flood control features. Accordingly, impacts associated with mudflow are less than significant.

4.8.7 MITIGATION

MM 4.8-1 Prior to the City of Colton's issuance of building permits for structures located within the 100-year floodplain (as shown on applicable FEMA Flood Insurance Rate Maps), the Project Applicant shall provide evidence to the City of Colton that a Conditional Letter of Map Revision (CLOMR) has been issued by FEMA for the Project. The grading plan shall be found to substantially conform to the CLOMR prior to the issuance of a building permit in this area.

MM 4.8-2 Prior to the City of Colton's issuance of building permits for structures located within the 100-year floodplain (as shown on applicable FEMA Flood Insurance Rate Maps), the Project Applicant shall provide evidence to the City of Colton that a Final Letter of Map Revision (LOMR) has been issued by FEMA verifying that flood control measures have been completed and the residential development areas are permanently removed from the FEMA 100-year floodplain.

4.8.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold g): Less-Than-Significant Impact. Under existing conditions, small portions of the southerly and easterly areas of the Project site are located within a 100-year flood hazard zone. Accordingly, the Project would place housing within a 100-year flood hazard area prior to mitigation. Implementation of Mitigation Measures MM 4.8-1 and MM 4.8-2 would ensure that the CLOMR and LOMR are in place at the time of need. With issuance of a CLOMR and LOMR from FEMA, impacts would be reduced to below a level of significance.

Threshold h): Less-Than-Significant Impact. Under existing conditions, small portions of the southerly and easterly areas of the Project site are located within a 100-year flood hazard zone. Accordingly, the Project would place structures within a 100-year flood hazard area which could impede or redirect flood flows without mitigation. Implementation of Mitigation Measures MM 4.8-1 and MM 4.8-2 would ensure that the CLOMR and LOMR are in place at the time of need. With issuance of a CLOMR and LOMR from FEMA, impacts would be reduced to below a level of significance.

Threshold i): Less-Than-Significant Impact. As discussed under Thresholds g) and h), portions of the easterly and southerly areas of the Project site are located within a 100-year flood hazard area. Therefore, the Project's potential to expose people or structures to a significant risk involving flooding

is considered potentially significant absent mitigation. Implementation of Mitigation Measures MM 4.8-1 and MM 4.8-2 would ensure that the CLOMR and LOMR are in place at the time of need. With issuance of a CLOMR and LOMR from FEMA, impacts would be reduced to below a level of significance.

4.9 LAND USE AND PLANNING

This Subsection discusses consistency of the proposed Project with applicable land use and planning policies adopted by the City of Colton and other governing agencies for the purpose of reducing adverse effects on the physical environment. Information used to support the analysis in this Subsection was obtained from the City of Colton General Plan Land Use Element (City of Colton, 2013a), City of Colton General Plan Mobility Element (City of Colton, 2013b), City of Colton General Plan 2013-2021 Housing Element (City of Colton, 2014), City of Colton General Plan Noise Element (City of Colton, 1987a), City of Colton General Plan Open Space and Conservation Element (City of Colton, 1987b), City of Colton General Plan Safety Element (City of Colton, 1987c), the City of Colton Municipal Code (City of Colton, 2016a), SCAG's Final 2008 Regional Comprehensive Plan (RCP) (SCAG, 2008), and SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG, 2016a). Refer to DEIR Section 7.0, *References*, for a complete list of reference sources.

4.9.1 EXISTING CONDITIONS

A. On-Site and Surrounding Land Uses

Under existing conditions, the Project site is predominantly undeveloped, with the exception of a portion of the southeast area of the Project site that is occupied by the Roquet Paving Company. During the site reconnaissance performed as part of the site-specific Phase I Environmental Site Assessment (ESA) in 2015, the Roquet Paving Inc. facility consisted of six (6) structures that included two (2) temporary construction trailer buildings used as offices; one (1) workshop structure adjacent to the west of the offices that was being used for storage of parts and construction equipment and vehicle repair activities; and three (3) cargo containers located to the west of the workshop building being used for records storage. The structures were located within a fenced, paved, construction equipment yard. The majority of the northern portion of the Project site is characterized by high topographic relief consisting of sparsely vegetated hills and rock outcroppings. The southwest portion of the Project site is relatively flat and contains grassy vegetation. With the exception of the structures located on the southeast portion of the Project site occupied by the Roquet Paving Company facility and a water tank, there are no structures on-site, and the site is not used for agriculture.

As previously shown on Figure 2-3, *Surrounding Land Uses and Development*, the Project site is generally bounded by development to the east and south, and by undeveloped land to the north and west. Single-family residential neighborhoods and commercial land uses within the City of Colton border the Project site to the east. The Project site is bordered on the south by residential, industrial, and commercial land use within San Bernardino County and vacant undeveloped land and residential land within Riverside County. Undeveloped land within the City of Colton is located to the north of the Project site. The Colton Landfill (no longer in use) is also located approximately 0.5-mile north of the Project site. Undeveloped land and the Santa Ana River located within the City of Colton border the Project site to the west.

As illustrated on Figure 2-4, *Existing General Plan Land Use Designations*, existing General Plan land use designations applicable to the Project site include the following:

- "Very Low Density Residential": Applies to the majority of the Project site, and predominantly located in the northern portion of the site. Allows for 0.1-2 dwelling units per acre (d.u./ac);
- "Low Density Residential": Applies to an area on the southeast portion of the Project site, and allows for 2.1-8 d.u./ac;
- "Medium Density Residential": Applies to an area on the southern and central portions of the Project site, and allows for 8.1-16 d.u./ac;
- "High Density Residential": Applies to a small area on the southern portion of the Project site, and allows for 16.1-22 d.u./ac;
- "Light Industrial": Applies to the southern tip of the Project site, and generally supports a variety of fabrication, manufacturing, assembly, distribution, warehouse uses, and commercial and office uses; and
- "Neighborhood Commercial": Applies to eastern tip of the Project site, and provides for a variety of retail, office, and services-oriented business activities that serve a local neighborhood area and population.

As shown on Figure 2-4, *Existing General Plan Land Use Designations*, surrounding General Plan land use designations within the City of Colton include the following: Very Low Density Residential to the north; Very Low Density Residential, Low Density Residential, "Neighborhood Commercial," and Light Industrial to the east; Medium Density Residential, High Density Residential, and General Commercial to the south; and Very Low Density Residential, Light Industrial, and "Open Space-Resource" to the west (City of Colton, 2013a, Figure LU-6). To the south of the Project site, General Plan land use designations within the County of Riverside include "Medium Density Residential" and "Light Industrial" (RCIT, 2016). To the south of the Project site, General Plan land use designations within the City of Riverside include "Business/Office Park (B/OP)" (City of Riverside, 2007a). To the east of the Project site, General Plan land use designations within the City of Grand Terrace include "Low Density Residential" (City of Grand Terrace, 2010, Exhibit 2-2)

As illustrated by Figure 3-2, *Existing and Proposed Zoning Classifications*, existing zoning classifications applicable to the Project site include "Very Low Density Residential (V-L)," "Low Density Residential (R-1)," "Medium Density Residential (R-2)," "Multiple-Family Residential (R-3/R-4)," "Light Industrial (M-1)," and "Neighborhood Commercial (C-1)." (City of Colton, 2016b)

As depicted on Figure 3-2, surrounding zoning classifications within the City of Colton include the following: VLDR to the north; VLDR, "Low Density Residential (R-1)," C-1, and "Industrial Park (I-P)" to the east; R-2, R-3/R-4, and "General Commercial (C-2)" to the south; and VLDR, I-P, and "Open Space Resources (OS-RS) to the west (City of Colton, 2016b). Zoning classifications to the south of the Project site within the City of Riverside include "Single-Family Residential (R-1-7000)," "Business

and Manufacturing Park (BMP)," and "Public Facility (PF)" (City of Riverside, 2007b). Zoning classifications applicable to property to the south of the Project site located within the unincorporated Riverside County include: "General Commercial (C-1/C-P)," "Scenic Highway Commercial (C-P-S)," "Industrial Park (I-P)," "Manufacturing-Service Commercial (M-SC)," "One-Family Residential (R-1)," "General Residential (R-3)," "Mobilehome Subdivision and Mobilehome Park (R-T)," and "Watercourse (W-1)" (RCIT, 2016).

B. Applicable Land Use and Planning Policies

1. City of Colton General Plan

The City of Colton General Plan is a policy document that reflects the City's vision for the future of Colton. The General Plan is organized into eight (8) separate elements. Each element is associated with a series of policies to guide the City's vision for future development. The following is a summary of the City of Colton General Plan Elements.

Land Use Element (2013)

The Land Use Element functions as a land use guide for future development in the City and the lands that fall within the City's sphere of influence. It identifies the general distribution, general location, and extent of land uses such as residential, commercial, industrial, open space, institutional, and agricultural. These designations are reflected on the General Plan Land Use Map, which is applied on a parcel-by-parcel basis throughout the City. The Land Use Element also provides standards for residential density and non-residential density. It governs how land is to be used; therefore, many of the issues and policies contained in other elements of the General Plan are linked in some degree to this element.

Mobility Element (2013)

The purpose of the Mobility Element is to establish long-term goals and policies designed to improve the local transportation system and create options for residents to move about the City (City of Colton, 2013b, p. M-1). Figure M-2, *Street Classification Plan*, of the Mobility Element identifies long-term vehicular roadways planned throughout the City. As shown on Figure M-2 of the Mobility Element, La Cadena Drive is identified as a "Major Arterial" (6-lane) roadway, and Pellissier Road is designated as a "Secondary Arterial" (4-lane) roadway. The Major Arterial standard is a six-lane facility with median or two-way left-turn lane, 12-foot wide parkway-adjacent sidewalks with on each side of the street, a curb-to-curb width of 86 feet, and a total right-of-way (ROW) width of 114 feet (City of Colton, 2013b, p. M-19). The Secondary Arterial standard is a four-lane facility with parking, 12-foot sidewalks on each side of the street, a total curb-to-curb width of 64 feet, and a total ROW of 88 feet (City of Colton, 2013b, p. M-20). The stated objective in the Mobility Element is to maintain a level of service (LOS) standard of "D" or better along most roadways and at signalized intersections throughout the City (City of Colton, 2013b, p. M-28).

Figure M-7 of the Mobility Element, *Bikeway Classifications*, identifies the location of existing and planned bicycle facilities throughout the City. As shown in Figure M-7, a Class I bicycle facility runs parallel to the east side of the Santa Ana River to the west of the Project site. To the east of the Project site, a Class III bicycle facility exists within portions of La Cadena Drive, and Class II and Class III bicycle facilities are planned within portions of La Cadena Drive. Under existing conditions, no bicycle facilities occur on the Project site. (City of Colton, 2013b, p. M-7)

Open Space and Conservation Element (1987)

The Open Space and Conservation Element, a mandatory General Plan element, was prepared pursuant to California Planning, Zoning, and Development Law, Government Code § 65302(e). The Open Space and Conservation Element assesses open space and conservation factors in the City of Colton. The objective of this element is to establish and maintain an open space and conservation system that ensures the conservation and efficient use of resources and meets local and regional open space needs. The element identifies standards and principles to preserve hillsides and environmentally sensitive areas, protect scenic vistas and visual resources, and ensure a wide range of passive and active recreational uses. (City of Colton, 1987b)

2013-2021 Housing Element (2014)

The General Plan Housing Element identifies and establishes the City's policies with respect to meeting the needs of existing and future residents of the City. Specific components of the Housing Element, which are also requirements of state law, include the following: An analysis of the City's demographic and housing characteristics and trends; a review of potential market, governmental, and environmental constraints to meeting the City's identified housing needs; an evaluation of land, administrative, and financial resources available to address the housing goals; a review of past accomplishments under the previous Housing Element; and a housing plan to address the identified housing needs, including housing goals, policies, and programs. Additionally, by law, the City is required to show in the Housing Element that adequate sites are available in Colton to accommodate the construction of new housing units consistent with the Regional Housing Needs Assessment (RHNA) directed by the Southern California Association of Governments (SCAG). (City of Colton, 2014)

Noise Element (1987)

The purpose of the Noise Element is to identify noise generation in the City and provide policies that minimize exposure of people to unacceptable noise levels. The establishment of desirable maximum noise levels and implementation are also included as part of the Noise Element. According to the General Plan, noise generation sources include primary arterials and major local streets, passenger and freight railroad operations, highways and freeways, and airport operations. (City of Colton, 1987a)

Safety Element (1987)

The objective of the state-mandated Safety Element is to assist in achieving acceptable levels of protection from natural and man-made hazards to life, health, and property, and to ensure that emergency services in the City are adequate to meet the City's needs during both minor emergencies and major catastrophic situations. Policies in the Safety Element pertain to the following areas: seismic and geologic hazards, fire hazard, flooding hazards, crime, and civil disaster preparedness. (City of Colton, 1987c)

Model Air Quality Element (1991)

The goal of the Model Air Quality Element is to provide overall guidance to the goals, policies, and programs with respect to achievement of state and federal air quality standards. This element identifies goals, policies, and programs pertaining to governmental programs and actions, air and vehicular transportation, land use, and energy. (City of Colton, 1991)

Cultural Resources Element (2000)

This element identifies the City's archaeological and historic resources, and identifies applicable goals and policies intended to protect such resources.

2. City of Colton Zoning Ordinance

The City of Colton Zoning Code is contained within Title 18 of the City of Colton's Municipal Code. The Zoning Code is a regulatory document that establishes specific standards for the use and development of all properties located within the City by regulating development intensity, including limits on building setbacks, landscaping standards, and building heights. The Zoning Code also defines the permitted land uses within the various zones. As shown on Figure 3-2, existing zoning classifications applicable to the Project site include "Very Low Density Residential (V-L)," "Low Density Residential (R-1)," "Medium Density Residential (R-2)," "Multiple-Family Residential (R-3/R-4)," "Light Industrial (M-1)," and "Neighborhood Commercial (C-1)" (City of Colton, 2016b).

According to § 18.10.050 of the City's Municipal Code, the V-L Zone allows for single-family detached homes on large, individual lots at a density of 0.1 to 2.0 d.u./ac. The R-2 Zone allows for detached and attached units, townhouses, and condominiums, and development of residential structures at a density of 8.1 to 16 d.u./ac. Multi-family housing (including condominiums, apartments, stacked flats, and senior housing are permitted within the R-3/R-4 Zone, with an allowable density range of 16.1 to 22 d.u./ac. A variety of fabrication, manufacturing, assembly, distribution, warehouse, and commercial and office uses are permitted within the M-1 Zone. Sections 18.26.060 through 18.26.110 of the City's Municipal Code provide the property development standards for the M-1 Zone. Permitted uses within the C-1 Zone include a variety of retail, office, and service-oriented business activities that serve a local neighborhood area and population. Property development standards applicable within the C-1 Zone are contained within § 18.18.060 through § 18.18.110 of the City's Municipal Code. (City of Colton, 2016a)

3. Chapter 18.41 (Hillside Standards) of the Colton Municipal Code

Chapter 18.41 of the Colton Municipal Code, "Hillside Standards", establishes regulations for the preservation of hillsides and ridgelines with important topographic features that contribute to the community's sense of identity. A substantial portion of the Project site consists of steep slopes (20 percent or greater) and a ridgeline that comprises a portion of the La Loma Hills; therefore, the provisions of the City's Hillside Standards are applicable to the proposed Project.

4. RTP/SCS

SCAG is a Joint Powers Authority (JPA) under California state law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under state law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities in an area covering more than 38,000 square miles. SCAG develops long-range regional transportation plans including sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations, and other plans for the region.

As a MPO and public agency, SCAG develops transportation and housing plans that transcend jurisdictional boundaries that affect the quality of life for southern California as a whole. SCAG's 2008 Regional Comprehensive Plan (RCP) and 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) serve as advisory documents to local agencies in the Southern California region for their information and voluntary use for preparing local plans and handling local issues of regional significance. The RCP identifies voluntary best practices to approach growth and infrastructure challenges in an integrated and comprehensive way.

4.9.2 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to land use and planning if the Project or any Project-related component would:

a. *Physically divide an established community;*

b. *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or*

c. *Conflict with any applicable habitat conservation plan or natural community conservation plan.*

The above-listed thresholds are derived directly from Section X of Appendix G to the CEQA Guidelines and address land use and planning-related effects to the physical environment associated with new development proposals. (OPR, 2009).

4.9.3 IMPACT ANALYSIS

Threshold a) Would the Project physically divide an established community?

The Project site is located in the southwestern portion of the City of Colton. The Project site is bordered by undeveloped hillsides to the north; existing homes, vacant land, and commercial land uses to the east; a mobile home park, low density residential, industrial land use, commercial land use, and undeveloped/vacant land to the south; and undeveloped land and the Santa Ana River to the west. Vehicular access to the site is proposed from La Cadena Drive on the east and from Center Street via Orange Street on the south, and from Roquet Ranch Road to the north, all of which are existing public roadways. Vehicular access into the site from both of these streets would not restrict or limit access to established communities located to the east and south. The proposed roadway improvements along Pellissier Road would accommodate vehicular and pedestrian access between the existing residential neighborhoods located east and south of the Project site. Additionally, the proposed offsite utility infrastructure would be constructed within existing rights-of-way and through undeveloped lands; therefore, the Project's off-site utility infrastructure would not result in a physical division of any established community. The proposed Project would represent a logical expansion of the existing residential area located along the western side of La Cadena Drive. As such, the Project would have no impact associated with a physical division of an established community.

Threshold b) Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

This EIR analyzes the physical environmental effects associated with all components of the Project, including Project construction and operation. Governmental approvals requested from the City of Colton by the Project Applicant include a Specific Plan, General Plan Amendment, Change of Zone, and Tentative Tract Map (No. 19983).

The land use plans, policies, and regulations applicable to the Project include those listed below, each of which is discussed in more detail.

1. The City of Colton General Plan
2. The City of Colton Zoning Code
3. Chapter 18.41 (Hillside Standards) of the Colton Municipal Code
4. The SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

The Project's consistency with applicable habitat conservation plan(s) is discussed below under Threshold c).

1. City of Colton General Plan

The City of Colton General Plan - Land Use Plan designates the Project site with the following land use designations: Very Low Density Residential, Low Density Residential, Medium Density Residential, High Density Residential, Neighborhood Commercial, and Light Industrial. The proposed Roquet Ranch Specific Plan has been prepared in order to implement the General Plan designations for the Project site, as amended by the proposed General Plan Amendment. Governmental approvals requested from the City of Colton by the Project Applicant include a Specific Plan (the *Roquet Ranch Specific Plan*), General Plan Amendment, Change of Zone, and a Tentative Tract Map (TTM No. 19983). With the approval of the proposed Specific Plan, any future development plans and entitlement applications (tract maps, site plans, and other similar entitlements) would be required to comply with the Specific Plan and substantially conform to the standards and guidelines set forth in the other sections of the Specific Plan, as well as any other applicable City of Colton regulations. Although the proposed Project would result in a change to the General Plan land use designations for the Project site in order to accommodate the approval of the Specific Plan, these changes would not result in a conflict with applicable plans, policies, or regulations adopted for the purpose of avoiding or reducing an environmental effect. Accordingly, less than significant environmental impact would result from the proposed amendment of the City of Colton General Plan land use designations at the Project site.

Table 4.9-1, *General Plan Consistency*, provides an analysis of the Project's consistency with all applicable General Plan goals, objectives, and policies that were adopted for the purpose of avoiding or mitigating an environmental effect. As shown in Table 4.9-1, the Project would not result in an inconsistentency with any of the applicable General Plan goals, objectives, and policies.

Table 4.9-1 General Plan Consistency

General Plan Goal/Objective/Policy	Proposed Project Consistency
Land Use Element	
Goal LU-4 Incorporate green building and other sustainable building practices into development projects.	**Consistent.** The Roquet Ranch Specific Plan requires pedestrian amenities including sidewalks and trails, access to open space with a trail head, parks, and access to transit on La Cadena Drive. The Specific Plan also calls for a mixture of uses, including a variety of residential home types (and densities) including single-family homes, townhomes, and condominiums. As detailed in the Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan, roof-mounted solar panel systems
Policy LU-4.1 Require that new development projects reflect the principles of Traditional Neighborhood Development: walkable street patterns, pedestrian amenities, access to transit, a mix of complementary uses, comfortable and accessible open spaces, a range of housing types and densities, and quality design.	
Policy LU-4.3 Promote sustainable building practices that go beyond the requirements of Title 24 of the	

General Plan Goal/Objective/Policy	Proposed Project Consistency
California Administrative Code, and encourage energy-efficient design elements.	would be permitted uses within the proposed Specific Plan area. Furthermore, the installation of roof-mounted solar panels is encouraged and facilitied through architectural design of the roofs of residential structures and construction standards within the proposed Specific Plan. (T&B Planning, Inc., 2016) It would also be mandatory for the Project to comply with all applicable regulations requiring the installation of efficient water fixtures. As described in the Specific Plan, the Project would utilize drought-tolerant landscaping throughout the Project site in order to reduce the Project's water demand (T&B Planning, Inc., 2016). The existing commercial building on-site are not good candidates for adaptive reuse as an alternative to new construction because the condition of the existing buildings renders them unsuitable for adaptive resuse as multiple-family dwelling units (the use proposed in the location of the existing Roquet Paving Company facility). The proposed Project has been designed to preserve the steep slopes and major ridgelines within the northern and eastern portions of the Project site though there will be grading of hillsides located on the southwest and north-central portions of the site. The proposed Project would also preserve 199.7 acres of open space. Overall, the proposed Project would be required to adhere to site-specific development standards set forth in the proposed Specific Plan. These standards will ensure that the design of the Project would respect the natural site
Policy LU-4.4 Support sustainable building practices that integrate building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction, and operation of the built environment.	
Policy LU-4.5 Promote adaptive reuse of existing buildings as an alternative to new construction.	
Policy LU-4.6 Require that land divisions and development projects incorporate designs and practices that respect natural site features and provide for groundwater recharge.	

General Plan Goal/Objective/Policy	Proposed Project Consistency
	features of the hillside and provide for groundwater recharge.
Goal LU-5 Reduce use of energy resources citywide, with a key goal of reducing the City's carbon footprint.	**Consistent.** The proposed Project would be required to comply with all required local and State regulations (including Title 24 of the California Administrative Code) with respect to incorporation of energy conservation features into the design of construction and site development. The Project's compliance with local, State, and federal regulations pertaining to air quality and greenhouse gas emissions is discussed in EIR subsections 4.2, *Air Quality*, and 4.6, *Greenhouse Gas Emissions*. These subsections also discuss the Project-specific Air Quality Analysis and Greenhouse Gas Analysis that were performed, and evaluate whether the Project would result in potentially significant impacts under each of the applicable CEQA thresholds. In cases where potentially significant impacts are identified, mitigation measures were incorporated to the extent that feasible mitigation measures are available. As detailed in the Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan, roof-mounted solar panel systems would be permitted uses within the proposed Specific Plan area. Furthermore, the architectural design of the roofs of residential structures is intended to encourage owners to install roof-mounted solar panels. (T&B Planning, Inc., 2016)
Policy LU-5.1 Require the incorporation of energy conservation features into the design of all new construction and site development, as required by State law and local regulations.	
Policy LU-5.4 Support the ongoing efforts of the California Air Resources Board to implement AB32 and SB375, and fully follow any new AB32 and SB375-related regulations.	
Policy LU-5.5 Develop and implement greenhouse gas emissions reduction measures, including discrete, early-action greenhouse gas reducing measures that are technologically feasible and cost effective.	
Policy LU-5.6 Require detailed air quality and climate change analyses for all applications that have the potential to adversely affect air quality, and incorporate the analyses into applicable CEQA documents. Projects with the potential to generate significant levels of air pollutants and greenhouse gases, such as manufacturing facilities and site development operations, shall be required to incorporate mitigation into their design and operation, and to utilize the most advanced technological methods feasible.	
Policy LU-5.7 Work with the South Coast Air Quality Management District and the Southern California Association of Governments to implement the Air Quality Management Plan (AQMP) and Regional Transportation Plan/Sustainable Communities Strategy, with the objective of meeting federal and state air quality standards for all pollutants. To	

General Plan Goal/Objective/Policy	Proposed Project Consistency
ensure that new measures can be practically enforced in the region, participate in future amendments and updates of the AQMP.	
Goal LU-6 Minimize or eliminate land use conflicts where residences are in close proximity to rail lines, freeways, and industrial businesses.	**Consistent.** The Project site contains a commercial paving operation in the existing condition within the eastern portion of the Project site near off-site residences. The Project would remove the existing paving operation use, which would reduce the potential for conflicts with existing and/or future off-site residential uses. The proposed Roquet Ranch Specific Plan has been designed to ensure compatibility with surrounding land uses, including possible future light industrial uses, through site planning, building design, street design, landscaping and other design elements. Moreover, the Project would not place residential uses in locations where they would immediately abut industrial land uses. Accordingly, the proposed Project would not result in land use conflicts through the establishment of incompatible land uses in proximity to each other. Under current conditions, the General Plan designates the majority of the Project site for residential uses. Accordingly, the Project's proposal to construct a master-planned residential community at the site is generally consistent with the Land Use Plan. The Project would locate residential uses within 1,000 feet of the industrial uses to the south of the Project site and within 500 feet of the I-215 freeway to the east of the Project site. Due to the proposed location of residential uses within close proximity to the I-215 freeway, a freeway health risk
Policy LU-6.1 Protect residential neighborhoods adjacent to industrial areas pursuant to the policy direction provided in Policy LU-1.9.	
Policy LU-6.2 Discourage the establishment of incompatible uses in proximity to each other	
Policy LU-6.3 Use land use designations and zones to buffer incompatible uses.	
Policy LU-6.4 Promote the use of buildings, setbacks, walls, landscaping, and other design features to buffer and reduce conflicts between adjacent properties	
Policy LU-6.5 As properties recycle from one use to another, ensure that the new use is consistent with the Land Use Plan and policy directives that support this Goal LU- 6.	
Policy LU-6.8 Require that any residential use or sensitive receptor use—at the time a development or building permit application is filed—that is proposed to locate within 1,000 feet of an existing industrial use or within 500 feet of a freeway include preparation of an air quality analysis that, at a minimum, analyzes the potential impacts of toxic air contaminants and cancer risks on the future residents or sensitive receptors.	

General Plan Goal/Objective/Policy	Proposed Project Consistency
	assessment was performed for the Project, the results of which are discussed within EIR Subsection 4.2, *Air Quality*, which identified that impacts associated with health risks would be less than significant.
Goal LU-8 Create new attractive residential neighborhoods throughout Colton that provide a range of quality housing.	**Consistent.** As discussed in the Roquet Ranch Specific Plan, the Project proposes to develop a new master-planned community at the Project site that would consist of up to 1,050 residential units that would include detached single-family homes, townhomes, and condominiums. As discussed in Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan, the proposed Project would establish a unified thematic concept throughout the proposed community. This thematic concept would be apparent in design elements such as architecture, monumentation, theme walls, and landscaping that would result in a long-range comprehensive planning approach. The Roquet Ranch community would also include 1.2-acres of Neighborhood Commercial use, a 10.3-acre school site, and a 0.8-acre fire station site. The high-density residential development proposed by the Project (Planning Area 8) would be located adjacent to the proposed neighborhood-oriented retail and recreational facilities. A total of 19.3 acres of recreational open space are proposed at the Project site, which would include the Rocky Glen Park, The Lodge recreational facility, Hillcrest Park, neighborhood parks, pocket parks, and a network of pedestrian trails throughout the master-planned community.
Policy LU-8.1 Consider the maximum densities set forth for each of the residential land use designations as maximums that can only be achieved by those developments that exhibit the highest design quality and provide definable community benefit.	
Policy LU-8.2 Require that the architectural design and scale of new residential developments respect and enhance the character of established neighborhoods.	
Policy LU-8.3 Encourage the provision of a range of housing types and sizes to accommodate the varied needs of all socioeconomic segments of the community.	
Policy LU-8.4 Pursue opportunities to locate higher-density residential development near activity centers such as parks and recreation facilities, commercial areas, employment centers, and transit.	
Policy LU-8.5 Avoid residential development in environmentally sensitive or hazardous areas unless mitigating measures are adequately implemented.	
Policy LU-8.6 Require that multi-family residential development and major subdivisions include amenities such as common open space or community facilities.	

General Plan Goal/Objective/Policy	Proposed Project Consistency
	The Roquet Ranch Specific Plan also would designate 199.7 acres of the Project site as Open Space-Resource, which would preserve the existing hillsides and ridgeline while concentrating development on the flatter portions of the site, avoiding grading of steep hillsides. EIR Subsection 4.4, *Biological Resources*, discusses the Project's potential impacts to environmentally sensitive areas at the subject property, and identifies mitigation measures to reduce Project impacts to less than significant.
Goal LU-9 Maintain a diverse mix of commercial uses that benefit the community in terms of needed commercial services, tax revenue, and employment opportunities.	**Consistent.** The Project proposes 1.2-acres of neighborhood-oriented retail use within Planning Area 11. Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan provides design guidelines for the proposed neighborhood commercial shopping center within Planning Area 11 to ensure that buildings, signage, and landscaping within the neighborhood shopping center would be sited and designed in a manner that is complementary to the community's overall layout, theme, and architectural composition, and are compatible with nearby development. The proposed neighborhood commercial shopping center would be neighborhood-serving, and accessible via pedestrian facilities or vehicular roadways. Overall, the Project would be consistent with the General Plan's goals and policies that intend to encourage high-quality architectural design of commercial centers and avoid automobile-centric strip commercial development.
Policy LU-9.2 Discourage proliferation of strip commercial development approaches.	
Policy LU-9.3 Encourage a unified architectural character in commercial areas, and vigorously enforce commercial land use standards, including but not limited to landscaping, signage, and property maintenance to enhance the visual appearance of the City's commercial areas.	
Goal LU-12 Provide for open space and recreation areas that meet the needs of Colton residents.	**Consistent.** The proposed Project would include 19.3 acres of recreational open space, consisting of active and passive recreational opportunities
Policy LU-12.1	

General Plan Goal/Objective/Policy	Proposed Project Consistency
Preserve and protect the City's established recreational and open space uses.	within Rocky Glen Park, The Lodge recreational facility, Hillcrest Park, neighborhood parks, and pocket parks. The Proejct would include facilities that would allow for a range of recreational amenities. All proposed residential Planning Areas within Roquet Ranch community would be located within 0.5-mile of a park. Furthermore, the Project would meet the minimum requirement of five acres of park space for every 1,000 residents stated in Policy LU-12.4.
Policy LU-12.2 Pursue opportunities for providing additional open space and recreation areas for residents, working toward the goal of having a City park within one-half mile of every residential neighborhood in Colton.	
Policy LU-12.3 Prioritize the development of a regional park and/or sports park within City limits.	
Policy LU-12.4 Provide five acres of park space for every 1,000 residents.	
Goal LU-13 Protect open space lands necessary for flood control and habitat preservation purposes, and to provide buffers from identified earthquake faults and other public safety hazards.	**Consistent.** The southernmost portion of the proposed Project would occur within an area that is designated by FEMA maps as being within a 100-year floodplain. However, as discussed in Subsection 4.8, *Hydrology and Water Quality*, the proposed Project drainage improvements would alleviate flooding issues and the proposed Project would be required to obtain a revision to the FEMA floodplain map prior to the issuance of occupancy permits for areas subject to the 100-year flood plain. Accordingly, the Project would not result in development within a designated flood plain, with the implementation of the mitigation measures identified in Subsection 4.8 of this EIR. The Project site is not within the boundaries of the West Valley HCP for Delhi sands flower-loving fly, and does not have any critical habitat for the Delhi sands flower-loving fly. According to the Project-specific Geologic and Geotechnical Input Report, there are no
Policy LU-13.1 Continue to monitor any changes to the flood zone boundaries of the Santa Ana River made by federal agencies, and modify Figure LU-4 as appropriate to reflect the most current Federal Emergency Management Agency (FEMA) flood maps.	
Policy LU-13.2 Prohibit development within designated flood plain areas, as shown on Figure LU- 4 and more specifically as shown on adopted Flood Insurance Rate Maps published by FEMA. Figure LU-4 is incorporated into the Safety Element with this reference and policies LU-13.1 and LU-13.2	
Policy LU-13.3 Work with the U.S. Fish and Wildlife Service and California Department of Fish and Game to establish and maintain the minimal area needed for Delhi sands flower-loving fly habitat.	
Policy LU-13.4 Require formal fault investigations for development of properties along the San Jacinto	

General Plan Goal/Objective/Policy	Proposed Project Consistency
Fault zone consistent with State law. For areas where development is prohibited due to fault restrictions, require that such space be set aside an open space to the maximum extent feasible by law.	faults located on-site. The Project proposes 199.7 acres of Open Space – Resource areas in order to preserve sensitive habitat located on-site.
Goal LU-14 Ensure adequate land area is available to support desired levels of City-provided public facility services.	**Consistent.** The Project provides a 0.8-acre fire station site and a 10.3-acre elementary school site. By providing land for these public facilities, the Project is consistent with Goal LU-14 and Policy LU-14.1.
Policy LU-14.1 Review City public facilities physical plants and sites on a regular basis to determine whether adjustments are needed consistent with the Land Use Plan adopted City policies and ordinances.	
Goal LU-21 Create a residential neighborhood in the Pellissier Ranch/La Loma Hills area that consists largely of low-density or clustered residential development, with support neighborhood commercial uses, open space, and compatible uses that complement the natural landscape, the Santa Ana River, and the La Loma Hills.	**Consistent.** The proposed Project would provide a mix of housing types, including single-family detached on various sized lots, townhomes, and condominiums within clustered developments, to avoid and maintain most of the steep slopes and major ridgelines of the site and would primarily concentrate development on the flatter portions of the site. The Project would also include a centrally-located 10.3-acre public school site, and a 0.8-acre fire station site. The Project would include a 13.9-acre community park, 5.4 acres of neighborhood parks, and 199.7 acres of natural open space that includes preservation of existing trails which would provide connections to existing trails in the La Loma hills as well as the surrounding neighborhoods and commercial centers. Planning Areas 8, 9 and 18 front Pellissier Road, which would include Class II bike lanes and 6' parkway adjacent sidewalks
Policy LU-21.1 Allow for a diverse housing mix that is compatible to the hillsides area.	
Policy LU-21.2 Allow residential density transfer to limit residential development on hillsides and transfer residential units to flatter land areas.	
Policy LU-21.3 Provide adequate public, community, and educational facilities to meet residential needs.	
Policy LU-21.4 Provide pedestrian linkages to surrounding neighborhoods and neighborhood commercial centers.	
Policy LU-21.5	

General Plan Goal/Objective/Policy	Proposed Project Consistency
Establish community recreation and park facilities, including open space areas with hiking and bicycle trails.	that would provide pedestrian and bicycle linkages to the existing residential neighborhoods and commercial centers located immediately to the east of the Project site. The Class II bike lanes and pedestrian facilities within Pellissier Road would also provide bike / pedestrian linkages between the proposed on-site residences and the neighborhood commercial uses proposed within Planning Area 11. All on-site facilities, including roadways and utility infrastructure, would be constructed as part of the proposed Project. EIR Section 3.0, *Project Description*, provides a detailed discussion of the specific infrastructure components of the Project. Additionally, EIR Subsections 4.12, *Public Services*, and 4.15, *Utilities and Service Systems*, evaluate whether safety services, and sewer, water, and utility infrastructure would be adequate to accommodate the proposed development. The proposed vehicular circulation plan would be reviewed by City staff to ensure adequacy to accommodate new traffic volumes, existing demands, and emergency response needs, and is described in Subsection 3.0, *Project Description*, of this EIR. The proposed Project would construct a hierarchy of roadways that would provide access to individual residential neighborhoods, parks and commercial uses. The circulation plan was designed in accordance with the City of Colton's General Plan Mobility Element. EIR Subsection 4.14, *Transportation and Traffic*, evaluates the adequacy of the proposed roadway system within the context of CEQA.
Policy LU-21.6 Base allowable densities and intensities on infrastructure capacity, landform, and other physical constraints.	
Policy LU-21.7 Ensure that roadway systems are adequate to accommodate new volumes, existing demands, and emergency response needs.	
Policy LU-21.8 Ensure that safety services and sewer, water, and utility infrastructure are adequate to accommodate new development.	
Policy LU-21.9 Require that new development assumes the full fair-share cost of public improvements which are necessitated by that development.	
Policy LU-21.10 Look for opportunities to create public or publicly accessible open space areas within the focus area.	
Housing Element	

General Plan Goal/Objective/Policy	Proposed Project Consistency
Goal H-1 Provide opportunities for the development of quality housing for households at and above the median income – housing that does not currently exist in the City in sufficient quantities.	**Consistent.** The Project would be constructed in accordance with the design guidelines provided in Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan. These design guidelines were designed with the intent to establish principles and standards for the design and development of a master-planned community that complements the character and physical landscape of the Pellisier Ranch/La Loma Hills area of the City of Colton. The Design Guidelines address site planning, architecture, and landscaping to provide for a thematically cohesive built environment within the Roquet Ranch community. Additionally, the proposed Project would contain a diverse mix of residential types that would be designed to appeal to wide range of household income levels.
Policy H-1.2 Require high-quality construction and amenities through the establishment and enforcement of modern development standards and comprehensive residential design guidelines.	
Goal H-3 Create opportunities for the development of new housing that responds to all economic segments of the community.	**Consistent.** The proposed Project provides for a range a housing types (detached single-family, townhomes, and condominiums) at densities up to 22 d.u./ac. As such, it is consistent with Goal H-3 to provide housing that responds to various segments of the community. Although the proposed Project does not include any areas designated for low-income housing, the proposed Project would not preclude the development of such housing at this location or elsewhere in the City of Colton. A 12.9-acre portion of the Project site (portion of Planning Area 3) is identified as a Housing Opportunity Site by the City of Colton Housing Element. The Housing Opportunity Site has a High Density Residential Overlay, which allows for a maximum of 30 dwelling
Policy H-3.1 Allow for densities up to 30 units per acre as set forth in the Residential Overlay designation and Mixed-Use: Downtown area.	
Policy H-3.2 Use density bonuses and other incentives to facilitate the development of new higher-density housing that is affordable to lower-income households.	
Policy H-3.3 Form collaborative partnerships with non-profit agencies and for-profit developers to maximize resources available for the provision of housing affordable to lower-income households	
Policy H-3.4	

General Plan Goal/Objective/Policy	Proposed Project Consistency
Address the housing needs of special populations and extremely low-income households through emergency shelters, transitional housing, supportive housing, and single-room occupancy units.	units to the acre. The Housing Element also states that "the site could yield 257 units at an assumed density of 20 units/acre." The Roquet Ranch Specific Plan would comply with the Housing Element by designating 6.0 acres (Planning Areas 8 and 10) of the Project site for development at an average density of 21.8 units per acre. Therefore, the Project would be consistent with the intent of the Housing Element in meeting the minimum density and area requirements to create opportunities for the development of higher-density housing.
Goal H-7 Promote and encourage sustainable development and green building practices for all new residential development and for the retrofitting of existing housing.	**Consistent.** The Project proposes to construct Medium Density Residential (Planning Area 9) and High Density Residential (Planning Area 8) land uses near La Cadena Drive, a Major Arterial roadway. As such, it would be consistent with Policy H-7.1 to focus higher density residential development along major transit corridors. The Project would comply with all applicable regulations requiring the installation of energy and water-efficient fixtures, and would be designed to accommodate high-efficiency appliances. As described in the Specific Plan, the Project also proposes using drought-tolerant landscaping throughout the Project site in order to reduce the Project's water demand (T&B Planning, Inc., 2016). The Project would also be required to adhere to all required local, State (including Title 24 of the California Administrative Code), and federal policies pertaining to the incorporation of energy conservation features into the design of construction and site development.
Policy H-7.1 Promote higher density residential development and mixed-use in Downtown Colton and along and major transit corridors.	
Policy H-7.2 Encourage water- and energy-efficient appliances and features for new residential development and encourage water- and energy-efficient retrofitting improvements for existing residential homes.	
Policy H-7.3 Provide incentives to promote weatherization, double-paned windows, and insulation for older homes.	
Policy H-7.4 Provide initiatives to increase the use of solar energy and utilize passive solar design to increase energy conservation.	

General Plan Goal/Objective/Policy	Proposed Project Consistency
	As detailed in the Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan, roof-mounted solar panel systems are permitted uses within the proposed Specific Plan area. Furthermore, the architectural design of the roofs of residential structures is intended to encourage owners to install roof-mounted solar panels. (T&B Planning, Inc., 2016)
Mobility Element	
Goal M-1 Provide an integrated and balanced multi-modal transportation network of Complete Streets to meet the needs of all users and transportation modes.	**Consistent.** The Project includes an interconnected, paved sidewalk system, and Class II bike lanes within the roadway right-of-way. These pedestrian and bicycle linkages would connect residential Planning Areas with the Commercial Retail uses within Planning Area 11, and the recreational facilities located throughout the community. Existing informal trails located within the open space Planning Areas would be preserved, and access to these informal trails would be provided via Hillcrest Park in Planning Area 16. As such, the Project provides a multi-modal transportation network that would provide opportunities for residence to utilize alternative (non-vehicular) modes of transportation.
Policy M-1.3 Require all new nonresidential, mixed-use, and large-scale residential development projects, through the development review process, to include public transit, bicycle, and pedestrian facilities.	
Policy M-1.4 Plan for multi-use recreation trails and paths that allow for physical activities, including running, walking, and bicycling.	
Policy M-1.5 Minimize vehicle emissions by encouraging land use patterns and multi-modal transportation improvements that reduce the need for automobile trips by making biking, walking, and use of public transit more convenient and available.	
Goal M-2 Provide a transportation system that includes connected transit, bicycle, and pedestrian networks.	**Consistent.** The Project proposes a multi-modal circulation plan that would include Class II bike lanes along Roquet Ranch Road, Pellissier Road, and Orange Street. In addition to providing sidewalks along Local Streets, the Project would construct sidewalks on both sides of Roquet Ranch Road (Collector roadway) and Pellissier Road (Secondary Arterial roadway). Formal and
Policy M-2.3 Require that private development projects provide transit amenities, including bus stops that meet Omnitrans' bus stop design guidelines.	
Policy M-2.7 Improve and add amenities, such as staging areas, to the Santa Ana River Trail, as identified in the	

General Plan Goal/Objective/Policy	Proposed Project Consistency
Santa Ana River Trail Blue Ribbon Committee Trail Vision document.	informal trails would also be provided throughout the Project site. Pedestrian linkages within Planning Area 14 would be designed to accommodate a future connection to the Santa Ana River Trail. Should OmniTrans determine that a bus stop is needed within the Project site, the City would condition the Project Applicant to provide a bus stop within the Roquet Ranch Specific Plan. The Project would provide bike racks within the on-site park facilities. Accordingly, the Project would be consistent with Goal M-2 to provide a transportation system that includes connected transit, bicycle, and pedestrian networks.
Policy M-2.8 Add bicycle amenities and facilities to new projects and at existing activity centers.	
Policy M-2.9 Condition discretionary projects to require bicycle amenities such as bike racks and secure storage areas.	
Policy M-2.14 Require that all new subdivision projects provide sidewalks on both sides of the street, except for subdivisions that create residential lots that are one acre or larger in size.	
Goal M-3: Develop a safe, efficient, and attractive street system that provides capacity to meet existing and future demand.	**Consistent.** The Project proposes a vehicular circulation plan that has been designed in accordance with the General Plan Mobility Element using the roadway classifications and Street Typology systems described in the Mobility Element. The streets accommodate pedestrians, bicycles, and transit modes of transportation in accordance with the roadway standards and Street Typology system delineated in the General Plan Mobility Element. The City of Colton applies Policy M-3.5 to the evaluation of the direct impacts to intersections within the City that would result from proposed development projects. EIR Subsection 4.14, *Transportation and Traffic*, evaluates the Project's impacts on traffic flows at specific study intersections. As indicated in Subsection 4.14, implementation of the mitigation identified in this EIR would reduce the Project's direct impacts to intersections within the City of Colton to Level of Service D or better during Project
Policy M-3.1 Apply General Plan roadway standards for roadways to the design and construction of future street improvements. Take into account not only automobiles, but also transit vehicles, bicycles, and pedestrians as identified by the Street Typology system.	
Policy M-3.5 Maintain intersection traffic flows at Level of Service of D during peak hours for all roadways in Colton, except at those locations identified in this Mobility Element where peak-hour LOS E is allowed.	
Policy M-3.6 Restrict driveway entrances onto surrounding arterial, secondary and major streets when practical, and minimize through traffic on residential Collector streets.	
Policy M-3.10	

General Plan Goal/Objective/Policy	Proposed Project Consistency
Require new subdivision in Reche Canyon and Pellisier Ranch/La Loma Hills areas to provide adequate local and emergency connections to arterial roadways.	operation. Therefore, the proposed Project would not result in significant and unavoidable direct impacts to any intersections within the City of Colton during the operation of the Project, and would be consistent with Policy M-3.5. The Project minimizes construction of driveways onto surrounding arterials by only proposing two access drives along La Cadena Drive from Pellissier Road and Planning Area 9. The Project does not propose any roadways that would directly contribute to through traffic on residential Collector streets.
Goal M-6 Ensure the provision of adequate, convenient, and safe parking for all land uses.	**Consistent.** The design of the Project would comply with the requirements and standards pertaining to the provision and design of off-street parking facilities as stated in Chapter 18.36 of the Colton Municipal Code. The Neighborhood Commercial land uses in Planning Area 11 would be required to provide and design loading areas in compliance with the loading requirements stated in Chapter 18.36 of the Colton Municipal Code. Prior to issuance of building permits, development within the Project would be required to demonstrate compliance with the parking and loading requirements stated in Chapter 18.36 through the City's review of building plans.
Policy M-6.1 Require that all new developments provide off-street parking to meet local needs and minimize congestion on streets.	
Policy M-6.2 Require that all new commercial and manufacturing developments provide adequate loading areas within off-street parking areas.	
Goal M-7 Coordinate with other jurisdictions and agencies on regional transportation projects.	**Consistent.** EIR Subsection 4.14, *Transportation and Traffic*, evaluated the Project's impacts on intersections within both the San Bernardino County Congestion Management Program (CMP), and the Riverside County CMP. Additionally, the traffic impact analysis prepared for the Project included study intersections within the jurisdiction of the neighboring cities of Grand Terrace and
Policy M-7.2 Require the provision of appropriate mitigation of traffic impacts in surrounding communities resulting from development in Colton. Work with surrounding communities to ensure that traffic impacts in Colton resulting from development outside the City are adequately mitigated.	

General Plan Goal/Objective/Policy	Proposed Project Consistency
	Riverside, as well as the County of Riverside. Where impacts to these intersections are identified, the Traffic Impact Analysis (Technical Appendix L) identifies improvements in other jurisdiction that would be required to reduce the potential impacts of the Proposed projects in those jurisdictions. As such, the Project is consistent with Goal M-7 and Policy M-7.2 because this EIR evaluates potential impacts to transportation facilities in surrounding jurisdictions and consideres mitigation that can be imposed by the the City of Colton.
Open Space and Conservation Element	
General Objective To establish and maintain an open space and conservation system which will ensure the conservation and wise utilization of valuable resources and will meet local and regional open space needs. 1. **Principle 1:** Preserve and protect hillside and environmentally sensitive areas designated for growth through the use of strict hillside development standards. 2. **Principle 2:** Ensure a wide range of active and passive recreational uses through the promotion of a coordinated system of open space areas and linkages directed to scenic, scientific, cultural, and nature-oriented uses. 3. **Principle 3:** Conserve and protect open space needed for the preservation of air quality, water quality, water supply, waste disposal, noise abatement or public safety through zoning and other regulatory tools. 4. **Principle 6:** Restrict development in canyons and hillsides and control the plan	**Consistent.** The proposed Project would designate the steepest hillsides and ridgeline as "Open Space – Resource", provide grading standards that ensure that homes would not block the sightline of the ridge, and concentrate the majority of the development on the flatter portions of the site in order to avoid extensive grading of steep hillsides and ecologically-sensitive habitats. The Project would substantially conform to the City's hillside development standards as it would: (1) result in the preparation of this EIR to evaluate environmental impacts to the Project site, (2) avoid extensive grading to the steepest hillsides on the Project site, (3) include internal roadways that avoid and/or minimize steep grades and (4) result in an overall target density of 3.1 dwelling units per acre with the majority of the highest density uses located near La Cadena Drive in the eastern portion of the Project site away from the steep hillside areas of the Project site.

General Plan Goal/Objective/Policy	Proposed Project Consistency
of development to prevent obstruction of natural runoff or water courses and to prevent unwarranted scarring of the hillsides. 5. **Principle 7:** Outstanding scenic vistas and visual features shall be preserved and protected through the use of view easements, height limitations, and a design review board.	EIR Subsections 4.3, *Biological Resources*, and 4.5, *Geology and Soils*, evaluate the Project's potential impacts to biological resources and geology-related issues (respectively), and recommended mitigation measures to reduce such impacts to less-than-significant levels. Additionally, the Project proposes providing 19.3 acres of parkland that would provide a range of active and passive recreational opportunities. The provision of 19.3 acres of parkland for a calculated population of up to 3,633 residents would result in a parkland to population ratio of 5.3 acres per 1,000 residents within the Roquet Ranch community. Landscaped areas within the community would utilize drought-tolerant plants. Accordingly, the proposed Project would be consistent with the general objective, principles, and standards presented in the City's General Plan Open Space and Conservation Element.
Standard 1 There shall be five (5) acres of park land per 1,000 residents.	
Standard 2 Intensive human uses, such as residential development or major traffic improvements, shall be prohibited in areas of documented ecological significance.	
Standard 3 The use of natural and drought-tolerant vegetation shall be encouraged for landscaping in order that maintenance and water consumption are minimized.	
Standard 5 Hillside development standards shall be adopted requiring: 1. Focused EIRs for all hillside developments exceeding ten (10) parcels in a single development or subdivision. 2. New development shall occur on those sites that require the least amount of grading and vegetation removal. 3. Roads shall follow the natural topography and are not to exceed a grade of 12 percent. 4. Hillside densities shall be determined after consideration of safety, access, public infrastructure availability, environmental	

General Plan Goal/Objective/Policy	Proposed Project Consistency
damage and aesthetics, but generally should not exceed two dwellings per acre.	
Safety Element	
General Objectives 1. Avoid or prevent damage from natural or man-made hazards by assessing their nature and location, taking steps to control them, and guiding human activities away from areas subject to hazards in which correction is not feasible. 2. Minimize unavoidable or unpreventable losses by requiring a thorough analysis of the geologic environment prior to design approval, and providing or requiring safe design, construction, and maintenance practices according to safety codes, ordinances, or special conditions placed on the project.	**Consistent.** Potential Project impacts associated with geologic and man-made hazards are evaluated in EIR Subsections 4.7, *Hazards and Hazardous Materials*, and 4.5, *Geology and Soils*, respectively. As concluded in these EIR subsections, the Project would result in less-than-significant impacts with mitigation measures incorporated. Accordingly, the Project would be consistent with these General Objectives.
Principle 1 Identify geologic conditions that need special management, restrict widespread urban development in areas of geologic hazards and designate land areas determined unfit for structures of human occupancy as open space land. <u>Standards</u>: 1. Require geologic studies on proposed developments for human occupancy within areas with identified hazards. 2. Structural design shall be compatible with the local geologic hazard. 5. Public safety facilities shall be located, designed, and managed in a manner which would maximize their ability to remain functional during and after a major geologic disaster.	**Consistent.** Per the City's mandatory requirements, prior to issuance of grading permits and/or building permits, development within the Roquet Ranch Specific Plan area would be required to implement the identified in a site-specific geotechnical investigation report. Additionally, prior to issuance of building permits, any proposed development within the Roquet Ranch Specific Plan area would be required to demonstrate that construction designs adequately incorporate all applicable local, State, and federal building code standards addressing geologic hazards. Siting and design of the proposed fire station site within Planning Area 13 would comply with all local and State requirements regarding design of such an emergency facility, which would be ensured through the review of building plans by the City of Colton Building Department and the Fire Department. EIR

General Plan Goal/Objective/Policy	Proposed Project Consistency
	Subsection 4.5, *Geology and Soils*, evaluates potential Project impacts related to geology and soil conditions at the site, and identifies Project mitigation measures intended to reduce any impacts to less than significant. Accordingly, the Project would be consistent with Principle 1 and the applicable standards.
Principle 2 Identify, delineate, and appraise hazardous flood-prone areas and prohibit structures for human occupancy to occur in such areas. Standards: 1. Parks, greenbelts, golf courses, bicycle and equestrian trails are to be established in flood plain areas. 2. No structure for human occupancy shall occur within the flood-plain area. 3. Land owners and home buyers shall be informed of property which lie in a high flood hazard area.	**Consistent.** Based on the Flood Insurance Rate Map (FIRM) No. 06071C8688H Panel 8688 that shows the Project site and vicinity, small areas of the southern portion of the site are located within a "Special Flood Hazard Area" that is subject to inundation by the 1% annual chance flood (100-year flood). As shown on FIRM No. 06071C8688H Panel 8688, the area surrounding the Highgrove Channel (traverses the southern portion of the Project site) is a floodway ("Zone AE") that is subject to 1% annual flood. The area of the Project affected by the floodway is proposed to be designated with the land use designation of "High Density Residential" (16.1-22.0 d.u./ac), which would result in the placement of structures for human occupancy within the floodplain area. However, as discussed in Subsection 4.8, Hydrology and Water Quality, the proposed Project drainage improvements would alleviate flooding issues and the proposed Project would be required to obtain a revision to the FEMA floodplain map prior to the issuance of occupancy permits for areas subject to the 100-year flood plain. Accordingly, the Project would not result in development within a designated flood plain, with the implementation of the mitigation measures identified in Subsection 4.8 of this EIR.
Principle 3	**Consistent**.

General Plan Goal/Objective/Policy	Proposed Project Consistency
Define and limit the extent and intensity of development in areas of high fire hazard. **Principle 4** Provide protection to property and life from fire. Standards: 1. No development for human occupancy shall occur in areas of exceptionally high fire hazard, or any area where fire cannot be safely controlled. 4. Multi-story structures and high-hazard structures shall comply with fire protection standards. 6. All developments must provide streets of adequate width to allow safe ingress and egress of emergency vehicles. 7. Major arterials and freeway shall be used for escape routes for public evacuation. 8. Reliable and sufficient water supplies for fire protection are to be provided to all developments within fire hazardous areas. 9. Distances between structures shall conform to standards for safe fire protection. 10. All development plans shall be reviewed by local planning, fire, water, health, road and flood control authorities.	As shown on Exhibit 4.8-2 of the City of Colton General Plan Update EIR, the Project site is located within a "Very High Fire Hazard Severity Zone" of a Local Responsibility Area (City of Colton, 2013b, Exhibit 4.8-2). The fire hazard mapping included in the General Plan Update EIR were based on fire hazard severity zone maps prepared by the California Department of Forestry and Fire Protection (Calfire) in 2008, which uses computer modeling to predict the potential risk for wildland fires. The fire hazard severity zone maps are updated periodically by Calfire to account for changes in the physical environment. Although the Project would include the development of residences within an area within the Very High Fire Hazard Severity Zone, the proposed Project would be requiremed to implement all applicable fire prevention components, as mandated by the California Building Code and the City of Colton Municipal Code. Upon the completion of the Project, the portions of the Project site containing residential uses would be converted to an urbanized environment, which would be reflected in future revisions to the fire hazard severity zone mapping, resulting in the removal of these portions of the Project site from from the Very High Fire Hazard Severity Zone. The Project's circulation plan would be designed and constructed in accordance with the standards outlined in the City of Colton Mobility Plan and would be subject to review by the Colton Department of Public Works and City of Colton Fire Department to ensure that streets allow for adequate emergency vehicle ingress and egress. Furthermore, the Project would not inhibit the use of major

General Plan Goal/Objective/Policy	Proposed Project Consistency
	arterials and freeways as escape routes for public evacuation, which is discussed in further detail under Threshold e) of EIR Subsection 4.14, *Transportation and Traffic*. As discussed within Subsection 4.15, *Utilities and Service Systems*, sufficient water supplies exist to provide the Project with adequate fire protection. Prior to issuance of building permits, the Colton Building Department would review construction plans to ensure that building setbacks comply with all applicable zoning and building code regulations, and therefore provide adequate spacing between structures for fire protection purposes. All development plans would also be reviewed by local planning, fire, water, health, road and flood control authorities.
Principle 5 Deter crime through proper design techniques. Standards: 2. Encourage the clustering of houses into small neighborhoods removed from major thoroughfares, thereby enhancing neighborhood recognition and surveillance of people or activities not normally associated with the neighborhood. 3. Require low shrubbery landscaping and discourage overnight on-street or vacant lot parking as an aid to police and the general public in visually surveying the neighborhood. 6. In order that an image of security is established, streets shall be well lighted and pedestrian paths occur in wide open space designed to encourage high intensity use.	**Consistent.** The design of the Roquet Ranch Specific Plan divides residential neighborhoods into individual Planning Areas accessible via local roads. Future development within each of the Planning Areas within the Roquet Ranch Specific Plan would comply with applicable City standards are regulations that address off-street parking, landscaping, pedestrian facilities, and lighting. Compliance with such regulations would be ensured through the City's review of construction plans prior to issuance of grading and building permits. Accordingly, the Project would be consistent with Principle 5 and the associated Standards.

General Plan Goal/Objective/Policy	Proposed Project Consistency
7. All development plans are to be reviewed by local planning and crime prevention authorities.	
Principle 6 Prepare for natural or man-made disasters such that containment of the hazard can occur immediately and evacuation of residents can take place readily. Standards: 1. All major arterials and freeways shall be designated as emergency evacuation routes. 3. Peak load water requirements are to be met by each building as established in the 1974 edition of the Insurance Service Office's *Guide for Determination of Required Fire Flow*. 4. Minimum road widths and clearances around structures shall follow the standards set in the Municipal Code.	**Consistent.** The Project's circulation plan would be designed and constructed in accordance with the standards outlined in the City of Colton Mobility Plan and would be subject to review by the Colton Department of Public Works and City of Colton Fire Department to ensure that streets allow for adequate emergency vehicle ingress and egress. Furthermore, the Project would not inhibit the use of major arterials and freeways as escape routes for public evacuation, which is discussed in further detail under Threshold e) of EIR Subsection 4.14, *Transportation and Traffic*. As discussed within Subsection 4.15, *Utilities and Service Systems*, sufficient water supplies exist to provide the Project with adequate fire protection. The design of the Project would comply with all applicable setback requirements. Accordingly, the Project would be consistent with Principle 6 and the associated Standards.
Noise Element	
Principle 1 Establish criteria defining compatible land uses as a function of the level of noise exposure. **Principle 2** Control noise exposure from future noise generators so the ambient environment will be kept within acceptable limits.	**Consistent.** A Noise Impact Analysis was prepared for the Project and has been incorporated into the discussion within EIR Subsection 4.10, *Noise*. As concluded in that subsection, the Project would not expose any on-site noise-sensitive land uses to excessive noise levels, although mitigation would be needed in some cases to ensure noise levels remain below a level of significance. The analysis demonstrates that

General Plan Goal/Objective/Policy	Proposed Project Consistency
Principle 3 Establish acceptable noise standards consistent with health and quality of life goals. <u>Standards</u>: 1. Residential structures should be constructed to maintain interior noise levels of not greater than 45 dBA, through the use of sound barrier improvements, building design, construction materials, and/or insulating techniques. 2. Residential growth in Community Noise Exposure Areas greater than 70 dBA should be discouraged, unless on-site noise levels can be reduced to 60 dBA or lower via on- and off-site noise alleviating improvements. 3. Exterior noise levels should not exceed 65 dBA during the day or 55 dBA at night for commercial land uses, including general business and general merchandising. 4. Exterior noise levels should not exceed 60 dBA at any time for such areas important to public need, and where the preservation of serenity and quietness is essential if the area is to continue to serve its intended purpose. Such areas could include parks, open spaces, amphitheaters, and other areas dedicated for activities requiring special qualities of serenity.	exterior noise levels would be maintained at 65 dBA or below during the daytime hours and 55 dBA or below during nighttime hours for all noise sensitive land uses. Additionally, construction materials used to construct residential structures would comply with all applicable local, State, and federal regulations pertaining to insulation and noise containment. Accordingly, the Project would comply with the Principles and Standards stated in the Colton General Plan Noise element.
Model Air Quality Element	
Goal 4 A pattern of land uses which can be efficiently served by a diversified transportation system and land development projects which directly and	**Consistent.** The Project would include a mix of land uses, including residential, open space, neighborhood-oriented retail, and public

General Plan Goal/Objective/Policy	Proposed Project Consistency
indirectly generate the minimum feasible air pollutants. **Policy 4.1** Manage growth by insuring the timely provision of infrastructure to serve new development. **Policy 4.2** Improve the balance between jobs and housing in order to create a more efficient urban form. **Policy 4.3** Support a regional approach to regulating the location and design of land uses which are especially sensitive to air pollution.	facility (school and fire station) uses. Additionally, pedestrian linkages and bike lanes would be provided throughout the community to encourage non-vehicular travel between land uses. Infrastructure improvements necessary to support the Project (including roadways and utilities) would be constructed by the Project Applicant. An analysis of the Project's cumulative impacts to air quality in the region is presented in EIR Subection 4.2, *Air Quality*. Although the Project would emit significant air pollution concentrations, the mitigation measures identified in this EIR would reduce these concentrations to the maximum extent feasible. Accordingly, the Project would be consistent with Goal 4 and the associated policies.
Goal 5 Reduce particulate emissions from roads, parking lots, construction sites, and agricultural lands. **Policy 5.1** Reduce particulate emissions from roads, parking lots, construction sites, and agricultural lands. **Policy 5.2** Reduce emissions from building materials and methods which generate excessive pollutants.	**Consistent.** An analysis of the Project's impacts to air quality is presented in EIR Subsection 4.2, *Air Quality*. As concluded in the analysis, with incorporation of mitigation measures, the Project would not emit substantial concentrations of particulate matter during either construction or long-term operation. The building materials used to construct on-site structures would comply with all local, State, and federal building code requirements. Accordingly, the Project is consistent with Goal 5 and the associated policies.
Goal 6 Reduced emissions through reduced energy consumption.	**Consistent.** The Project would comply with all applicable regulations requiring the installation of energy-efficient fixtures, and would be designed to accommodate high-efficiency appliances. As described in the Specific Plan,

General Plan Goal/Objective/Policy	Proposed Project Consistency
Policy 6.1 Reduce energy consumption through conservation improvements and requirements. **Policy 6.2** Reduce water heating emissions resulting from swimming pool heaters and residential and commercial water heaters. **Policy 6.3** Recycle wastes.	the Project also proposes using drought-tolerant landscaping throughout the Project site in order to reduce the Project's water demand (T&B Planning, Inc., 2016). The Project would also be required to adhere to all required local, State (including Title 24 of the California Administrative Code), and federal policies pertaining to the incorporation of energy conservation features into the design of construction and site development. As detailed in the Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan, roof-mounted solar panel systems are encouraged and facilitated through construction standards applicable to the proposed Specific Plan. Furthermore, the architectural design of the roofs of residential structures is intended to encourage owners to install roof-mounted solar panels. The Project would be required to comply with all applicable solid waste statutes and regulations, and thus would not conflict with Policy 6.3 encouraging the recycling of waste.
Cultural Resources Element	
Goal #1 Identify, protect, and preserve Colton's rich archaeological resources for the enjoyment of future generations. **Policy 1a.** Conserve in their entirety the largest and most unique archaeological sites. **Policy 1b.** Develop public policy to protect archaeological resources from the encroachment of development.	**Consistent.** An analysis of the Project's impacts to cultural resources is presented in EIR Subsection 4.4, *Cultural Resources*. As concluded in the analysis, with incorporation of mitigation measures, the Project would not significantly impact archaeological resources. Accordingly, the Project is consistent with Goal #1 and the associated policies.

General Plan Goal/Objective/Policy	Proposed Project Consistency
Goal # 2 Identify, designate and preserve specific historically significant structures, landscapes, and facilities. **Policy 2a.** Preserve historic resources in number and type to retain the distinctive character of all stages of Colton's history by establishing historic districts within the City. **Policy 2f.** Ensure future development is compatible with existing structures and district characteristics	**Consistent.** An analysis of the Project's impacts to cultural resources is presented in EIR Subsection 4.4, *Cultural Resources*. As concluded in the analysis, with incorporation of mitigation measures, the Project would not significantly impact historic resources. Accordingly, the Project is consistent with Goal #2 and the associated policies.

2. City of Colton Zoning Code

As discussed above within subsection 4.9.1A.2, the City of Colton Zoning Code is contained within Title 18 of the City of Colton's Municipal Code, and establishes specific standards for the use and development of all properties located within the City by regulating land uses, development intensity, including limits on building setbacks, landscaping standards, and building heights. As shown on Figure 3-2, *Existing and Proposed Zoning Designations*, the City of Colton Zoning Ordinance, existing zoning classifications applicable to the Project site include "Very Low Density Residential (V-L)," "Low Density Residential (R-1)," "Medium Density Residential (R-2)," "Multiple-Family Residential (R-3/R-4)," "Light Industrial (M-1)," and "Neighborhood Commercial (C-1)" (City of Colton, 2016b).

As shown on Figure 3-2, the Project would change the zoning designations of the site from "Very Low Density Residential (VLDR)," "Medium Density Residential (R-2)," "Multiple-Family Residential (R-3/R-4)," "Light Industrial (M-1)," and "Neighborhood Commercial (C-1)" to "Specific Plan Zone (SP)" to provide amended land use and development standards for the subject property and formalize planning area boundaries that reflect the proposed Roquet Ranch Specific Plan. The proposed SP zoning designation is designed to allow for a variety of uses including residential uses, commercial uses, an elementary school, a fire station, open space, recreational areas, parks, and other uses adopted with the Specific Plan. The Project is inconsistent with the existing zoning designations; however, implementation of the change of zone would ensure the consistency of the Project with the proposed zoning regulations that are identified in the Roquet Ranch Specific Plan. Inconsistency with the existing zoning designations does not constitute a significant environmental impact in itself, because it does not imply a physical impact to the environment. Potential environmental impacts resulting from the Project are discussed in the respective EIR Subsections.

3. *Chapter 18.41 (Hillside Standards) of the Colton Municipal Code*

Chapter 18.41 (Hillside Standards) of the Colton Municipal Code seeks to preserve the City's scenic resources by encouraging retention and/or protection of the City's natural topographic features and vegetation such as hillside ridgelines, steep slopes, and other hillsides that have aesthetic value to the City of Colton and contribute to the community's sense of identity. The Hillside Standards encourages grading practices that minimize the disturbance of hillsides and development standards which are intended to maintain natural hillsides and blend structures with the natural hillside environment. (City of Colton, 2016a, Chapter 18.41)

The Roquet Ranch Specific Plan was designed to minimize hillside disturbance. Development would be 'stair-stepped' into existing grades to retain the overall existing topography and hillside character. Furthermore, residential lot sizes would be minimized in order to maximize views for individual homes. Although the proposed Project would utilize contour grading in some locations in order to create a natural-looking hillside, the extensive use of contour grading would not be used to avoid the construction of steep and hazardous internal roadways. As demonstrated in Figure 4.1-4, *Miguel Bustamante Parkway Visual Simulation (Before & After)*, the Project design would preserve the prominent ridgelines and hillsides that currently exist on-site. As such, public views of the on-site hillsides and ridgelines from the west (i.e., along Miguel Bustamante Parkway) would not be adversely affected by the Project. Figure 4.1-5, *Orange Street Visual Simulation (Before & After)*, illustrates that views of the on-site prominent ridgeline and hillsides from the south would largely be preserved, with the exception of views of the portions of the hillsides that are at lower elevations that would be partially obscured by intervening residential structures proposed by the Project. The Project would result in contour grading of a small hill on the southwest portion of the Project site; however, the hill that is proposed to be graded is not a defining feature of the Project site in relation to the larger hills and prominent ridgeline that would be preserved through the Project's design.

By implementing a community design that preserves the existing hillside backdrop for the community (when viewed from the east, south, and west) by siting structures below the prominent ridgeline, the proposed Roquet Ranch Project would implement the majority of the standards required by the City's Hillside Standards. Accordingly, the Project would not conflict with the Chapter 18.41 (Hillside Standards) of the Colton Municipal Code in a manner that would result in a significant physical environmental impact.

4. *SCAG Regional Transportation Plan and Regional Comprehensive Plan*

SCAG's 2008 RCP and 2016 RTP/SCS are the applicable SCAG planning documents that apply to the proposed Project. The RCP identifies voluntary best practices to approach growth and infrastructure challenges in an integrated and comprehensive way. The SCS is an elment of the RTP and was prepared pursuant to SB 375 (Public Resources Code § 21155.1 et seq.). SB 375 directs the California Air Resources Board (CARB) to set regional targets for greenhouse gas reductions from passenger vehicle use and tasks SCAG with developing a SCS that provides a plan for meeting the CARB regional target. On September 23, 2010, CARB issued a regional 8% per capita greenhouse gas reducition

target for the planning year 2020, and a conditional target of 13% fo 2035. In accordance with SB 375, the SCAG SCS, which is an element of the RTP, establishes a land use and transportation development strategy to accommodate regional population growth in a manner capable of achieving the CARB regional greenhouse gas targets. On June 28, 2106, CARB issued Executive Order G-16-066, whereby CARB formally accepted SCAG's determination that implementation of the 2016 RTP/SCS would achieve the 2020 and 2035 greenhouse gas reduciton targets for the SCAG region. The RTP/SCS goals are meant to provide guidance for considering proposed projects for municipalities throughout the SCAG jurisdictional area within the context of regional goals and policies. As shown in Table 4.9-2, *Analysis of Consistency with SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy Goals*, implementation of the proposed Project would not result in an inconsistency with the adopted RTP/SCS.

Table 4.9-2 Analysis of Consistency with SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/ SCS GOAL	GOAL STATEMENT	PROJECT CONSISTENCY DISCUSSION
G1	Align the plan investments and policies with improving regional economic development and competitiveness.	No inconsistency identified. This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive local and regional planning efforts. The development of the proposed Specific Plan would not impede economic development in the Project area or elsewhere in the City of Colton.
G2	Maximize mobility and accessibility for all people and goods in the region.	No inconsistentency identified. EIR Subsection 4.14, *Transportation and Traffic*, evaluates Project-related traffic impacts and specifies mitigation measures to reduce the potential for impacts to intersections within the City of Colton to the extent feasible. Accordingly, the Project would not result in an inconsistency RTP Goal G2.
G3	Ensure travel safety and reliability for all people and goods in the region.	No inconsistency identified. As disclosed in EIR Subsection 4.14, *Transportation and Traffic*, there is no component of the proposed Project that would result in a substantial safety hazard to motorists (refer to analysis under Threshold d) of EIR Subsection 4.14).
G4	Preserve and ensure a sustainable regional transportation system.	No inconsistency identified. This policy would be implemented by cities and the counties within the SCAG region as part of the overall planning and maintenance of the regional transportation system. The Project would not affect such planning or maintenance efforts within the City of Colton. The Project would have no adverse effect on such planning or maintenance efforts.
G5	Maximize the productivity of our transportation system.	No inconsistency identified. This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive transportation planning efforts. The Project would be consistent with the City of Colton's General Plan Mobility Element, which meets this goal to maximize productivity.

Table 4.9-2 Analysis of Consistency with SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/ SCS GOAL	GOAL STATEMENT	PROJECT CONSISTENCY DISCUSSION
G6	Protect the environment and health for our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).	No inconsistency identified. An analysis of the Project's environmental impacts is provided throughout this EIR, and feasible mitigation measures are specified where warranted. Additionally, and as discussed in EIR Subsection 4.14, *Transportation and Traffic*, the Project would have a less-than-significant impact regarding conflict with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities. Additionally, the Project would foreseeably implement sidewalk and bike lane improvements called for by the City of Colton's General Plan Mobility Element along public roadway rights-of-way that would be installed as part of the Project's future development. The Project is located within the service areas of Omnitrans, a public transit agency serving various jurisdictions within San Bernardino County. Omnitrans does not operate any transit service in the immediate vicinity of the Project site, with the exception of Bus Route 215, which travels along Interstate-215 (less than 0.05 miles east of the Project site).
G7	Actively encourage and create incentives for energy efficiency, where possible.	No inconsistency identified. This policy provides guidance to establish local incentive programs to encourage and promote energy efficient development. The Project includes design features related to building design, landscaping, and energy systems to promote the efficient use of energy.
G8	Encourage land use and growth patterns that facilitate transit and active transportation.	No inconsistency identified. This policy provides guidance to establish a local land use plan that facilitates the use of transit and active (non-motorized) forms of transportation. The Project proposes to develop the undeveloped property with a master-planned community that includes a network of pedestrian linkages (including informal trails and sidewalks) that facilitate pedestrian travel throughout the Project site, and accommodate connectivity with off-site trails and other pedestrian facilities. The proposed Project also does not impede access to public transit. As such, the Project is consistent with G8.
G9	Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	No inconsistency identified. This policy provides guidance to the City of Colton to monitor the transportation network and to coordinate with other agencies as appropriate. The proposed development of the Project site would not affect the security of the regional transportation system.

Source: (SCAG, 2016a)

In addition, Project consistency with the 2016 RTP/SCS is demonstrated by its inclusion within the growth projections for the City of Colton assumed by the 2016 RTP/SCS. The 2016 RTP/SCS projects a 1.1% average annual population growth rate in the City between 2012 (population 52,800) and 2040

(population 69,100), which includes a projected 2030 population of 64,361 (SCAG, 2016a, Appendix Table 11). According to the City of Colton General Plan, which has a planning horizon that extends to 2030, buildout of the City planning area will accommodate a population of 67,182 (City of Colton, 2013a, Table LU-1). Thus, the City population growth projected by the 2016 RTP/SCS during the period in which the Project would be constructed and become operational is accommodated by the capacity of the General Plan. Moreover, the 2016 RTP/SCS includes population projections in Traffic Analysis Zone (TAZ) maps. The TAZ area that includes the Project site (TAZ No. 3760) is projected to grow in population from 4,489 in 2020 to 6,901 in 2035 (SCAG, 2016a, TAZ No. 3760). This represents an average annual growth rate of 2.28% within the TAZ, almost three times the City annual average growth rate. Indeed, the resident population of the Project at buildout (i.e., 3,633) represents only 52.6% of the projected resident population of the TAZ by 2035. Accordingly, the Project is consistent with TAZ projections for the area that includes the Project site, which are also reflected in in the corresponding figures included in SCAG's 2016 RTP/SCS (SCAG, 2016a, TAZ No. 3760). Since Project development is within the growth projections assumed by the 2016 RTP/SCS, the Project is consistent with the 2016 RTP/SCS and would not conflict with its greenhouse gas reduction goals.

Threshold c) Would the Project conflict with any applicable habitat conservation plan or natural community conservation plan?

The Project site is not located within an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan. The Final West Valley Habitat Conservation Plan for the Federally Endangered Delhi Sands Flower-loving Fly is a Habitat Conservation Plan that includes approximately 416.3 acres of land within the City of Colton north of the I-10 Freeway and 5.8 acres encompassing a portion of East Slover Avenue south of the I-10 Freeway (RBF, 2014, p. 2). The final West Valley HCP does not designate the Project site for habitat conservation (RBF, 2014, Exhibit 1). Therefore, no impact would occur.

4.9.4 CUMULATIVE IMPACT ANALYSIS

Regarding Threshold a), the Project would not isolate any established communities or residences from neighborhood communities. As such, the Project has no potential to result in cumulatively considerable impacts associated with the physical arrangement of an established community.

The Project proposes to amend the Colton General Plan in order to re-designate the entire Project site as "Roquet Ranch Specific Plan," with the land use designations and circulation system identified in the Specific Plan. A Change of Zone for the entire site is proposed to reclassify the Project site as "Specific Plan," in accordance with all of the development standards set forth in the proposed Roquet Ranch Specific Plan. The Project proposes the City of Colton adopt the Roquet Ranch Specific Plan by resolution, which proposes the development of 874 residential dwelling units (which could increase to up to 1,050 dwelling units if the school site and fire station are not developed), 1.2 acres of Neighborhood Commercial use, a 10.3-acre school site, a 0.8-acre fire station, 19.3 acres of recreational open space, 199.7 acres of open space preserved as natural habitat, and a hierarchal roadway circulation system to serve the Roquet Ranch community. The land use types proposed by

the Roquet Ranch Specific Plan include "Low Density Residential," "Medium Density Residential," "High Density Residential," "Neighborhood Commercial," "Public/Institution," "Open Space-Recreation," and "Open Space-Resource."
The Project would not result in cumulatively considerable impacts associated with Threshold b) as the proposed Project would not result in a conflict with General Plan. Accordingly, there is no potential for the Project to contribute to any cumulatively significant impacts due to a conflict with an applicable plan or policy.

As discussed in Threshold c), the proposed Project is not located within the jurisdiction of a habitat conservation plan or natural community conservation plan. Accordingly, there is no potential for the Project to contribute to any cumulatively significant impacts due to a conflict with a habitat conservation plans/natural community conservation plan.

4.9.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a): No Impact. The proposed Project represents a logical expansion of the existing residential area located along the western side of La Cadena Drive, and would not physically divide an established community.

Threshold b): Less-than-Significant Impact. The Project would not be inconsistent with any General Plan policy, strategy or objective. The Project would be inconsistent with the current zoning classifications applicable to the Project site, and proposes a Change of Zone for the entire site to reclassify the Project site as "Specific Plan," in accordance with all of the development standards set forth in the proposed Roquet Ranch Specific Plan. The Project would not be inconsistent with any 2016 RTP/SCS policy, strategy or objective.

Threshold c): No Impact. The Project site is not located within an adopted HCP, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan, and therefore would not conflict with any such plans.

4.9.6 MITIGATION

No mitigation measures required.

4.10 NOISE

This Subsection addresses the environmental issue of noise. The information in this Subsection is based in part on a technical report titled, "Roquet Ranch Specific Plan Noise Impact Analysis, City of Colton," dated August 5, 2016 and appended to this EIR as *Technical Appendix E*. (Urban Crossroads, Inc., 2016d)

4.10.1 NOISE FUNDAMENTALS

A. *Noise Definitions*

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise sources by discriminating against very low and very high frequencies of the audible spectrum; dBA are adjusted to reflect only those frequencies which are audible to the human ear. The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal human voice conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 100 feet. (Urban Crossroads, Inc., 2016d, pp. 11-12)

B. *Noise Descriptors*

Environmental noise descriptors are generally based on averages, rather than instantaneous, noise levels. The most commonly used figure is the equivalent level (Leq). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period and is commonly used to describe the "average" noise levels within the environment. (Urban Crossroads, Inc., 2016d, p. 12)

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Day-Night Average Noise Level (LDN) and the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The LDN and CNEL are weighted averages of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The LDN time of day corrections include the addition of 10 decibels to dBA Leq (Equivalent Continuous Sound Level) sounds levels at night between 10:00 p.m. and 7:00 a.m. The CNEL time of day corrections require the addition of 5 decibels to dBA Leq sound levels in the evening from 7:00 p.m. to 10:00 p.m., in addition to the corrections for the LDN. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. LDN and CNEL do not represent the actual sound level heard at any particular time, but rather represents the total sound exposure. The City of Colton relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources,

and therefore, this analysis uses the CNEL noise level to apply the more conservative evening hour corrections to the 24-hour noise levels. (Urban Crossroads, Inc., 2016d, p. 12)

C. *Sound Propagation*

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on the following factors. (Urban Crossroads, Inc., 2016d, p. 12)

1. Geometric Spreading

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. (Urban Crossroads, Inc., 2016d, p. 12)

2. Ground Absorption of Noise

To account for the ground-effect attenuation (absorption) of noise, two types of site conditions are commonly used in traffic noise models: soft site and hard site conditions. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receptor such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source. (Urban Crossroads, Inc., 2016d, p. 13)

3. Atmospheric Effects

Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 ft.) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors that may affect noise levels include air temperature, humidity, and turbulence. (Urban Crossroads, Inc., 2016d, p. 13)

4. Shielding

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the barrier and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an “out of sight, out of mind” effect. That is, the perception of noise level tends to

decrease when vegetation blocks the line-of-sight to nearby residents. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The Federal Highway Administration (FHWA) does not consider the planting of vegetation to be a noise abatement measure. (Urban Crossroads, Inc., 2016d, p. 13)

D. Land Use Compatibility with Noise

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, mismanagement of noise impacts can also impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the development projects are planned, designed, and constructed in such a way that noise impacts from roadway noise are minimized. (Urban Crossroads, Inc., 2016d, p. 14)

A variety of reactions can be expected from people exposed to any given noise environment. Surveys have shown that about ten percent of the people exposed to traffic noise of 60 dBA will report being highly annoyed with the noise, and each increase of one dBA is associated with approximately two percent more people being highly annoyed. When traffic noise exceeds 60 dBA or aircraft noise exceeds 55 dBA, people may begin to complain. Despite this variability in behavior on an individual level, the population as a whole can be expected to exhibit the following responses to changes in noise levels: a) an increase or decrease of 1 dBA cannot be perceived except in carefully controlled laboratory experiments, b) a change of 3 dBA is considered *barely perceptible*, and c) changes of 5 dBA or more are considered *readily perceptible*. (Urban Crossroads, Inc., 2016d, p. 14)

E. Vibration

Vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency. Vibration is usually expressed in peak particle velocity (PPV) in inches per second (in/sec) and discussed in decibel (dB) units in order to compress the range of numbers required to describe vibration. Vibration impacts are generally associated with activities such as train operations, construction, and heavy truck movements. Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response (annoyance). It takes some time for the human body to respond to vibration

signals. In a sense, the human body responds to average vibration amplitude often described as the root-mean-square (RMS). The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a 1-second period. As with airborne sound, the RMS velocity is often expressed in decibel notation as vibration decibels (VdB), which serves to reduce the range of numbers used to describe human response to vibration. Vibration is often described in units of velocity (inches per second) and decibels (dB) and is denoted as VdB. (Urban Crossroads, Inc., 2016d, pp. 15-16)

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. (Urban Crossroads, Inc., 2016d, p. 16)

4.10.2 EXISTING NOISE CONDITIONS

A. Existing Ambient Noise Environment

The Project site is located west of La Cadena Drive and north of the proposed Pellissier Road in the City of Colton. Interstate 215 (I-215) is located approximately 300 feet east of the Project site. The existing surrounding land uses include open space to the north; residential and commercial to the east; residential, commercial, and industrial to the south; and vacant land to the west. The nearest airport to the Project site is Flabob Airport, located approximately four miles southwest of the site. The Project is currently predominantly undeveloped, with the exception of the Roquet Paving Inc. facility located on the southeast portion of the site, which produces a nominal degree of noise associated with vehicle ingress and egress from the property. Therefore, no substantial noise emanates from the Project site under existing conditions and existing noise is from surrounding roadways.

B. Existing Ground-borne Vibration

Ground-borne vibration levels from automobile traffic are generally overshadowed by vibration generated by heavy trucks that roll over the same uneven roadway surfaces. However, due to rapid drop-off rate of ground-borne vibration and the short duration of the associated events, vehicular traffic-induced ground-borne vibration is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity. As the existing Project site is predominantly undeveloped, no ground-borne vibration is generated by the Project site in the existing condition.

C. *Airport Noise*

As stated above, the nearest airport to the Project site is Flabob Airport, located approximately four miles southwest of the site. Due to the distance of the airport from the site, airport and aircraft noise are not a constraint to development at the Project site.

4.10.3 APPLICABLE ENVIRONMENTAL REGULATIONS

Federal, state, and local agencies regulate different aspects of environmental noise. Federal and State agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies. Local noise standards and guidelines are often based on the broader guidelines established by State and Federal agencies. A description of the regulatory setting for the Project study area's existing noise setting is provided below.

1. State of California Noise Requirements

The State of 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. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared according to 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. (Urban Crossroads, Inc., 2016d, p. 19)

2. State of California Building Standards Code

The State of California's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, and the California Building Standards Code. These noise standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from 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 noise sources create an exterior noise level of 60 dBA CNEL or higher. 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 noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL. (Urban Crossroads, Inc., 2016d, p. 19)

3. City of Colton General Plan Noise Element

The purpose of the Noise Element is to identify noise generation in the City and provide policies that minimize exposure of people to unacceptable noise levels. The establishment of desirable maximum noise levels and implementation are also included as part of the Noise Element. According to the General Plan, noise generation sources include primary arterials and major local streets, passenger and freight railroad operations, highways and freeways, and airport operations. The Noise Element

identifies the following principles for existing and future development related to noise (City of Colton, 1987a):

- Principle 1: Establish criteria defining compatible land uses as a function of the level of noise exposure.
- Principle 2: Control noise exposure from future noise generators so the ambient environment will be kept within acceptable limits.
- Principle 3: Establish acceptable noise standards consistent with health and quality of life goals.

The Noise Element identifies the following standards for existing and future development related to noise:

- Standard 1: Residential structures should be constructed to maintain interior noise levels of not greater than 45 dBA, through the use of sound barrier improvements, building design, construction materials and/or insulating techniques.
- Standard 2: Residential growth in Community Noise Exposure Areas greater than 70 dBA should be discouraged, unless on-site noise levels can be reduced to 60 dBA or lower via on- and offsite noise alleviating improvements.
- Standard 3: Exterior noise levels should not exceed 65 dBA during the day or 55 dBA at night for commercial land uses, including general business and general merchandising.
- Standard 4: Exterior noise levels should not exceed 60 dBA at any time for such areas important to public need, and where the preservation of serenity and quietness is essential if the area is to continue to serve its intended purpose. Such areas could include parks, open spaces, amphitheaters, and other areas dedicated for activities requiring special qualities of serenity.

Standards 1 to 4 identify the transportation-related exterior noise level standards for the proposed Project land uses, including: residential, commercial, park, and public/institutional uses. Based on Standards 1, 2, and 3, the exterior noise level standard for residential and recreational (park) land uses is 60 dBA CNEL, and the interior noise level standard for residential uses is 45 dBA CNEL. These long-term 24-hour noise standards are typically limited to transportation-related (mobile) noise sources. (Urban Crossroads, Inc., 2016d, p. 20)

Table 5-1, *Land Use Compatibility for Community Noise Environments*, of the City of Colton General Plan Noise Element identifies guidelines to evaluate the land use compatibility of transportation-related noise. Table 5-1 indicates that residential land uses (single-family) within the Project are considered *normally acceptable* with exterior noise levels at or below 60 dBA CNEL, and *conditionally acceptable* with noise levels at or below 70 dBA CNEL. Recreational (park) land use within the Project site is considered *normally acceptable* with exterior noise levels of up to 70 dBA CNEL, and *conditionally acceptable* with noise levels approaching 75 dBA CNEL. School facilities are considered *normally acceptable* with exterior noise levels of up to 65 dBA CNEL, and *conditionally acceptable* with noise levels of up to 70 dBA CNEL. For *conditionally acceptable* land uses within

new development projects, detailed analyses of noise reduction requirements and incorporation of necessary noise insulation features into project design are required. Table 5-1 of the City of Colton General Plan Noise Element does not identify land use compatibility guidelines for commercial land uses. (Urban Crossroads, Inc., 2016d, p. 20)

4. City of Colton Municipal Code

Noise Impacts Associated with Project Construction

The City of Colton Municipal Code does not identify specific construction noise level standards or permitted hours of construction activity. Therefore, the analysis in this EIR utilizes the permitted hours found in the County of San Bernardino Development Code standards for Project construction. The County of San Bernardino Development Code, Section 83.01.080 (g) indicates that construction noise levels are considered exempt if they occur between the hours of 7:00 a.m. to 7:00 p.m. Mondays to Fridays, with no activity allowed on Sundays and Federal holidays. The County of San Bernardino also does not establish a numeric maximum acceptable construction source noise level for nearby potentially affected receivers which would allow for a quantified determination of what CEQA constitutes a substantial temporary or periodic noise increase. In the absence of construction noise level standards delineated by the City of Colton or the County of San Bernardino, the Noise Impact Analysis performed for the Project utilized the construction noise level threshold of 85 dBA Leq for construction activities occurring near sensitive receptors over a period of eight hours or more adopted by the National Institute for Occupational Safety and Health (NIOSH), which represents the level at which noise may result in harm to human health. (Urban Crossroads, Inc., 2016d, p. 23)

Noise Impacts Associated with Project Operation

Section 18.42.040 of the City of Colton Municipal Code includes the City's community noise ordinance which indicates that the exterior noise level limit for the City shall be 65 dBA Leq. This regulation addresses community noise impacts from non-transportation noise sources (such as roof-top air conditioning units, parking lot vehicle movement activities, park activities, school athletic field activities, RV idle/air brake activities, and fire station activities, etc.). Section 18.42.040 of the City of Colton Municipal Code shall apply to operational noise levels associated with the Project. It should be noted that the County of San Bernardino Development Code, Section 83.01.080 (g) (2) exempts emergency equipment, vehicles, and devices such as the expected noise sources associated with the proposed fire station and fire truck activities in Planning Area 13; because these emergency vehicle noise sources occur only infrequently, these are considered less than significant. (Urban Crossroads, Inc., 2016d, p. 22)

5. Vibration Standards

Specific vibration level standards are not defined by the City of Colton General Plan or the City's Municipal Code. As such, this analysis uses the County of San Bernardino vibration standard of 0.2 in/sec PPV found in Section 83.01.090 of the Development Code to evaluate construction and operational noise resulting from the Project. (Urban Crossroads, Inc., 2016d, pp. 23-24)

4.10.4 BASIS FOR DETERMINING SIGNIFICANCE

The Project would have a significant noise-related impact if construction and/or operation of the Project or a Project-related component would cause:

a. *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards or other agencies;*

b. *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;*

c. *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;*

d. *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;*

e. *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 expose people residing or working in the project area to excessive noise levels; or*

f. *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.*

Noise level increases resulting from the Project are evaluated based on the guidance given in CEQA Guidelines Appendix G at the closest sensitive receiver locations. While the CEQA Guidelines and the City of Colton General Plan Guidelines provide direction on noise compatibility and establish noise standards by land use type that are sufficient to assess the significance of noise impacts under the first threshold, they do not define the levels at which increases are considered substantial for use under the second, third and fourth threshold. Under CEQA, consideration must be given to the magnitude of the increase, the existing ambient noise levels and the location of noise-sensitive receivers in order to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes that there is no single noise increase that renders the noise impact significant. Therefore, the lead agency must determine when an increase is substantial, based on substantive evidence.

Because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise, there is no completely satisfactory way to measure the subjective effects of noise or of the corresponding human reactions of annoyance and dissatisfaction. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of the noise to the existing environment to which one has adapted—the so-called "ambient environment". In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged. With this in mind, the Federal Interagency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated increases in noise levels that take into account the ambient noise level. The FICON recommendations are based on studies that

relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (i.e., CNEL). (Urban Crossroads, Inc., 2016d, p. 26)

For the purpose of the analysis in the Project's Noise Impact Analysis (*Technical Appendix K*) and herein, FICON is used. FICON identifies a readily perceptible 5 dBA or greater project-related noise level increase as a significant impact when the noise levels without the project are below 60 dBA. According to the FICON, in areas where the without project noise levels range from 60 to 65 dBA, a 3 dBA or greater project-related noise level increase would be a significant impact. When the without project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if noise-sensitive receivers are affected, since it likely contributes to an existing noise exposure exceedance. Table 4.10-1, *Significance of Noise Impacts at Noise-Sensitive Receivers*, provides a summary of the potential noise impact significance criteria based on guidance from FICON.

Based on the significance of noise impacts outlined on Table 4.10-1, noise impacts will be considered significant in this EIR if any of the following occur as a direct result of the proposed development:

A. Off-Site Traffic Noise

If the off-site traffic noise levels at nearby noise-sensitive land uses adjacent to roadways conveying Project traffic:

- Are less than 60 dBA CNEL and the Project creates a readily perceptible 5 dBA CNEL or greater Project related noise level increase; or
- Range from 60 to 65 dBA CNEL and the Project creates a barely perceptible 3 dBA CNEL or greater Project noise level increase; or
- Already exceed 65 dBA CNEL, and the Project creates a community noise level impact of greater than 1.5 dBA CNEL.

B. On-Site Traffic Noise

If the on-site exterior noise levels exceed 60 dBA CNEL or the interior noise levels exceed 45 dBA CNEL at the residential land uses or proposed school site within the Project site. (See Table 4.10-1).

Construction Noise and Vibration

Construction noise vibration impacts will be considered significant in this EIR if Project-related construction activities:

- Occur at any time other than the permitted hours of 7:00 a.m. to 7:00 p.m. on any day with no activity allowed on Sundays and Federal holidays (County of San Bernardino Municipal Code, Section 83.01.080 (g));

- Create noise levels which exceed the construction noise level threshold of 85 dBA Leq for construction activities occurring near sensitive receptors over a period of eight hours or more adopted by NIOSH;

- Generate construction vibration levels that exceed the County of San Bernardino acceptable vibration standard of 0.02 in/sec PPV (San Bernardino County Development Code, Section 83.01.090).

Table 4.10-2, *Significance Criteria Summary*, below provides a summary of the significance criteria used to evaluate the significance of noise impacts associated with the proposed Project.

4.10.5 METHODOLOGY FOR CALCULATING PROJECT-RELATED NOISE IMPACTS

A. Construction Noise Analysis Methodology

Noise generated by the Project construction equipment would include a combination of trucks, power tools, concrete mixers and portable generators that can reach high levels when combined. The number and mix of construction equipment is expected to occur in the following stages:

- Rough/Fine Grading
- Underground Infrastructure
- Building Construction
- Architectural Coating
- Paving

In order to describe the typical construction activity noise levels for each stage of Project construction, Urban Crossroads, Inc. collected reference construction activity noise level measurements at several typical construction sites to generate a representative list of typical noise levels. Noise levels generated by heavy construction equipment range from approximately 68 dBA to over 80 dBA when measured at 50 feet. However, these noise levels diminish with distance from the construction site at a rate of 6 dBA with each doubling of distance. For example, a noise level of 80 dBA measured at 50 feet from the noise source to the receiver would be reduced to 74 dBA at 100 feet from the source to the receiver, and would be further reduced to 68 dBA at 200 feet from the source to the receiver. The reference construction activity noise levels used for the noise impact analysis are summarized in Table 11-1 of the Project's noise impact analysis (*Technical Appendix K*). Tables 11-2 through 11-6 of the Project's noise impact analysis show the Project construction stages and the reference construction noise levels used for each stage of construction, while Table 11-7 of the Project's noise impact analysis provides a summary of the noise levels from each stage of construction at each of the sensitive receiver locations. Based on the reference construction noise levels, the Project-related construction noise levels when the peak reference noise level is operating at the closest point within the center of construction activity to

the nearest the sensitive receiver location would range from 42.3 to 83.2 dBA Leq. (Urban Crossroads, Inc., 2016d, pp. 69-70)

Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. In order to describe the existing ambient noise environment, 24-hour noise level measurements were taken at the following eight representative noise-sensitive receivers as identified by Urban Crossroads, Inc. (Urban Crossroads, Inc., 2016d, pp. 57-58):

- R1: Located approximately 1,865 feet north of the Project site, R1 represents existing residential homes on Litton Avenue.
- R2: Represents existing residential homes located approximately 478 feet east of the Project site on Palm Avenue.
- R3: Represents the existing single-family residential homes located roughly 31 feet from the eastern Project site boundary on Lark Street.
- R4: Represents the existing single-family residential homes located approximately 46 feet north of the Project site on Maryknoll Drive.
- R5: Represents residential homes at a distance of approximately 58 feet on Maryknoll Drive.
- R6: Represents existing mobile homes located approximately 30 feet south of the Project site.
- R7: Represents the existing mobile homes located roughly 53 feet south of the Project site boundary.
- R8: Represents the mobile homes located approximately 32 feet south of the Project site boundary.

As shown on Figure 4.10-1, *Receiver Locations*, noise-sensitive receivers in the vicinity of the Project site include residential homes to the north, east, and south of the Project site, which are represented by noise receiver locations R1 through R8. The closest noise sensitive receiver is represented by location R6 where existing mobile homes are located approximately 30 feet to the south of the Project site.

B. Federal Highway Administration Traffic Noise Prediction Model

The estimated roadway noise impacts from vehicular traffic were calculated by Urban Crossroads, Inc. using a computer program that replicates the FHWA Traffic Noise Prediction Model- FHWA-RD-77-108. The FHWA Model arrives at a predicted noise level through a series of adjustments to the

Reference Energy Mean Emission Level (REMEL). In California, the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. Adjustments were then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period. (Urban Crossroads, Inc., 2016d, p. 35)

C. *Off-Site Traffic Noise Prediction Model Inputs*

The off-site roadway parameters included as Table 6-1 of the Project's noise impact analysis (*Technical Appendix K*) presents the roadway parameters used by Urban Crossroads, Inc. to assess the Project's off-site transportation noise impacts. The table identifies the 36 study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications according to the City of Colton, City of Riverside, City of Grand Terrace, and County of Riverside General Plan Circulation Elements, and the posted vehicle speeds. Soft site conditions were used to analyze the traffic noise impacts within the Project study area which account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. Research conducted by Caltrans has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model used in this analysis. (Urban Crossroads, Inc., 2016d, p. 35)

The Existing (2016), Opening Year 2020, and Horizon Year 2040 average daily traffic volumes used for this study are presented on Table 6-2 of the Project's noise impact analysis (*Technical Appendix K*) and were provided by the Roquet Ranch Specific Plan Traffic Impact Analysis prepared by Urban Crossroads, Inc. Table 6-3 of the Project's noise impact analysis presents the time of day vehicle splits by vehicle type, and Table 6-4 of the Project's noise impact analysis presents the total traffic flow distributions (vehicle mixes) used in the noise impact analysis. The vehicle mix provides the hourly distribution percentages of automobile, medium trucks and heavy trucks for input into the FHWA Model based on roadway types. (Urban Crossroads, Inc., 2016d, pp. 35-38)

D. *On-Site Traffic Noise Prediction Model Inputs*

The on-site roadway parameters including the average daily traffic (ADT) volumes used for the Noise Impact Analysis are shown in Table 6-5 of the Project's noise impact analysis. Based on the City of Colton General Plan Mobility Element and the traffic impact analysis (*Technical Appendix L*), La Cadena Drive is classified as a four-lane Major Arterial and Pellissier Road is classified as a four-lane Secondary Arterial; Roquet Ranch Drive is classified as a two-lane Collector Road. To predict the future on-site noise environment at the Project site, the Horizon Year 2040 with Project ADT volumes were obtained from the Project's traffic impact analysis. The traffic volumes shown on Table 6-5 of the Project's noise impact analysis reflect future long-range traffic conditions needed to assess the future on-site traffic noise environment and identify potential mitigation measures (if necessary) that

address very conservative assumptions for future conditions. Soft site conditions were used to analyze the traffic noise impacts within the Project study area which account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. Research conducted by Caltrans has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model used in the Project's noise impact analysis. (Urban Crossroads, Inc., 2016d, p. 38)

Table 6-3 of the Project's noise impact analysis shows the time of day vehicle splits by vehicle type, and Table 6-4 of the Project's noise impact analysis shows the total traffic flow distributions (vehicle mixes) used for the noise impact analysis. The vehicle mix provides the hourly distribution percentages of automobile, medium trucks and heavy trucks for input into the FHWA Model based on roadway types. To describe the actual traffic conditions on the I-215 Freeway adjacent to the Project site, the 2014 traffic volumes were collected from the 2014 Annual Average Daily Truck Traffic (AADT) on the California Highway System, Caltrans Traffic Data Branch. The I-215 traffic counts used in this analysis represent the most recent data published by Caltrans that accurately reflects the heavy truck activities on the I-215 Freeway. (Urban Crossroads, Inc., 2016d, p. 38)

To model the future noise environment at each building within the Project site, Urban Crossroads Inc. collected coordinate information to identify the noise transmission path between the noise source and receiver. The coordinate information is based on the Project site plan showing the plotting of each Planning Area in relation to the I-215 Freeway, La Cadena Drive, Pellissier Road, and Roquet Rancho Road. The exterior noise level impacts at the outdoor living area receivers were placed 5 feet above the pad elevation and 10 feet from the proposed barrier location or at the proposed building façade, whichever is greater. All second-floor receivers were located 14 feet above the proposed finished floor elevation. (Urban Crossroads, Inc., 2016d, pp. 38-39)

E. FTA Rail Noise Prediction Model

The BNSF Railway Company operates rail lines approximately 1,420 feet to the east of the Project site. Urban Crossroads, Inc. calculated railroad noise impacts from the BNSF rail lines using the Federal Transit Administration (FTA) Noise Impact Assessment Spreadsheet ("FTA Model"). The FTA Model calculates the predicted noise level based on the type of train, distance to receiver, number of trains per hour, speed, number of locomotives per train, and type of railroad tracks. The number of trains per hour and speed of each train for the railroad tracks near the Project site were obtained from the U.S. Department of Transportation Crossing Inventory Forms for the City of Colton area. Over a 24-hour period, the rail line accommodates a total of 106 daily trains (or approximately 4.4 trains per hour over a 24-hour period) at a maximum speed of 60 miles per hour (mph). The railroad noise impact calculations are provided in Appendix 8.1 of *Technical Appendix K*. (Urban Crossroads, Inc., 2016d, p. 39)

F. Ground-borne Vibration

The Project's noise impact analysis calculated the potential ground-borne vibration associated with vehicular traffic and construction activities. Ground-borne vibration levels from automobile traffic are

generally overshadowed by vibration generated by heavy trucks that roll over the same uneven roadway surfaces. However, due to the rapid drop-off rate of ground-borne vibration and the short duration of the associated events, vehicular traffic-induced ground-borne vibration is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity. (Urban Crossroads, Inc., 2016d, p. 40)

However, while vehicular traffic is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used. Ground vibration levels associated with various types of construction equipment are shown below in Table 4.10-3, *Vibration Source Levels for Construction Equipment*. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the human response (annoyance) using the vibration assessment methods defined by the FTA. To describe the human response (annoyance) associated with vibration impacts, the FTA provides the following equation used to determine the vibration levels at a given receiver distance based on a reference vibration level distance of 25 feet: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$. (Urban Crossroads, Inc., 2016d, p. 40)

4.10.6 IMPACT ANALYSIS

Impact thresholds a), c), and d) are discussed together immediately below, followed by separate discussions on thresholds b), e), and f).

Threshold a)	***Would the Project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards or other agencies?***
Threshold c)	***Would the Project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?***
Threshold d)	***Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?***

A. Construction Noise Impact Analysis

Construction equipment operating on the Project site would create intermittent periods of noise when construction equipment is in operation, which would cause short-term increases in ambient noise levels. As discussed in EIR Subsection 4.10.5, the Project's noise impact analysis (*Technical Appendix K*) modeled and analyzed construction noise levels for each stage of construction, which include (Urban Crossroads, Inc., 2016d, p. 69):

- Rough/Fine Grading;
- Underground Infrastructure;
- Building Construction;
- Architectural Coating; and
- Paving.

To assess the potential for short-term construction noise impacts, analysis of the Project's construction noise level impacts were completed by Urban Crossroads Inc. for eight representative noise receiver locations (R1 through R8), which represent the nearest noise-sensitive receivers to the Project site. Figure 4.10-2, *Construction Activity Locations*, depicts the distance between the receiver locations and the limits of construction activities. As shown in Table 4.10-4, *Construction Noise Level Compliance*, when the peak reference noise level is operating at the closest point within the center of construction activity to the nearest the sensitive receiver location, construction noise levels would range from 42.3 to 83.2 dBA Leq. None of the calculated construction noise levels would exceed the construction noise level threshold of 85 dBA Leq for construction activities occurring near sensitive receptors over a period of eight hours or more adopted by NIOSH. Additionally, based on the standard articulated in Section 83.01.080 (g) of the County of San Bernardino Development Code, Table 4.10-2 requires that all construction activities would be limited to occurring within the hours of 7:00 a.m. and 7:00 p.m. Mondays to Saturdays, with no activity allowed on Sundays and Federal holidays. As such, noise impacts that would occur as a result of Project construction activities would be less than significant.

Although construction noise is temporary, intermittent, and of short duration and would be less than significant, standard Mitigation Measure MM 4.10-1 is nonetheless identified in Subsection 4.10.9 to further reduce the potential for nuisance noise levels at the nearby noise-sensitive residential uses.

B. Off-Site Transportation-Related Noise Impact Analysis

Urban Crossroads, Inc. used noise contours to assess the Project's incremental traffic-related noise impacts at land uses adjacent to the Project site. Noise contour boundaries represent equal levels of noise exposure and are measured in CNEL from the center of the roadway for the 70, 65, and 60 dBA noise levels. Tables 7-1 through 7-6 of the Project's Noise Impact Analysis (*Technical Appendix K*) presents a summary of the unmitigated exterior traffic noise levels for the 36 study area roadway segments analyzed for the *without Project* and the *with Project* conditions for each of the three scenarios presented below. A summary of the traffic noise level contours for each of the traffic scenarios is included in Appendix 7.1 of *Technical Appendix K*. To evaluate off-site noise increases that could result from Project-related traffic, Urban Crossroads, Inc. developed noise contours for the following traffic scenarios (Urban Crossroads, Inc., 2016d, p. 41).

- Existing (2016) Without / With Project. This scenario refers to the existing present-day noise conditions, without and with buildout of the proposed Project.

- Opening Year 2020 Without / With Project. This traffic scenario refers to the background noise conditions at future Year 2020 with and without the Project. The *with Project* scenario corresponds to Year 2020 conditions and includes all cumulative projects listed in the Project's traffic impact analysis (*Technical Appendix L*).

- Horizon Year (2040) Without / With Project. This scenario refers to the background noise conditions at future Year 2040 with and without the proposed Project. The *with Project*

scenario corresponds to Year 2040 conditions and includes all cumulative projects identified in the Traffic Impact Analysis. (*Technical Appendix L*).

1. Existing with Project Conditions

Table 4.10-5, *Existing Off-Site Project-Related Traffic Noise Impacts*, presents a comparison of the *Existing without Project* and *with Project* conditions CNEL Noise Levels which would result with implementation of the proposed Project in the absence of cumulative development and ambient growth. As shown on Table 4.10-5, the *Existing with Project* noise level conditions are calculated to range from 57.2 to 78.0 dBA CNEL. As shown on Table 4.10-5, the Project would result in an exterior noise level increase of up to 2.0 dBA CNEL. Based on the significance criteria presented in Table 4.10-2, none of the roadway segments would experience a potentially significant unmitigated exterior noise level impact due to the Project's contribution to off-site traffic volumes under Existing with Project conditions. (Urban Crossroads, Inc., 2016d, p. 49)

2. Opening Year 2020 With Project Conditions

Table 4.10-6, *Opening Year 2020 Off-Site Project-Related Traffic Noise Impacts*, presents a comparison of the Year 2020 *without Project* and Year 2020 *with Project* conditions CNEL noise levels. As shown on Table 4.10-6, the Year 2020 *with Project* Conditions noise level contours are calculated to range from 58.1 to 78.3 dBA CNEL. As shown on Table 4.10-6, the Project would result in an exterior noise level increase of up to 1.8 dBA CNEL. Because the ambient conditions would be below the significance thresholds for all roadways segments, implementation of the Project would result in a less-than-significant impact under Year 2020 *with Project* Conditions. (Urban Crossroads, Inc., 2016d, p. 49)

3. Horizon Year 2040 With Project Conditions

Table 4.10-7, *Horizon Year 2040 Off-Site Project-Related Traffic Noise Impacts*, presents a comparison of the Horizon Year 2040 *without Project* and *with Project* conditions CNEL noise levels. Table 4.10-7 shows that the unmitigated exterior noise levels are expected to range from 61.3 to 79.8 dBA CNEL for Horizon Year 2040 *without Project* conditions. Table 4.10-7 presents the Horizon Year 2040 *with Project* conditions noise level contours that are expected to range from 61.4 to 79.8 dBA CNEL. As shown on Table 4.10-7, the Project would generate an exterior noise level increase of up to 1.3 dBA CNEL, which would not exceed the significance thresholds identified in Table 4.10-2 for any of the 36 roadway segments studied. Therefore, the off-site Project-related traffic noise level increases are considered less than significant under Horizon Year 2040 conditions. (Urban Crossroads, Inc., 2016d, p. 49)

C. On-Site Traffic Noise Analysis

Urban Crossroads, Inc. expects that the primary source of noise impacts to the Project site would be traffic noise from the I-215 freeway, La Cadena Drive, Pellissier Road, Roquet Ranch Road, and BNSF rail lines. The Project would also expect some background traffic noise impacts from the Project's

internal streets; however, due to the and low traffic volume/speed, Urban Crossroads, Inc. does not expect traffic noise from these roads to substantially contribute to the noise environment.

1. On-Site Exterior Noise Analysis

Using the FHWA traffic noise prediction model and the off-site roadway parameters presented in the Project's noise impact analysis, (*Technical Appendix K*) the expected future exterior noise levels for individual lots was calculated by Urban Crossroads, Inc. Table 4.10-8, *Exterior Noise Levels (CNEL),* presents a summary of future exterior noise levels in the outdoor living areas (backyards) for the proposed lots adjacent to the I-215 Freeway, La Cadena Drive, Pellissier Road, and Roquet Ranch Road, and facing the BNSF rail lines. As shown in Table 4.10-8, the proposed lots would experience unmitigated exterior noise levels ranging from 46.7 to 73.6 dBA CNEL. Refer to Appendix 8.1 of *Technical Appendix L* for Urban Crossroads on-site traffic noise analysis calculations.

Standard 2 of the City of Colton General Plan Noise Element, establishes a 60 dBA CNEL exterior noise level standard for residential land uses. As shown in Table 4.10-8, unmitigated noise levels would exceed the 60 dBA CNEL exterior noise level standard for onsite residential uses in Planning Area 9 (along I-215 freeway and La Cadena Drive); Planning Areas 3 and 8 (along Pellissier Road); Planning Areas 2 and 6 (along Pellissier Road); Planning Area 7 (along Roquet Ranch Road); and Planning Area 4 (along Roquet Ranch Road). As such, absent mitigation, a potentially significant impact would occur with respect to the exterior noise levels in these residential areas. Mitigation Measure MM 4.10-2 would require the construction of 6-foot high noise barriers for Planning Areas 2 to 4, and 6 to 9 adjacent to Pellissier Road and Roquet Ranch Road. As shown in Table 4.10-8, implementation of Mitigation Measure MM 4.10-2 would reduce exterior noise levels for Planning areas 2 to 4, and 6 to 9 adjacent to Pellissier Road and Roquet Ranch Road to a range of 53.8 to 58.3 dBA CNEL, which would satisfy the City of Colton 60 dBA CNEL exterior noise level standard. The mitigated exterior noise levels at the residential homes within Planning Area 9 adjacent to the I-215 freeway and La Cadena Drive would approach 62.8 and 60.4 dBA CNEL (respectively) with implementation of Mitigation Measure MM 4.10-2. While the exterior noise levels would exceed the 60 dBA CNEL standard for residential land use at the residential homes within Planning Area 9 adjacent to the I-215 freeway and La Cadena Drive, the mitigated exterior noise levels would satisfy the conditions of *conditionally acceptable* residential land use, based on Table 5-1 of the City of Colton General Plan Noise Element. Furthermore, Table 83-3 of the County of San Bernardino Development Code indicates that exterior noise levels of up to 65 dBA CNEL are allowed provided exterior noise mitigation has been provided, and the interior noise levels do not exceed 45 dBA CNEL (refer to on-site interior noise analysis section below). Accordingly, implementation of Mitigation Measure MM 4.10-2 would sufficiently reduce potential on-site traffic exterior noise levels to less-than-significant levels.

Unmitigated exterior noise levels at the school land use within Planning Area 12 will satisfy the exterior noise level criteria of 65 dBA CNEL for *normally acceptable* land use without the need for exterior noise mitigation.

2. *On-Site Interior Noise Analysis*

To ensure that the interior noise levels would comply with the City of Colton 45 dBA CNEL interior noise standards, Urban Crossroads, Inc. calculated future noise levels at the first and second floor building façades. The interior noise level was calculated as the difference between the predicted exterior noise level at the building façade and the noise reduction of the structure. Typical building construction would provide a Noise Level Reduction (NLR) of approximately 12 dBA with "windows open" and a minimum of 25 dBA noise reduction with "windows closed." However, sound leaks, cracks, and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are typically used to improve interior noise reduction, including weather-stripped solid core exterior doors; upgraded dual glazed windows; mechanical ventilation/air conditioning; and exterior wall/roof assembles free of cuts or openings. (Urban Crossroads, Inc., 2016d, p. 54)

Table 4.10-9, *First Floor Interior Noise Impacts (CNEL)*, shows that the future unmitigated noise levels (with windows open) at the first-floor building façade are calculated to range from 53.9 to 66.1 dBA CNEL. Table 4.10-10, *Second Floor Interior Noise Impacts (CNEL)*, shows that the future unmitigated noise levels (with windows open) at the second-floor building façade are calculated to range from 56.8 to 70.6 dBA CNEL. The interior noise level analysis shows that the City of Colton 45 dBA CNEL interior noise level standards can be satisfied using standard windows with a minimum sound transmission class (STC) rating of 27, with the exception of the lots in Planning Area 9 that abut La Cadena Drive, which would require upgraded windows with a minimum STC rating of 32. As such, Mitigation Measure MM 4.10-3 requires the installation of upgraded windows with a minimum STC rating of 32 at all residential buildings within Planning Area 9 situated on lots that abut La Cadena Drive. Implementation of Mitigation Measure MM 4.10-3, would reduce interior noise levels to a less-than-significant level.

D. *Stationary Operational Noise*

Potential operational noise impacts from the Project's stationary noise sources on off-site sensitive receiver locations (see Figure 4.10-1) were analyzed in the Project's noise impact analysis (*Technical Appendix K*). Figure 4.10-3, *Operational Noise Sources*, identifies the receiver locations and noise source locations used to assess the Project-related operational noise levels. Project-related stationary-source (operational) noise would be generated by the commercial, park, school, and fire station uses. The on-site Project-related noise sources are expected to include: roof-top air conditioning units, parking lot vehicle movement activities, drive-thru speakerphone, park activities, school athletic field activities, RV idle/air brake activities, and fire station activities. Further, the proposed residential land uses are considered noise-sensitive receptors, and are not expected to include any specific type of operational noise levels beyond the typical noise sources associated with residential land use. (Urban Crossroads, Inc., 2016d, p. 59)

To calculate Project operational noise impacts, Urban Crossroads, Inc. collected reference noise level measurements from similar types of activities to represent the noise levels expected with the

development of the proposed Project. Table 10-1 of the Project's noise impact analysis shows the reference noise level measurements used to calculate the Project operational noise impacts at each of the sensitive receiver locations, which included the following noise sources (Urban Crossroads, Inc., 2016d, p. 61):

- Roof-top air conditioning units;
- Parking lot vehicle movements;
- Drive-thru speakerphone;
- Park/school athletic field activity;
- RV idle/air brake activities; and
- Fire station activities.

Figure 4.10-3, *Operational Noise Sources*, shows the operational noise level calculations accounting for distance attenuation provided due to geometric spreading. As shown in Table 4.10-11, hourly noise levels associated with the roof-top air conditioning units, parking lot vehicle movement activities, park activities, school athletic field activities, RV idle/air brake activities, and fire station activities are expected to range from 16.4 to 51.2 dBA Leq at the sensitive off-site receiver locations. The operational noise level calculation worksheets are included in Appendix 10.1 of *Technical Appendix K*. The operational noise levels generated by the Project at the sensitive receiver locations would not exceed the exterior noise level standard of 65 dBA Leq established by Section 18.42.040 of the City of Colton Municipal Code. (Urban Crossroads, Inc., 2016d, p. 63)

To evaluate the Project operational noise level contributions, the Project operational noise levels were combined with the existing ambient noise levels measurements for the off-site receiver locations. The difference between the combined Project and ambient noise levels describe the Project noise level contributions. Noise levels that would be experienced at receiver locations when Project-source noise is added to the ambient daytime and nighttime conditions are presented on Table 4.10-12, *Daytime Operational Noise Level Contributions (DBA LEQ)*, and Table 4.10-13, *Nighttime Operational Noise Level Contributions (DBA LEQ)*, respectively. (Urban Crossroads, Inc., 2016d, p. 64)

As indicated in Table 4.10-12, the Project would contribute an operational noise level increase of up to 0.4 dBA Leq during the daytime hours at the existing sensitive receiver locations potentially impacted by the operation of the Project. Table 4.10-1 shows that the Project would contribute an operational noise level increase of up to 0.5 dBA Leq at the nearby sensitive receiver locations during the nighttime hours. As shown on Table 4.10-12 and Table 4.10-1, only receiver R5 (which represents the off-site residential homes along Maryknoll Drive) would experience an increase in existing ambient noise levels as a result of Project operational noise. Project-related operational noise level contributions would not exceed the significance criteria shown in Table 4.10-1, *Significance of Noise Impacts at Noise-Sensitive Receivers*, and therefore the increases at the sensitive receiver locations would be considered less than significant. (Urban Crossroads, Inc., 2016d, pp. 64-65)

Based on the foregoing analysis, Project operational stationary-source noise would not result in a substantial temporary/periodic, or permanent increase in ambient noise levels in the Project vicinity

above levels existing without the Project, and impacts would be less than significant. The future operational noise level contribution is not calculated for the future residential homes within the Project planning areas since the existing ambient noise levels do not represent the ambient conditions once the Project would be fully built and occupied. (Urban Crossroads, Inc., 2016d, pp. 64-65)

Threshold b) Would the Project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used and the distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause intermittent, localized intrusion. The proposed Project's construction activities most likely to cause vibration impacts are heavy mobile construction equipment used on-site and trucks hauling building materials to the Project site. Using the vibration source level of construction equipment provided in Table 4.10-3, *Vibration Source Levels for Construction Equipment*, and the construction vibration assessment methodology published by the FTA, Urban Crossroads calculated the Project's vibration levels. Table 4.10-3 presents the expected Project-related vibration levels of the eight (8) representative noise-sensitive receiver locations.

As shown on Table 4.10-3Table 4.10-14, *Construction Equipment Vibration Levels*, based on the reference vibration levels provided by the FTA, a large bulldozer represents the peak source of vibration with a reference velocity of 0.089 in/sec (PPV) at a distance of 25 feet. At distances ranging from 54 to 3,629 feet from Project construction activities, construction vibration velocity levels are expected to approach 0.028 in/sec PPV, as shown on Table 4.10-14. Based on the County of San Bernardino vibration standard of 0.2 in/sec PPV, the construction-related vibration impacts are considered less than significant.

Furthermore, vibration levels at the site of the closest receiver are unlikely to be sustained during the entire construction period, but would occur rather only during times that heavy construction equipment is operating adjacent to the Project site perimeter. In addition, construction at the Project site would be restricted to daytime hours consistent with City of Colton and Mitigation Measure MM 4.10-1 requirements, thereby eliminating potential vibration impacts during the sensitive nighttime hours. Therefore, the Project's short-term construction activities would not result in exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels. Thus, impacts are less than significant.

Threshold e) 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 expose people residing or working in the project area to excessive noise levels.

Flabob Airport is the closest airfield to the Project site, and is located approximately 4 miles to the southwest of the Project site. The Project does not lie within an airport land use plan, or within two miles of a public airport or public use airport. Accordingly, the Project would not expose people

residing of working in the Project area to excessive airport-related noise levels. Thus, no impact would occur. (Urban Crossroads, Inc., 2016d, p. 25; Google Earth, 2016)

Threshold f)	***For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?***

There are no private airfields or airstrips in the vicinity of the Project site (Google Earth, 2016). As such, implementation of the Project would not expose on-site residents or workers to safety hazards associated with private airfields or airstrips. No impact would occur.

4.10.7 CUMULATIVE IMPACT ANALYSIS

The cumulative impact analysis considers construction and operation of the proposed Project in conjunction with other development projects in the vicinity of the Project site resulting from full General Plan buildout and buildout in the surrounding areas.

A. Construction-Related Noise Impact

Construction activities associated with the Project, especially involving heavy construction equipment, would create intermittent periods of noise when construction equipment is in operation and cause a short-term increase in ambient noise levels. The peak noise level anticipated during grading activities when all equipment is operating simultaneously at the Project site boundaries. In reality, it is highly unlikely that all pieces of heavy construction would be operating simultaneously at the same time and at the same location adjacent to the Project site boundaries. Instead, noise levels would vary day-to-day and would vary throughout the workday as equipment moves around the Project site. As discussed under Threshold a), construction noise levels would not exceed the construction noise threshold level of 85 dBA Leq for single-family residential land use. Because the construction noise levels would not exceed 85 dBA Leq, because construction noise would be temporary in nature, and because the Project and other cumulative projects (listed in Table 4.0-1 of this EIR) would be required to comply with applicable noise standards to reduce potential construction-related noise level impacts, Project construction activities combined with foreseeable construction noise from nearby development would result in a less than cumulatively considerable substantial (long-term) increase in ambient noise levels in the Project study area above levels existing without the Project. However, the proposed Project as well as other cumulative projects (listed in Table 4.0-1 of this EIR) would be required to implement mitigation measures to reduce potential construction related noise level impacts.

B. Transportation-Related Noise Impacts

As is demonstrated in Table 4.10-6, *Opening Year 2020 Off-Site Project-Related Traffic Noise Impacts*, the *Year 2020 with Project Conditions* noise level contours are calculated to range from 58.1 to 78.3 dBA CNEL, and the Project would result in an exterior noise level increase of up to 1.8 dBA CNEL. This Project-related increase in noise levels for the *Year 2020 with Project Conditions* scenario would not exceed the significance thresholds (shown in Table 4.10-2). As shown in Table 4.10-7, *Horizon Year 2040 Off-Site Project-Related Traffic Noise Impacts*, the Project would generate an exterior noise

level increase of up to 1.3 dBA CNEL for the *Horizon Year 2040 With Project Conditions*, which would not exceed the significance thresholds identified in Table 4.10-2 for any of the 36 roadway segments studied. When combined with other cumulative projects in the vicinity, the proposed Project could result in a cumulatively considerable impact regarding long term transportation-related noise; however, the proposed Project as well as other cumulative projects (listed in Table 4.0-1 of this EIR) would be required to comply with applicable noise standards and implement mitigation measures to reduce potential transportation-related noise impacts. As such, the Project would result in a less than cumulatively considerable impact with respect to transportation-related noise impacts.

C. *Ground-Borne Vibration and Ground-Borne Noise*

Vibration levels from the proposed Project's short-term construction activities would not exceed County of San Bernardino Development Code Section 83.01.090 vibration standard of 0.2 in/sec PPV. Furthermore, vibration levels at the site of the closest receiver are unlikely to be sustained during the entire construction period, but would occur rather only during times that heavy construction equipment is operating adjacent to the Project site perimeter. In addition, construction at the Project site would be restricted to daytime hours consistent with City of Colton requirements thereby eliminating potential vibration impacts during the sensitive nighttime hours. Therefore, the potential for the Project to result in cumulatively considerable ground-borne vibration and ground-borne noise would be less than significant. Other cumulative projects in the vicinity of the proposed Project could result in a cumulatively considerable impact regarding ground-borne vibration and ground-borne noise during construction. However, the proposed Project as well as other cumulative projects (listed in Table 4.0-1 of this EIR) would be required to comply with applicable noise standards and implement mitigation measures to reduce potential ground-borne vibration and ground-borne noise impacts.

D. *Airport Noise*

The proposed Project does not involve the construction, operation, or us of any public airports, public use airports, or private airstrips. There are no conditions associated with the Project that would contribute airport noise or exposure of additional people to unacceptable levels of airport noise. Accordingly, the Project would have no potential to cumulatively contribute to impacts associated with noise from any public airports, public use airports, or private airstrip. Additionally, the Project does not lie within an airport land use plan, or within two miles of a public airport or public use airport or a private airstrip.

4.10.8 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a), c), and d) (On-Site Exterior Noise). Significant Direct Impact: The Project would expose residential homes to unmitigated exterior noise levels that would exceed the 60 dBA CNEL exterior noise level standard for residential uses in the following areas of the Project site: Planning Area 9 (along I-215 freeway and La Cadena Drive); Planning Areas 3 and 8 (along Pellissier Road); Planning Areas 2 and 6 (along Pellissier Road); Planning Area 7 (along Roquet Ranch Road); and Planning Area 4 (along Roquet Ranch Road).

Thresholds a), c), and d) (On-Site Interior Noise). Significant Direct Impact: Without mitigation by the installation of upgraded windows (i.e., windows with a minimum STC rating of 32), proposed residences within Planning Area 9 that abut La Cadena Drive would experience interior noise levels that exceed the City of Colton 45 dBA CNEL interior noise level standard.

Threshold b): Less-than-Significant. Construction and operation of the Project would produce vibration levels below the County of San Bernardino vibration standards used as a vibration threshold in this EIR. Vibration impacts would be less than significant.

Threshold e): No Impact. The Project would not expose people residing or working in the area to excessive noise levels associated with public airports.

Threshold f): No Impact. The Project would not expose people residing or working in the area to excessive noise levels associated with private airstrips.

4.10.9 MITIGATION

MM 4.10-1 Prior to issuance of any grading and building permits, the City of Colton shall review grading and building plans to ensure the following notes are included on the plans. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Colton upon request.

a) All construction activities and haul truck deliveries shall be prohibited from occurring between 7:00 p.m. and 7:00 a.m. and on Sundays and Federal holidays.

b) All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers, consistent with manufacturer's standards. The construction contractors shall place all stationary equipment so that emitted noise is directed away from the noise sensitive receivers nearest the Project site.

c) Construction equipment staging areas shall be located such that a minimum distance of 100 feet is maintained between construction staging areas and noise-sensitive receptors.

d) The construction contractor shall design a haul route exhibit that includes delivery routes that minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 7:00 a.m. to 7:00 p.m. Monday to Saturday with no activity on Sundays and Federal holidays).

MM 4.10-2 Prior to issuance of building permits, the City of Colton shall verify that final building plans require the construction of 6-foot high noise barriers at lots within Planning Areas 2 to 4, and 6 to 9 that abut Pellissier Road and Roquet Ranch Road. Additionally, the

final building plans shall also require the construction of an 8-foot high noise barrier for outdoor living areas at lots within Planning Area 9 which abut La Cadena Drive and face the I-215 Freeway and BNSF rail lines.

The recommended noise control barriers shall be constructed so that the top of each wall and/or berm combination extends to the recommended height above the pad elevation of the lot it is shielding. In instances where the road is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the road. The barrier shall provide a weight of at least 4 pounds per square foot of face area with no decorative cutouts or line-of-sight openings between shielded areas and the roadways. The barrier shall consist of a solid face from top to bottom. Unnecessary openings or decorative cutouts shall not be made. All gaps (except for weep holes) should be filled with grout or caulking. The noise barrier shall be constructed using any combination of the following construction materials:

- Masonry block;
- Stucco veneer over wood framing (or foam core), or 1-inch-thick tongue and groove wood of sufficient weight per square foot;
- Glass (1/4-inch-thick), or other transparent material with sufficient weight per square foot;
- Earthen berm;
- Any combination of these construction materials.

During the final building inspection, the City of Colton Building Inspector shall ensure that the sound barriers were constructed to adhere to the requirements stated herein, as well as the design specifications shown on the final approved building plans.

MM 4.10-3 Prior to issuance of building permits in Planning Area 9, the City of Colton shall verify that final building plans require windows with a minimum STC rating of 32 be installed at all buildings situated on lots within Planning Area 9 that abut La Cadena Drive. During the final building inspection, the City of Colton Building Inspector shall ensure that the windows were installed in adherence with the requirements stated herein, as well as the design specifications shown on the final approved building plans.

4.10.10 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds a), c), and d) (On-Site Exterior Noise). Less-Than-Significant Impact with Mitigation: Implementation of Mitigation Measure MM 4.10-2 would reduce exterior noise levels for Planning areas 2 to 4, and 6 to 9 adjacent to Pellissier Road and Roquet Ranch Road to a range of 53.8 to 58.3 dBA CNEL, which would satisfy the City of Colton 60 dBA CNEL exterior noise level standard. While the exterior noise levels would exceed the 60 dBA CNEL standard for residential land use at the residential homes within Planning Area 9 adjacent to the I-215 freeway and La Cadena Drive (up to

62.8 dBA CNEL), the mitigated exterior noise levels would satisfy the conditions of *conditionally acceptable* residential land use as shown in Table 5-1 of the City of Colton General Plan Noise Element, and the exterior noise level of up to 65 dBA CNEL allowed by the San Bernardino County Development Code with the provision of exterior noise mitigation. Accordingly, implementation of Mitigation Measure MM 4.10-2 would sufficiently reduce potential on-site traffic exterior noise levels to less-than-significant levels.

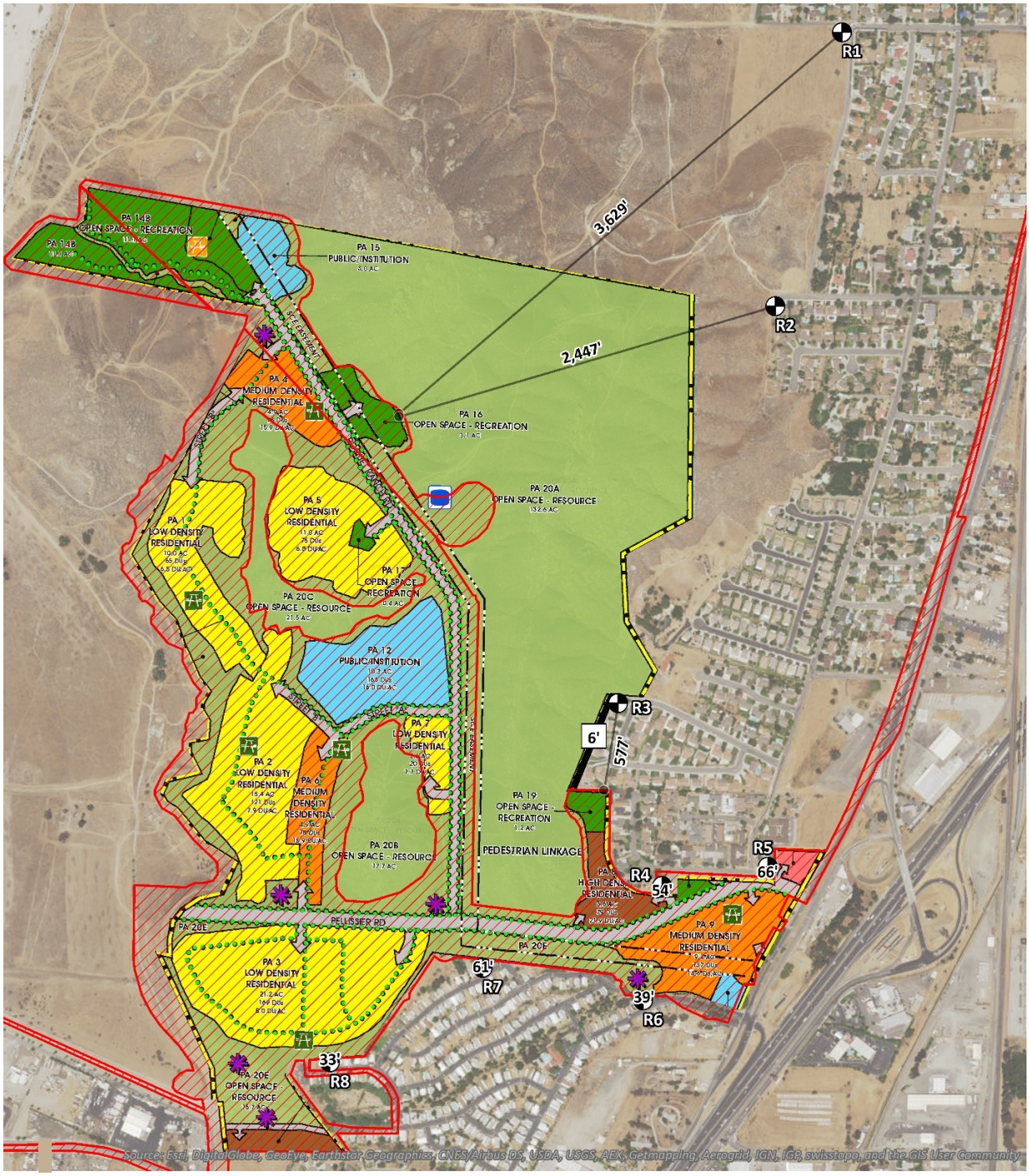
Thresholds a), c), and d) (On-Site Interior Noise). Less-Than-Significant Impact with Mitigation: Implementation of Mitigation Measure MM 4.10-3 would require installation of upgraded windows with a minimum STC rating of 32 at all residential buildings within Planning Area 9 situated on lots that abut La Cadena Drive. Implementation of Mitigation Measure MM 4.10-3, would reduce interior noise levels to below the 45 dBA CNEL interior noise standard, and a less-than-significant impact would occur.

Source(s): Urban Crossroads (12-07-2016)

Figure 4.10-1

NOT TO SCALE

RECEIVER LOCATIONS



Source(s): Urban Crossroads (12-07-2016)

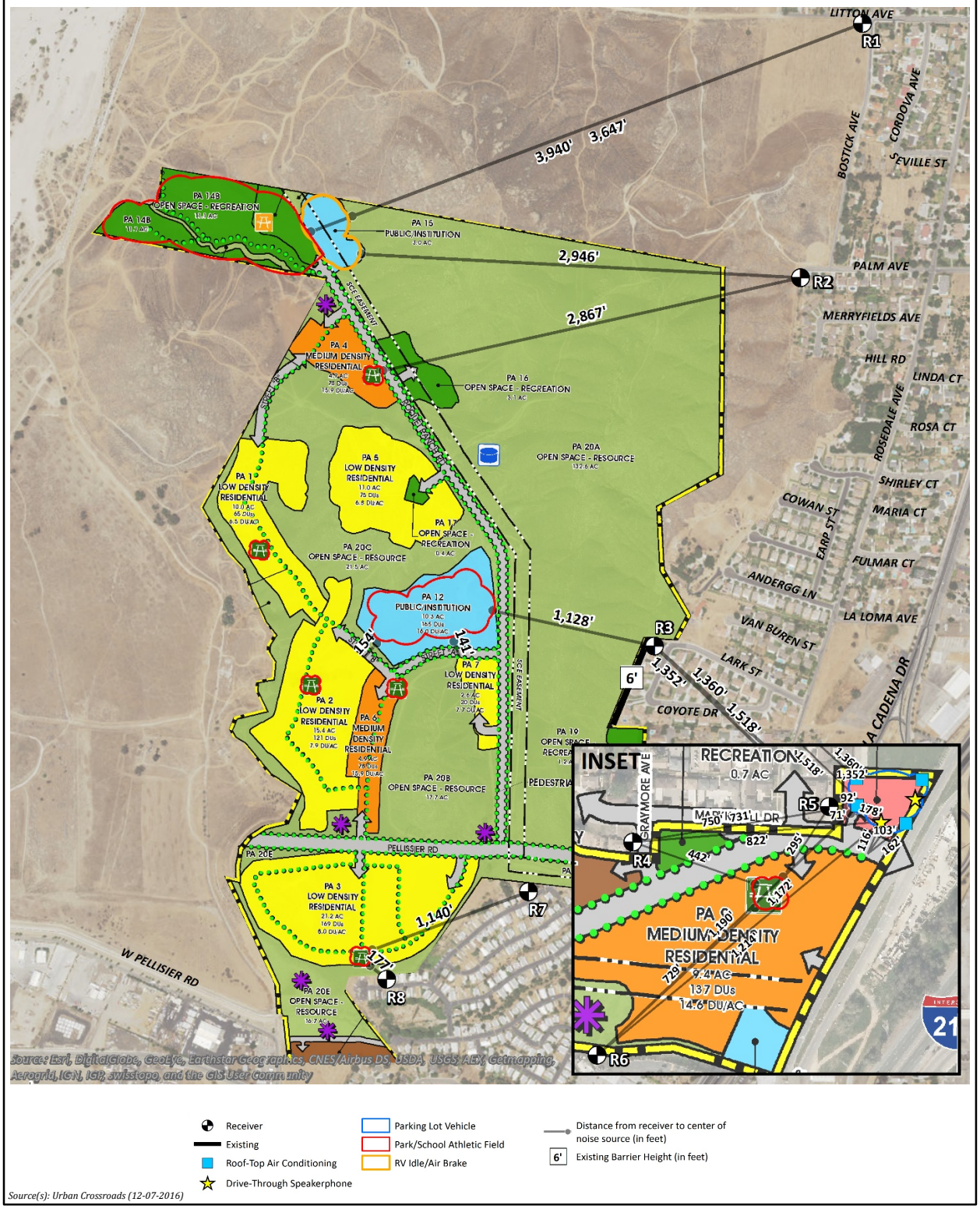
Figure 4.10-2

NOT TO SCALE

CONSTRUCTION ACTIVITY LOCATIONS

Lead Agency: City of Colton

SCH No. 2016061056



Source(s): Urban Crossroads (12-07-2016)

Figure 4.10-3

NOT TO SCALE

OPERATIONAL NOISE SOURCES

Table 4.10-1 Significance of Noise Impacts at Noise-Sensitive Receivers

Without Project Noise Level	Potential Significant Impact
< 60 dBA	5 dBA or more
60 - 65 dBA	3 dBA or more
> 65 dBA	1.5 dBA or more

Source: (Urban Crossroads, Inc., 2016d, Table 4-1)

Table 4.10-2 Significance Criteria Summary

Analysis	Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site Traffic Noise	Noise-Sensitive[1]	if ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
		if ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase	
		if ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
	Non-Noise-Sensitive[2]	if ambient is < 65 dBA CNEL	≥ 5 dBA CNEL Project increase	
		if ambient is > 65 dBA CNEL	≥ 3 dBA CNEL Project increase	
On-Site Traffic Noise[2]	Noise-Sensitive	Exterior Noise Level Criteria	60 dBA CNEL @ Residential Use	
			70 dBA CNEL @ School Use	
		Interior Noise Level Criteria	45 dBA CNEL @ Residential Use & School Classrooms	
Operational Noise[3]	Noise-Sensitive	Exterior Noise Level Standards	65 dBA Leq	
Construction Noise and Vibration	Noise-Sensitive	Permitted hours of 7:00 a.m. to 7:00 p.m. Monday to Saturday; no activity on Sundays and Federal holidays.[4]		
		Noise Level Threshold[5]	85 dBA Leq	n/a
		Vibration Level Threshold[6]	0.2 in/sec PPV	n/a

[1] FICON, 1992
[2] City of Colton General Plan Noise Element, Standard 3
[3] City of Colton Municipal Code, Section 18.42.040
[4] County of San Bernardino Development Code, Section 83.01.080 (g)
[5] NIOSH, Criteria for Recommended Standard: Occupational Noise Exposure, 1998
[6] County of San Bernardino Development Code Section 83.01.090 (a)
"Daytime" = 7:00 a.m. – 10:00 p.m.; "Nighttime" = 10:00 p.m. – 7:00 a.m.; "n/a" = no nighttime construction activity is permitted and therefore no nighttime construction noise level threshold is identified.
Source: (Urban Crossroads, Inc., 2016d, Table 4-2)

Table 4.10-3 Vibration Source Levels for Construction Equipment

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Source: (Urban Crossroads, Inc., 2016d, Table 6-7)

Table 4.10-4 Construction Noise Level Compliance

Receiver Location	Construction Noise Levels (dBA Leq)		
	Peak Activity	Threshold[1]	Threshold Exceeded?
R1	42.3	85	No
R2	45.8	85	No
R3	58.3	85	No
R4	78.9	85	No
R5	77.2	85	No
R6	81.7	85	No
R7	77.8	85	No
R8	83.2	85	No

[1] NIOSH-established construction noise level threshold of 85 dBA Leq
Source: (Urban Crossroads, Inc., 2016d, Table 11-8)

Table 4.10-5 Existing Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	Adjacent Planned Land Use[1]	CNEL at Adjacent Land Use (dBA)[2]			Noise-Sensitive Land Use?	Threshold Exceeded?[3]
				No Project	With Project	Project Addition		
1	S Riverside Av.	n/o Placentia Ln.	Light Industrial	72.3	72.4	0.1	No	No
2	Main St.	s/o Placentia Ln.	Business/Office	71.2	71.4	0.2	No	No
3	Main St.	n/o Columbia Av.	Residential	72.1	72.3	0.2	Yes	No
4	Main St.	s/o Columbia Av.	Residential	69.5	69.7	0.2	Yes	No
5	Orange St.	s/o Center St.	Light Industrial	62.1	63.3	1.2	No	No
6	Orange St.	n/o Columbia Av.	Residential	63.1	63.8	0.7	Yes	No
7	Orange St.	s/o Columbia Av.	Residential	64.3	64.6	0.3	Yes	No
8	La Cadena Dr.	n/o S Rancho Av.	Light Industrial	69.1	69.4	0.3	No	No
9	La Cadena Dr.	s/o S Rancho Av.	Light Industrial	71.5	71.9	0.4	No	No
10	La Cadena Dr.	s/o W Litton Av.	Residential	71.6	72.0	0.4	Yes	No
11	La Cadena Dr.	s/o Barton Rd.	Residential	71.4	72.3	0.9	Yes	No
12	La Cadena Dr.	n/o S Iowa Av.	Residential	71.0	72.0	1.0	Yes	No
13	La Cadena Dr.	s/o S Iowa Av.	Commercial	69.3	71.3	2.0	No	No
14	La Cadena Dr.	s/o Pellissier Rd.	Residential	68.5	69.0	0.5	Yes	No
15	I-215 SB Fwy	n/o Barton Rd.	Residential	77.5	77.6	0.1	Yes	No
16	I-215 SB Fwy	s/o Barton Rd.	Commercial	77.4	77.4	0.0	No	No
17	I-215 SB Fwy	n/o S Iowa Av.	Commercial	77.4	77.4	0.0	No	No
18	I-215 SB Fwy	s/o S Iowa Av.	Business/Office	77.2	77.3	0.1	No	No
19	I-215 NB Fwy	n/o Barton Rd.	Residential	77.9	78.0	0.1	Yes	No
20	I-215 NB Fwy	s/o Barton Rd.	Commercial	78.0	78.0	0.0	No	No
21	I-215 NB Fwy	n/o S Iowa Av.	Commercial	78.0	78.0	0.0	No	No
22	I-215 NB Fwy	s/o S Iowa Av.	Business/Office	77.7	77.8	0.1	No	No
23	Iowa Av.	n/o Center St.	Business/Office	67.5	67.6	0.1	No	No
24	Iowa Av.	s/o Center St.	Business/Office	67.7	67.8	0.1	No	No
25	Mt. Vernon Av.	n/o Barton Rd.	Residential	66.5	66.6	0.1	Yes	No
26	Mt. Vernon Av.	s/o Barton Rd.	Commercial	68.1	68.1	0.0	No	No
27	S Rancho Av.	w/o La Cadena	Light Industrial	62.8	63.2	0.4	No	No
28	Barton Rd.	w/o Mt. Vernon	Commercial	67.1	67.5	0.4	No	No
29	Barton Rd.	e/o Mt. Vernon	Commercial	68.7	68.9	0.2	No	No
30	W Main St.	e/o S Iowa Av.	Commercial	63.9	64.1	0.2	No	No
31	W Main St.	w/o Michigan Av.	Residential	57.2	57.4	0.2	Yes	No
32	W Main St.	e/o Michigan Av.	Residential	60.4	60.5	0.1	Yes	No
33	Placentia Ln.	e/o S Riverside	Business/Office	57.7	59.1	1.4	No	No
34	W Center St.	w/o Orange St.	Business/Office	62.6	64.1	1.5	No	No
35	W Center St.	w/o Stephens Av.	Residential	63.8	64.0	0.2	Yes	No
36	Columbia Av.	e/o Orange St.	Residential	68.5	68.6	0.1	Yes	No

[1] General Plan Sources: City of Colton Land Use Plan (Figure LU-6), City of Riverside Land Use Policy Map (Figure LU-10), City of Grand Terrace Land Use Map (Exhibit 2-2), and the County of Riverside Highgrove Area Plan Land Use Plan (Figure 3)

[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.

[3] Significance criteria, as shown in Table 4.10-2, *Significance Criteria Summary*.

Source: (Urban Crossroads, Inc., 2016d, Table 7-7)

Table 4.10-6 Opening Year 2020 Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	Adjacent Planned Land Use[1]	CNEL at Adjacent Land Use (dBA)[2]			Noise-Sensitive Land Use?	Threshold Exceeded?[3]
				No Project	With Project	Project Addition		
1	S Riverside Av.	n/o Placentia Ln.	Light Industrial	72.6	72.6	0.0	No	No
2	Main St.	s/o Placentia Ln.	Business/Office	71.6	71.8	0.2	No	No
3	Main St.	n/o Columbia Av.	Residential	72.4	72.6	0.2	Yes	No
4	Main St.	s/o Columbia Av.	Residential	69.8	70.0	0.2	Yes	No
5	Orange St.	s/o Center St.	Light Industrial	62.7	63.8	1.1	No	No
6	Orange St.	n/o Columbia Av.	Residential	63.4	64.1	0.7	Yes	No
7	Orange St.	s/o Columbia Av.	Residential	64.7	64.9	0.2	Yes	No
8	La Cadena Dr.	n/o S Rancho Av.	Light Industrial	69.4	69.8	0.4	No	No
9	La Cadena Dr.	s/o S Rancho Av.	Light Industrial	71.9	72.2	0.3	No	No
10	La Cadena Dr.	s/o W Litton Av.	Residential	72.0	72.4	0.4	Yes	No
11	La Cadena Dr.	s/o Barton Rd.	Residential	71.8	72.6	0.8	Yes	No
12	La Cadena Dr.	n/o S Iowa Av.	Residential	71.4	72.3	0.9	Yes	No
13	La Cadena Dr.	s/o S Iowa Av.	Commercial	69.9	71.7	1.8	No	No
14	La Cadena Dr.	s/o Pellissier Rd.	Residential	69.1	69.9	0.8	Yes	No
15	I-215 SB Fwy	n/o Barton Rd.	Residential	77.8	77.9	0.1	Yes	No
16	I-215 SB Fwy	s/o Barton Rd.	Commercial	77.8	77.8	0.0	No	No
17	I-215 SB Fwy	n/o S Iowa Av.	Commercial	77.8	77.8	0.0	No	No
18	I-215 SB Fwy	s/o S Iowa Av.	Business/Office	77.5	77.5	0.0	No	No
19	I-215 NB Fwy	n/o Barton Rd.	Residential	78.3	78.3	0.0	Yes	No
20	I-215 NB Fwy	s/o Barton Rd.	Commercial	78.3	78.3	0.0	No	No
21	I-215 NB Fwy	n/o S Iowa Av.	Commercial	78.3	78.3	0.0	No	No
22	I-215 NB Fwy	s/o S Iowa Av.	Business/Office	78.0	78.1	0.1	No	No
23	Iowa Av.	n/o Center St.	Business/Office	68.0	68.1	0.1	No	No
24	Iowa Av.	s/o Center St.	Business/Office	68.0	68.1	0.1	No	No
25	Mt. Vernon Av.	n/o Barton Rd.	Residential	67.2	67.3	0.1	Yes	No
26	Mt. Vernon Av.	s/o Barton Rd.	Commercial	68.8	68.8	0.0	No	No
27	S Rancho Av.	w/o La Cadena Dr.	Light Industrial	63.2	63.6	0.4	No	No
28	Barton Rd.	w/o Mt. Vernon Av.	Commercial	67.6	68.0	0.4	No	No
29	Barton Rd.	e/o Mt. Vernon Av.	Commercial	69.1	69.3	0.2	No	No
30	W Main St.	e/o S Iowa Av.	Commercial	64.7	64.8	0.1	No	No
31	W Main St.	w/o Michigan Av.	Residential	58.1	58.3	0.2	Yes	No
32	W Main St.	e/o Michigan Av.	Residential	61.6	61.9	0.3	Yes	No
33	Placentia Ln.	e/o S Riverside Av.	Business/Office	59.3	60.3	1.0	No	No
34	W Center St.	w/o Orange St.	Business/Office	63.9	65.1	1.2	No	No
35	W Center St.	w/o Stephens Av.	Residential	65.0	65.2	0.2	Yes	No
36	Columbia Av.	e/o Orange St.	Residential	68.7	68.9	0.2	Yes	No

[1] General Plan Sources: City of Colton Land Use Plan (Figure LU-6), City of Riverside Land Use Policy Map (Figure LU-10), City of Grand Terrace Land Use Map (Exhibit 2-2), and the County of Riverside Highgrove Area Plan Land Use Plan (Figure 3).
[2] The CNEL is calculated at the boundary of the ROW of each roadway and the property line of the nearest adjacent land use.
[3] Significance criteria, as shown in Table 4.10-2, *Significance Criteria Summary*
Source: (Urban Crossroads, Inc., 2016d, Table 7-8)

Table 4.10-7 Horizon Year 2040 Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	Adjacent Planned Land Use[1]	CNEL at Adjacent Land Use (dBA)[2]			Noise-Sensitive Land Use?	Threshold Exceeded?[3]
				No Project	With Project	Project Addition		
1	S Riverside Av.	n/o Placentia Ln.	Light Industrial	75.9	76.0	0.1	No	No
2	Main St.	s/o Placentia Ln.	Business/Office	74.4	74.5	0.1	No	No
3	Main St.	n/o Columbia Av.	Residential	73.9	74.0	0.1	Yes	No
4	Main St.	s/o Columbia Av.	Residential	72.0	72.1	0.1	Yes	No
5	Orange St.	s/o Center St.	Light Industrial	63.5	64.4	0.9	No	No
6	Orange St.	n/o Columbia Av.	Residential	64.3	64.8	0.5	Yes	No
7	Orange St.	s/o Columbia Av.	Residential	65.5	65.7	0.2	Yes	No
8	La Cadena Dr.	n/o S Rancho Av.	Light Industrial	70.8	71.0	0.2	No	No
9	La Cadena Dr.	s/o S Rancho Av.	Light Industrial	74.4	74.6	0.2	No	No
10	La Cadena Dr.	s/o W Litton Av.	Residential	72.8	73.1	0.3	Yes	No
11	La Cadena Dr.	s/o Barton Rd.	Residential	74.0	74.5	0.5	Yes	No
12	La Cadena Dr.	n/o S Iowa Av.	Residential	72.9	73.6	0.7	Yes	No
13	La Cadena Dr.	s/o S Iowa Av.	Commercial	71.4	72.7	1.3	No	No
14	La Cadena Dr.	s/o Pellissier Rd.	Residential	71.7	71.9	0.2	Yes	No
15	I-215 SB Fwy	n/o Barton Rd.	Residential	79.3	79.4	0.1	Yes	No
16	I-215 SB Fwy	s/o Barton Rd.	Commercial	79.4	79.4	0.0	No	No
17	I-215 SB Fwy	n/o S Iowa Av.	Commercial	79.4	79.4	0.0	No	No
18	I-215 SB Fwy	s/o S Iowa Av.	Business/Office	78.9	78.9	0.0	No	No
19	I-215 NB Fwy	n/o Barton Rd.	Residential	79.8	79.8	0.0	Yes	No
20	I-215 NB Fwy	s/o Barton Rd.	Commercial	79.8	79.8	0.0	No	No
21	I-215 NB Fwy	n/o S Iowa Av.	Commercial	79.8	79.8	0.0	No	No
22	I-215 NB Fwy	s/o S Iowa Av.	Business/Office	79.5	79.5	0.0	No	No
23	Iowa Av.	n/o Center St.	Business/Office	68.8	69.4	0.6	No	No
24	Iowa Av.	s/o Center St.	Business/Office	69.3	69.4	0.1	No	No
25	Mt. Vernon Av.	n/o Barton Rd.	Residential	69.3	69.3	0.0	Yes	No
26	Mt. Vernon Av.	s/o Barton Rd.	Commercial	70.5	70.5	0.0	No	No
27	S Rancho Av.	w/o La Cadena Dr.	Light Industrial	66.7	66.9	0.2	No	No
28	Barton Rd.	w/o Mt. Vernon Av.	Commercial	68.5	68.7	0.2	No	No
29	Barton Rd.	e/o Mt. Vernon Av.	Commercial	69.9	70.1	0.2	No	No
30	W Main St.	e/o S Iowa Av.	Commercial	65.4	65.5	0.1	No	No
31	W Main St.	w/o Michigan Av.	Residential	61.3	61.4	0.1	Yes	No
32	W Main St.	e/o Michigan Av.	Residential	64.2	64.3	0.1	Yes	No
33	Placentia Ln.	e/o S Riverside Av.	Business/Office	62.1	62.7	0.6	No	No
34	W Center St.	w/o Orange St.	Business/Office	65.7	66.5	0.8	No	No
35	W Center St.	w/o Stephens Av.	Residential	65.7	65.8	0.1	Yes	No
36	Columbia Av.	e/o Orange St.	Residential	71.1	71.2	0.1	Yes	No

[1] General Plan Sources: City of Colton Land Use Plan (Figure LU-6), City of Riverside Land Use Policy Map (Figure LU-10), City of Grand Terrace Land Use Map (Exhibit 2-2), and the County of Riverside Highgrove Area Plan Land Use Plan (Figure 3).
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.
[3] Significance criteria, as shown in Table 4.10-2, *Significance Criteria Summary*
Source: (Urban Crossroads, Inc., 2016d, Table 7-9)

Table 4.10-8 Exterior Noise Levels (CNEL)

Planning Area	Land Use	Roadway	Unmitigated Noise Level (dBA CNEL)	Combined Unmitigated Noise Level (dBA CNEL)	Mitigated Noise Level (dBA CNEL)	Combined Mitigated Noise Level (dBA CNEL)	Barrier Height (Feet)
PA 9	Residential	I-215 Fwy.	70.7	73.6	62.8	64.8	8.0
		La Cadena Dr.	70.4		60.4		8.0
		BNSF Rail	46.7		46.7		8.0
		Pellissier Rd.	64.7	-	58.3	-	6.0
PA 3 & 8	Residential	Pellissier Rd.	64.7	-	58.3	-	6.0
PA 2 & 6	Residential	Pellissier Rd.	62.0	-	55.9	-	6.0
PA 7	Residential	Roquet Ranch Rd.	60.8	-	53.8	-	6.0
PA 12	School	Roquet Ranch Rd.	60.8	-	_[1]	-	_[1]
PA 5	Residential	Roquet Ranch Rd.	57.8	-	_[1]	-	_[1]
PA 4	Residential	Roquet Ranch Rd.	60.8	-	53.8	-	6.0

[1] Unmitigated exterior noise level satisfies the City of Colton exterior noise level standard. No exterior noise mitigation is required.
Source: (Urban Crossroads, Inc., 2016d, Table 8-1)

Table 4.10-9 First Floor Interior Noise Impacts (CNEL)

Planning Area	Noise Level at Façade[1]	Required Interior Noise Reduction[2]	Estimated Interior Noise Reduction[3]	Upgraded Windows[4]	Interior Noise Level[5]
PA 9	66.1	21.1	30.0	Yes	36.1
PA 3 & 8	57.3	12.3	25.0	No	32.3
PA 2 & 6	55.3	10.3	25.0	No	30.3
PA 7	53.9	8.9	25.0	No	28.9
PA 12	53.9	8.9	25.0	No	28.9
PA 5	56.9	11.9	25.0	No	31.9
PA 4	53.9	8.9	25.0	No	28.9

[1] Exterior noise level at the facade with windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).
[2] Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.
[3] A minimum of 25 dBA noise reduction is assumed with standard building construction.
[4] Does the required interior noise reduction trigger upgraded with a minimum STC rating of greater than 27?
[5] Estimated interior noise level with minimum STC rating for all windows.
Source: (Urban Crossroads, Inc., 2016d, Table 8-2)

Table 4.10-10 Second Floor Interior Noise Impacts (CNEL)

Planning Area	Noise Level at Façade[1]	Required Interior Noise Reduction[2]	Estimated Interior Noise Reduction[3]	Upgraded Windows[4]	Interior Noise Level[5]
PA 9	70.6	25.6	30.0	Yes	40.6
PA 3 & 8	63.6	18.6	25.0	No	38.6
PA 2 & 6	61.2	16.2	25.0	No	36.2
PA 7	59.2	14.2	25.0	No	34.2
PA 12	59.2	14.2	25.0	No	34.2
PA 5	56.8	11.8	25.0	No	31.8
PA 4	59.2	14.2	25.0	No	34.2

[1] Exterior noise level at the facade with windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).
[2] Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.
[3] A minimum of 25 dBA noise reduction is assumed with standard building construction.
[4] Does the required interior noise reduction trigger upgraded with a minimum STC rating of greater than 27?
[5] Estimated interior noise level with minimum STC rating for all windows.
Source: (Urban Crossroads, Inc., 2016d, Table 8-3)

Table 4.10-11 Project Operational Noise Levels

Receiver Location[1]	Noise Sources[2]					Combined Operational Noise Levels (dBA Leq)[3]
	Roof-Top Air Conditioning Units	Parking Lot Vehicle Movements	Drive-Through Speakerphones	Park/School Athletic Field Activity	RV Idle/ Air Brake Activity	
R1	-[4]	-[4]	-[4]	5.5	25.2	25.3
R2	-[4]	-[4]	-[4]	8.2	27.0	27.1
R3	26.6	23.6	21.9	16.3	-[4]	29.5
R4	31.8	27.6	27.2	24.5	-[4]	34.6
R5	50.0	42.8	40.5	28.0	-[4]	51.2
R6	27.8	24.6	23.8	20.1	-[4]	30.9
R7	-[4]	-[4]	-[4]	16.2	-[4]	16.4
R8	-[4]	-[4]	-[4]	32.4	-[4]	32.4
PA 2	-[4]	-[4]	-[4]	33.6	-[4]	33.6
PA 7	-[4]	-[4]	-[4]	34.4	-[4]	34.4
PA 9	45.1	40.4	44.2	-[4]	-[4]	48.4

[1] See Exhibit 10-A of *Technical Appendix K* for the receiver and noise source locations.
[2] Reference noise sources as shown on Table 10-1 of *Technical Appendix K*.
[3] Calculations for each noise source are provided in Appendix 10.1 of *Technical Appendix K*.
[4] Receiver locations are not exposed to the noise source. There is no direct line of sight from the receiver to the source.
"PA" = Planning Area
Source: (Urban Crossroads, Inc., 2016d, Table 10-2)

Table 4.10-12 Daytime Operational Noise Level Contributions (DBA LEQ)

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Contribution[6]	Threshold Exceeded?[7]
R1	25.3	L1	55.4	55.4	0.0	No
R2	27.1	L2	50.3	50.3	0.0	No
R3	29.5	L5	52.9	52.9	0.0	No
R4	34.6	L6	55.7	55.7	0.0	No
R5	51.2	L7	61.2	61.6	0.4	No
R6	30.9	L9	56.5	56.5	0.0	No
R7	16.4	L8	51.9	51.9	0.0	No
R8	32.4	L10	60.9	60.9	0.0	No

[1] See Figure 4.10-1 for the sensitive receiver locations.
[2] Total Project operational noise levels as shown on Table 4.10-11.
[3] Reference noise level measurement locations as shown on Exhibit 5-A of *Technical Appendix K*.
[4] Observed daytime ambient noise levels as shown on Table 5-1 of *Technical Appendix K*.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] Significance Criteria as defined in Table 4.10-2.
Source: (Urban Crossroads, Inc., 2016d, Table 10-4)

Table 4.10-13 Nighttime Operational Noise Level Contributions (DBA LEQ)

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Contribution[6]	Threshold Exceeded?[7]
R1	25.3	L1	54.3	54.3	0.0	No
R2	27.1	L2	54.0	54.0	0.0	No
R3	29.5	L5	56.8	56.8	0.0	No
R4	34.6	L6	59.4	59.4	0.0	No
R5	51.2	L7	60.2	60.7	0.5	No
R6	30.9	L9	58.0	58.0	0.0	No
R7	16.4	L8	55.9	55.9	0.0	No
R8	32.4	L10	61.7	61.7	0.0	No

[1] See Figure 4.10-1 for the sensitive receiver locations.
[2] Total Project operational noise levels as shown on Table 4.10-11.
[3] Reference noise level measurement locations as shown on Exhibit 5-A of *Technical Appendix K*.
[4] Observed nighttime ambient noise levels as shown on Table 5-1 of *Technical Appendix K*.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] Significance Criteria as defined in Table 4.10-2.
Source: (Urban Crossroads, Inc., 2016d, Table 10-5)

Table 4.10-14 Construction Equipment Vibration Levels

Receiver Location[1]	Distance to Const. Activity (Feet)	Receiver PPV Levels (in/sec)[2]				Peak Particle Vibration (PPV)	Threshold Exceeded?[3]
		Small Bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer		
R1	3,629	0.000	0.000	0.000	0.000	0.000	No
R2	2,447	0.000	0.000	0.000	0.000	0.000	No
R3	577	0.000	0.000	0.001	0.001	0.001	No
R4	54	0.001	0.011	0.024	0.028	0.028	No
R5	66	0.001	0.008	0.018	0.021	0.021	No
R6	39	0.002	0.018	0.039	0.046	0.046	No
R7	61	0.001	0.009	0.020	0.023	0.023	No
R8	33	0.002	0.023	0.050	0.059	0.059	No

[1] Receiver locations are shown on Figure 4.10-1.
[2] Based on the Vibration Source Levels of Construction Equipment included on Table 4.10-3.
[3] Does the peak vibration exceed the maximum acceptable vibration threshold?
Source: (Urban Crossroads, Inc., 2016d, Table 11-9)

4.11 POPULATION AND HOUSING

This Subsection assesses the potential for impacts to the environment associated with the Project's effects on population and housing. The analysis in this Subsection is based on information contained in the Project's proposed Roquet Ranch Specific Plan (T&B Planning, Inc., 2016), the City of Colton General Plan Housing Element, and data from the California Department of Finance. All reference sources are listed in Section 7.0, *References*.

4.11.1 EXISTING CONDITIONS

The Project site predominantly consists of vacant, undeveloped land with the exception of the six commercial structures located on the southeastern portion of the Project site that are associated with the Roquet Paving Inc. facility. Currently, the Project site does not contain or support a residential population. Under existing conditions, the Roquet Paving Inc. facility remains in operation, and does generate a small number of employees. As previously depicted on Figure 2-1, *Surrounding Land Uses and Development*, the existing land uses for properties in the vicinity of the Project site are as follows:

North: Undeveloped land occurs to the north of the Project site. Residential land uses occur to the northeast of the Project site.

East: The Project site is bordered on the east by vacant undeveloped land, residential, and commercial land uses.

South: The Project site is bordered on the south by residential, industrial, and commercial land use within San Bernardino County and vacant undeveloped land and residential land within Riverside County.

West: The Project site is bordered on the west by undeveloped/vacant land and the Santa Ana River.

A. Population Projections

1. Department of Finance

According to the California Department of Finance (DOF), in the year 2010 (the most recent census data available), the City of Colton had a total population of approximately 52,154 persons (DOF, 2016a). The DOF's projection for the City's population in 2016 (the most recent population projection available) was 53,351 persons, which represented a projected increase of approximately 2.3 percent in the six-year period between 2010 and 2016. (DOF, 2016b)

2. City of Colton General Plan

Within the Land Use Element of the City of Colton General Plan, the projected population for the buildout year of 2030 is estimated to be 67,182 (City of Colton, 2013a, Table LU-1). The City of Colton General Plan Housing Element cites SCAG population projections for the City, which estimate

the population of the City of Colton will reach 71,700 by the year 2035 (City of Colton, 2014, p. H-34). This estimated population projection represents an increase of approximately 1.4 percent per year.

B. City of Colton Housing Element

The City of Colton General Plan contains a Housing Element (certified on February 4, 2014) that identifies the overall goals, objectives, policies and programs that the City intends to implement to facilitate the provision of housing for existing and future residents (City of Colton, 2014, p. H-14). State law requires that each jurisdiction evaluate its housing element every five years to determine its effectiveness in achieving County and State goals and objectives, and to adopt an updated Housing Element that reflects the results of this evaluation.

Whereas the population of the City of Colton grew by 18.3 percent from 1990 to 2000, the City has experienced a decrease in the population growth between 2000 and 2013 at 10.5 percent. The City's growth rate has increased and decreased in response to short-term economic cycles. The City's share of total County population has remained stable between 1990 and 2013, decreasing from approximately 2.8% to 2.6% over this period. (City of Colton, 2014, pp. H-33 - H-34)

A component of the Housing Element is the Regional Housing Needs Assessment (RHNA), which is a process directed by SCAG that identifies the number of housing units that have been determined to represent Colton's "fair share" of the regional housing need during the Housing Element planning period. By law, the City's Housing Element is required to demonstrate that adequate sites are available in Colton to accommodate the construction of new housing units consistent with the RHNA. For the 2013-2021 planning period, SCAG assigned Colton a RHNA of 1,923 housing units. (City of Colton, 2014, p. H-3)

4.11.2 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to population and housing if the Project or any Project-related component would:

a. *Induce substantial 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 housing, necessitating the construction of replacement housing elsewhere; or*

c. *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.*

4.11.3 IMPACT ANALYSIS

Threshold a)	***Would the Project induce substantial 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)?***

As with any residential development project, the construction of new homes associated with the implementation of the proposed Project would generate some amount of population growth from outside the area. The proposed Project would result in the construction and operation of a master-planned community comprised of a maximum of 1,050 residential units. The City of Colton General Plan Land Use Map designates the subject property as "Very Low Density Residential (VLDR)," "Low Density Residential (LDR)," "Medium Density Residential (MDR)," "High Density Residential (HDR)," and "Light Industrial". Table LU-1 of the City of Colton General Plan Land Use Element states an average household size of 3.46 persons per household (City of Colton, 2013a, Table LU-1). Thus, for purposes of analysis, this EIR utilizes the City of Colton General Plan persons per household ratio (which is extrapolated from existing population estimates) to assess the future population for the proposed Project, as this ratio is reflective of the typical household throughout the City of Colton. Accordingly, the anticipated population for the proposed Project is based on a population generation rate of 3.46 persons per household, which when applied to the proposed 1,050 homes would result in an estimated 3,633 residents within the Project site.

Under existing conditions, the Colton General Plan land use map designates 243.3 acres of the Project site as VLDR, 17.6 acres of the site as LDR, 49.2 acres of the site as MDR, 14.0 acres of the site as HDR, 1.0 acres of the site as Neighborhood Commercial, and 9.7 acres of the site as Light Industrial. The maximum total dwelling units that could be developed at the Project site under the existing land use designations is equivalent to the sum of the site's total acreage for each land use designation multiplied by the maximum residential density (du/ac) permitted under each land use designation. Accordingly, the existing Colton General Plan land use designations applicable to the site would allow for up to 1,722 residential dwelling units to be developed at the Project site ([243.3 acres × 2.0 du/ac] + [17.6 acres × 8.0 du/ac] + [49.2 acres × 16.0 du/ac] + [14.0 acres × 22.0 du/ac] = 1,722 dwelling units). Utilizing the population generation rate of 3.46 persons per household that was derived from the Colton General Plan, development of the site in accordance with the existing Colton General Plan land use designations would generate approximately 5,958 residents (3.46 persons per household × 1,722 dwelling units = 5,958 persons). Although the Project would increase the City's population by approximately 3,633 persons, this increase is nominal compared to the increase of 5,958 persons that could result from the development of the Project site in accordance with the existing Colton General Plan land use designations. Additionally, the population increase that would result from the Project (3,633 persons) represents only a 6.8 percent increase over the DOF's estimated 2016 City of Colton population of 53,351 persons (DOF, 2016b). Moreover, the Project site is designated for residential development by the City's General Plan; therefore, the City has anticipated an increase to the City's population related to residential development within the Project site.

Although the proposed Project would increase the City of Colton's population by approximately 3,633 residents, such population growth is less than the population increase that could result from development of the site in accordance with the existing General Plan land use designations (5,958 persons), and is also consistent with the population increase anticipated by the City's General Plan. Thus, the projected population of the proposed Project is within the City's population projection. All potential impacts to the environment associated with the population growth have been evaluated in the other Subsections of this EIR. There are no physical environmental effects specific to population growth on the Project site that would result in a significant adverse effect to the environment. Thus, impacts are regarded as less than significant.

Threshold b) Would the Project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The Project site is vacant and undeveloped (with the exception of Roquet Paving Company commercial facility) and, therefore, implementation of the proposed Project would not result in the displacement of a substantial amount of existing housing nor result in the need for construction of replacement housing elsewhere. Moreover, the Project involves the construction of up to 1,050 residential units on-site that would further improve the housing supply in the region. Considering the aforementioned, no impacts associated with housing displacement would occur as a result of the proposed Project.

Threshold c) Would the Project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The Project site is vacant and undeveloped (with the exception of the Roquet Paving Inc. facility located on the southeast portion of the site) and, therefore, the proposed Project would not result in the displacement of any persons nor result in the need for construction of replacement housing elsewhere. Furthermore, the proposed Project involves the construction of up to 1,050 residential units on-site that would accommodate housing needs for segments of the City's population. Thus, no impact association with population displacement would occur as a result of the proposed Project.

4.11.4 CUMULATIVE IMPACT ANALYSIS

The implementation of the Project is expected to generate a resident population that was anticipated by the City in its long-range planning for population growth. Although other residential projects in the City of Colton would similarly generate population growth, the City's General Plan anticipates such population growth through the General Plan Land Use Element Buildout Year 2030. All other residential development projects (including the cumulative projects listed in Table 4-1, *Cumulative Projects List*, of this EIR), would be required to evaluate their individual impacts associated with population and housing with respect to the City's long range population growth projections and determine whether they would result in potentially significant environmental impacts associated with this issue. Thus, the potential cumulative impacts of population and housing growth are analyzed in the context of City of Colton projections as they pertain to the City's General Plan area.

As previously concluded, the proposed Project site is vacant and undeveloped (with the exception of the Roquet Paving Inc. facility located on the southeast portion of the site), and would not result in the displacement of a substantial amount of exiting housing or people. Although other residential development projects in the City may require the displacement of housing or people, such impacts would be specific to each individual project. Therefore, the proposed Project would not result in a cumulative contribution toward the likeliness that housing or people may be displaced, and related cumulative impacts would be less than significant.

The proposed Project would lead to the development of up to 1,050 residential units, which would increase the population in the City by approximately 3,633 people. As discussed above under Subsection 4.11.1, in the year 2010 the City housed a total population of 52,154 persons (DOF, 2016a). Additionally, the DOF projects the City's population to reach 53,351 persons in 2016 (DOF, 2016b). The City of Colton estimates that by the year 2030 the population of the City will increase to 67,182 persons (City of Colton, 2013a, Table LU-1). The proposed Project would not exceed the General Plan Land Use population projection for the City of Colton. Although other residential development projects will individually result in population growth to the City of Colton, the population generated by the proposed Project would not result in a cumulatively considerable contribution of population to the City of Colton. As such, the Project would not cumulatively contribute to population growth in the area.

4.11.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a): Less-than-Significant Impact. Although the Project would accommodate a population of approximately 3,633 residents, such population growth is less than the population increase (5,958 persons) that could result from development of the site in accordance with the existing General Plan land use designations applicable to the site. The Project's population increase of 3,633 persons is also consistent with the growth that is anticipated by the City's General Plan. There would be no impacts to the environmental peculiar to population growth that are not addressed in other Subsections of this EIR.

Threshold b): No Impact. The Project site is predominantly vacant and undeveloped and contains no housing under existing conditions. Therefore, the Project would not result in the displacement of a substantial amount of existing housing nor result in the need for construction of replacement housing elsewhere.

Threshold c): No Impact. The Project site is predominantly vacant and undeveloped and contains no housing under existing conditions. Therefore, the Project would not displace any persons nor result in the need for construction of replacement housing elsewhere.

4.11.6 MITIGATION

No mitigation is required.

4.12 PUBLIC SERVICES

The analysis in this Subsection assesses the potential for the Project's implementation to cause adverse physical effects to the environment resulting from service demands placed on the following public services: fire protection services, police protection services, schools, libraries, parks, and other public services and facilities. The analysis in this Subsection is based in part on the City of Colton General Plan EIR Section 4.14, *Public Services* (City of Colton, 2013c). Additionally, this Subsection is based on correspondences received from the Colton Fire Department (CFD, 2016), the Colton Police Department (CPD, 2016), the Colton Joint Unified School District (CJUSD, 2016).

4.12.1 EXISTING CONDITIONS

A. Fire Protection/Emergency Medical Service

Fire protection services to the Project site and surrounding area are provided by the Colton Fire Department (CFD). According to correspondence with CFD staff, the CFD would provide emergency response services to the Project from four fire stations that support a combination of four Municipal Fire Engines, one Ladder Truck, and one Brush Engine. These four fire stations include: Colton Fire Station #1 located at 303 East E Street (located approximately 3.6 miles from the entrance to the Project site from Maryknoll Drive); Station #2 located at 1511 North Rancho Avenue (located approximately 4.4 miles from the entrance to the Project site from Maryknoll Drive); Station #3 located at 1100 South La Cadena Drive (located approximately 2.1 miles from the entrance to the Project site from Maryknoll Drive); and Station #4 located at 1151 South Meadow Lane (located approximately 3.2 miles from the entrance to the Project site from Maryknoll Drive). CFD Station #3 is the primary station that would serve the Project. The staffing level at each Colton Fire Station consists of three staff members per shift, including one Fire Captain, one Fire Engineer, and one Firefighter Paramedic. Station #3 includes one Municipal Fire Engine staffed with one Fire Captain, one Fire Engineer, and one Firefighter Paramedic. Additionally, at least one Battalion Chief is on duty at all times at Colton Fire Station #1 (303 East 'E' Street in the City of Colton), approximately 3.6 roadway miles northeast of the Project site. (CFD, 2016, n.p.)

The Colton Fire Department Strategic Plan has identified a response time standard requiring the first arriving unit to be on scene within 6 minutes and 30 seconds, 90% of the time. The Colton Fire Department desires to further evaluate the feasibility of meeting CFAI (Commission on Fire Accreditation International) response time standards that call for the first arriving unit to be on scene within 5:30 of initial dispatch in future deployment models. (CFD, 2016, n.p.)

Funding for CFD facilities is derived from a variety of sources, including City required Development Impact Fees (DIF), property taxes, grants, cost recovery/fines, and service fees.

B. Police Service

Police services to the Project site and surrounding area are provided by the Colton Police Department (CPD). The CPD operates from its headquarters at 650 North La Cadena Drive and is staffed by 51

sworn officers and employs a fleet of 21 marked police vehicles. According to correspondence with CPD staff, the existing staffing levels sufficiently meet the demand for police services throughout the City. The CPD has not yet established performance criteria; nonetheless, the average CPD response time to an emergency call is generally within three to five minutes of the received call. (CPD, 2016, n.p.)

Funding for the CPD comes from a variety of sources, including City required DIFs, property taxes, grants, cost recovery/fines, and service fees.

C. *School Service*

The Project site lies within the service area of the Colton Joint Unified School District (CJUSD). According the City's General Plan EIR, the CJUSD consists of 18 elementary schools, four middle schools, two high schools, one alternative school, and one continuation high school. During the 2009-2010 school year, the CJUSD accommodated 23,608 students with an average district-wide class size of approximately 26 students. (City of Colton, 2013c, p. 4.14-3)

According to correspondence with CJUSD staff, the Project site is located within the enrollment areas of Woodrow Wilson Elementary School (approximately 1.7 miles northeast of the Project site at 750 South 8th Street in the City of Colton), Terrace Hills Middle School (approximately 1.5 miles east of the Project site at 22579 DeBerry Street in the City of Grand Terrace), and Grand Terrace High School (approximately 0.4-mile east of the Project site at 21810 Main Street in the City of Grand Terrace). (CJUSD, 2016)

Funding for school services and facilities is derived from a variety of sources, including property taxes, grants, cost recovery/fines, and service fees. In addition, Chapter 16.92 of the Colton Municipal Code establishes a school facilities fee for residential developmental projects throughout the City to help pay for school facilities and services (City of Colton, 2016a, Ch. 16.92). See Subsection, 4.12.2, below, for additional detail regarding school facilities fee requirements.

D. *Parks and Recreational Facilities*

The City of Colton has 11 parks that collectively comprise approximately 54.09 acres of parkland. The Project site lies within the vicinity of the following parks:

- Reid Park, located approximately 0.5-mile south of the Project site, within the City of Riverside;
- Highgrove Community Park, located approximately 1.1 miles southeast of the Project site, within unincorporated Riverside County; and
- Pico Park, located approximately 0.6-mile east of the Project site, within the City of Grand Terrace. (Google Earth Pro, 2016)

For a more detailed discussion about existing parks and recreational facilities in the vicinity of the Project site, refer to EIR Subsection 4.13, *Recreation*.

Funding for park and recreation services and facilities is derived from a variety of sources, including property taxes, grants, cost recovery/fines, and service fees. In addition, Chapter 16.92 of the Colton Municipal Code requires that development projects dedicate park land on-site and/or contribute a fair-share payment of park impact fees in lieu of land dedication (City of Colton, 2016a, Ch. 16.58). See Subsection, 4.12.2, below, for additional detail regarding parkland dedication requirements.

E. Other Public Facilities and Services

The City of Colton maintains three public library facilities that serve approximately 60,000 borrowers annually and house over 80,000 items in circulation. The following three public library facilities would be available for use by the future residents of the Project:

- Colton Public Library Main Branch (10,700 sq. ft.): located at 656 Ninth Street, approximately 2.8 miles northeast of the Project site;
- Luque Branch Library (3,000 sq. ft.): located at 294 East 'O' Street, approximately 2.0 miles northeast of the Project site; and
- Carnegie Building - Advance to Literacy Center (6,400 sq. ft.): located at 380 North La Cadena Drive, approximately 2.6 miles northeast of the Project site. (City of Colton, 2013c, p. 4.14-4; Google Earth Pro, 2016)

Funding for library services and facilities is derived from a variety of sources, including City required DIFs, property taxes, grants, cost recovery/fines, and service fees. In addition, donations to the City of Colton Library program are placed in a dedicated library fund and are controlled by the Colton *Board of Library Trustees* (City of Colton, 2016a. § 2.60.040).

4.12.2 APPLICABLE ENVIRONMENTAL REGULATIONS

A. California Senate Bill 50

California Senate Bill 50 (known as the Leroy F. Greene School Facilities Act) was signed into law on August 27, 1998. SB 50 allows public school districts the ability to impose impact fees on new development projects to help fund the construction of new public school facilities. It also restricts local agencies from denying or placing conditions of approval on new developments due to school facilities, except for the imposition of impact fees.

B. City of Colton Municipal Code, Chapter 15.16

The City of Colton Municipal Code Chapter 16.92, *Fire Code*, prescribes regulations governing conditions hazardous to life and property from fire or explosion within the City of Colton. The City's Fire Code adopted and incorporated the 2013 California Fire Code through resolution. (City of Colton, 2016a, Ch. 15.16)

C. *City of Colton Municipal Code, Chapter 16.92*

The City of Colton Municipal Code Chapter 16.92, *School Facilities Fee Ordinance*, implements California Senate Bill 50 and establishes a school facilities impact fee for residential developmental projects throughout the City to help pay for school facilities and services. The amount of the school facilities fee required of a given Project is based on the number of students that would be foreseeably generated by a proposed residential development. (City of Colton, 2016a, Ch. 16.92)

D. *City of Colton Municipal Code, Chapter 16.58*

The City of Colton Municipal Code Chapter 16.58, *Dedication of Land or Payment of Fees for Park and Recreational Facilities*, requires that development projects provide and dedicate park land on-site at a ratio of 3 acres per 1,000 people, contribute a fair-share payment of park impact fees in lieu of dedication, or contribute a combination of park impact fees and on-site parkland dedication (City of Colton, 2016a, Ch. 16.58)

4.12.3 BASIS FOR DETERMINING SIGNIFICANCE

The Project would result in a significant impact to public services if the Project or any Project-related component would:

> *Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*
>
> a. *Fire protection;*
> b. *Police protection;*
> c. *Schools;*
> d. *Parks; or*
> e. *Other public facilities.*

Based on the above and in accordance with CEQA and Section XIV of CEQA Guidelines Appendix G (OPR, 2009), the analysis below focuses on whether or not the proposed Project would cause a physical environmental change due to Project-related demands for public service facilities that may affect service ratios, response times or other performance objectives for any of the public services. Services demand in and of itself is not an environmental impact under CEQA unless such demand causes an adverse physical change to the environment.

4.12.4 IMPACT ANALYSIS

Threshold a) ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

a) Fire protection?

The development of the proposed Project site would result in up to 1,050 residential units and other uses, which would increase the demand for fire protection services from the CFD as compared to existing conditions. According to information provided by the CFD, the facilities and staffing levels at the nearest fire station, Station #3, would not be able to adequately respond to emergency calls to serve the potential future demand that would result from the development of 1,050 dwelling units on the Project site in accordance with the Department's performance standards of 6 minutes and 30 seconds, 90% of the time (CFD, 2016, n.p.). Therefore, Project demand for fire protection services may require a new fire protection facility or the expansion of existing facilities in order to accommodate the demand generated by the proposed Project. Project-related impacts for future on-site facilities are addressed under the relevant issue areas identified throughout this EIR (e.g., air quality, biological resources, cultural resources, etc.). Under each of these Subsections, the Project-related impacts were determined to be less than significant, or mitigation measures were imposed to reduce impacts to the maximum feasible extent. There are no components of the planned on-site public facilities that would result in impacts that have not already been addressed within this EIR or that are inherent to the development of a fire station facility.

The Project proposes to designate a 0.8-acre planning area for "Public/Institutional" use in the southeastern portion of the Project site to accommodate the future development of a fire station that would service the Project's on-site demand for fire protection. Should the CFD elect to develop a fire station facility within the proposed fire station site, the new fire station would be adequate to accommodate the demand for fire protection services generated by the Project in accordance with the Department's performance standards (CFD, 2016, n.p.). Accordingly, a less-than-significant impact associated with fire protection demand would occur. The proposed on-site fire station site is an inherent part of the Project evaluated in this EIR and as such, the environmental effects associated with constructing and operating the fire station are adequately disclosed.

Should the CFD elect not to develop a fire station facility within the proposed on-site area, there would be inadequate fire protection services available to serve the future demand of the Project in accordance with the Department's performance standards (CFD, 2016, n.p.). As of the date of the preparation of this EIR, the CFD has not identified any alternative fire station locations outside the Project site that would be developed in the case that the proposed on-site fire station site is not acquired for fire station development. Therefore, the Project may result in the need for the construction of a fire station at an off-site location, which could potentially result in physical environmental impacts in addition to those

discussed within this EIR. The potential future development of a new or expanded CFD facility would require subsequent discretionary actions by the City of Colton, which would require review under CEQA. However, because it is unknown what site (if any) may be affected by a potential future development or expansion of a CFD facility, it would be highly speculative for this EIR to evaluate the potential for physical environmental impacts that could result from development of a CFD facility on an unspecified alternative site. Accordingly, a less-than-significant physical impact would occur as a result of Project-related demand for fire protection services because an on-site location is identified and evaluated in other subsections of this EIR.

Threshold b)	***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***
	b) Police protection?

As a result of the Project's approval, the Project site could be developed in the future as a master-planned residential community with up to 1,050 residential units and other uses, which would increase the demand for police protection services from the CPD as compared to existing conditions. According to information provided by the CPD, four additional CPD police officers and two CPD vehicles would be required as a result of the Project; however, the CPD has adequate facilities to serve the potential future demand that would result from the development of the Project. Therefore, potential future development on the Project site would not require the provision of new or physically altered police facilities. (CPD, 2016, n.p.) Accordingly, implementation of the Project would have a less-than-significant impact because it would not result in or require new or expanded 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.

Threshold c)	***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***
	c) Schools?

Implementation of the Project would result in the ultimate development of up to 1,050 residential units on the Project site. According to student generation rates (per dwelling unit) utilized by the CJUSD, implementation of the Project would generate up to 387 elementary school students, 104 intermediate school students, and 177 high school students (CJUSD, 2016, n.p.).

The Project proposes to designate a 10.3-acre planning area for "Public/Institutional" use in the central portion of the Project site to allow for the future development of an elementary school that would

service the Project's on-site demand for elementary school services. Project-related impacts for future on-site facilities are addressed under the relevant issue areas identified throughout this EIR (e.g., air quality, biological resources, cultural resources, etc.). Under each of these Subsections, the Project-related impacts were determined to be less than significant, or mitigation measures were imposed to reduce impacts to the maximum feasible extent. There are no components of the planned on-site public facilities that would result in impacts that have not already been addressed within this EIR or that are inherent to the development of a school facility.

Additionally, the Project Applicant would be required to contribute fees to the CJUSD in accordance with the Leroy F. Green School Facilities Act of 1998 (SB 50 Greene) and Colton Municipal Code Chapter 16.92 which allows school districts to collect fees from new developments to offset the costs associated with increasing school capacity needs. The payment of school mitigation impact fees authorized by SB 50 is deemed to provide "full and complete mitigation of impacts" on school facilities from the development of real property (California Government Code Section 65995). Thus, with mandatory regulatory compliance with SB 50, a less-than-significant physical impact would occur as a result of Project-related demand for school services.

Threshold d)	***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*** ***d) Parks?***

Implementation of the Project would provide one public community park, four neighborhood parks, one private recreational facility, and six pocket parks on-site that would provide a combined total of 19.3 acres of parkland, which is 8.4 acres above the City's Municipal Code parkland requirement. The Project would meet the City's parkland dedication standard of 3.0 acres per 1,000 residents and the Project applicant would not be required to pay in-lieu parkland dedication fees to the City of Colton.

Impacts due to the physical construction of these recreational facilities are addressed under the relevant issue areas identified throughout this EIR (e.g., air quality, biological resources, cultural resources, etc.). Under each of these Subsections, the Project's construction-related impacts were determined to be less than significant, or mitigation measures were imposed to reduce impacts to the maximum feasible extent. There are no components of the planned on-site recreation facilities that would result in impacts that have not already been addressed within this EIR or that are inherent to recreation. Additionally, no off-site parks or recreational improvements are proposed or required by the Project or its implementing development. Accordingly, implementation of the Project would have a less-than-significant impact to park services because the dedication of parkland on-site would preclude the requirement for new or expanded park facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives.

For more information regarding environmental impacts based on the construction and/or long term use of park facilities, refer to Section 4.13, *Recreation*.

Threshold e)	***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*** ***e) Other Public Facilities?***

As a result of the Project's approval, the Project site could be developed in the future with up to 1,050 residential units, which would increase the site's demand for library services from the City of Colton as compared to existing conditions. Accordingly, the Project Applicant would be required to pay required Development Impact Fees to support the expansion of library services commensurate with the Project.

At the time of this writing, the City of Colton Library Branch has not indicated that new or expanded library facilities would be needed to serve the Project. However, it is expected that existing libraries can accommodate the demand and there would be no need to construct new library facilities. Accordingly, a less-than-significant physical impact would occur as a result of Project-related demand for library services.

4.12.5 CUMULATIVE IMPACT ANALYSIS

The Project site is entirely located within the City of Colton service area for fire protection, police protection, and library services. Therefore, the extent of the Project's cumulative impacts to these issue areas is limited to the City of Colton's jurisdiction. Project-related impacts, when considered in association with on-going development throughout the City of Colton, could be cumulatively considerable if the increased demand results in the need to physically expand or modify an existing public service facilities or build a new facility to service the demand. Project-related development and other cumulative development in the City of Colton would be required to contribute public facility impact fees pursuant to City requirements. Mandatory fee contributions by the Project and cumulative developments would ensure that adequate funding is provided to the CFD, CPD, and City of Colton to respond to increased demand for services. The need to physically modify or expand, or to construct a new off-site fire station, police station, or library as a result of reasonably foreseeable increased demand is not anticipated by these service providers. Accordingly, the proposed Project's impacts to the CFD, CPD, and City of Colton would not be cumulatively considerable. Impacts associated with the construction and operation of an on-site fire station are analyzed throughout this EIR.

With the addition of on-going development throughout the CJUSD service area, future development of the Project site with up to 1,050 residential units could contribute to the need to physically modify or expand an existing school facility or build a new school. The Project Applicant and other

developments throughout the CJUSD service area are required to contribute fees to the CJUSD in accordance with State Senate Bill 50, which allows public school districts to impose impact fees on new projects to help fund the construction of new public school facilities. Payment of school impact fees constitutes complete mitigation for Project-related impacts to school services (see EIR Subsection 4.12.2, *Applicable Environmental Regulations*, above). Therefore, with contribution of mandatory school impact fees, Project's impacts to school services would not be cumulatively considerable. Impacts associated with the construction and operation of an on-site elementary school are analyzed throughout this EIR.

With the addition of on-going development and incremental population increases throughout the City of Colton and surrounding area, implementation of the Project would contribute to the cumulative need for additional park facilities. However, future Project-related development, and on-going developments in the City of Colton, would be required to comply with the Colton Municipal Code Chapter 16.58, which requires that residential developments provide on-site park land and recreational amenities and/or pay fees to the City of Colton that, in turn, the City would use toward the development of new recreational facilities and the maintenance of existing facilities. Impacts associated with the construction and operation of on-site parks are analyzed in this EIR. The Project's compliance with Colton Municipal Code Chapter 16.58 would ensure that the Project's impacts to park services would be less than cumulatively considerable.

Furthermore, future residential development on the Project site would generate an on-going stream of property tax revenue, which would provide funds that could be used by the City of Colton, County of San Bernardino, and State of California for the provision of fire protection, police protection, public school, public park, and public library services.

Because the physical expansion, modification, or off-site construction of public facilities is not a reasonably foreseeable consequence of the Project when considered in conjunction with other cumulative development, impacts are considered less than cumulatively considerable.

4.12.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a): Less-than-Significant Impact. Implementation of the Project would result in the development of an on-site fire station site. Development of this proposed on-site fire station would not result in additional physical impacts to the environment that are not already addressed throughout this EIR. Where significant impacts are identified, mitigation measures have been imposed to reduce potential effects to the maximum feasible extent. With mandatory payment of Development Impact Fees in compliance with City requirements, the Project would not result in a cumulatively considerable impact to CFD facilities.

Threshold b): Less-than-Significant Impact. The Colton Police Department has adequate physical capacity to service the proposed Project. No new or expanded police protection facilities are needed; thus, a less-than-significant impact would occur. Additionally, with mandatory payment of

Development Impact Fees in compliance with City requirements, the Project would not result in a cumulatively considerable impact to police protection facilities.

Threshold c): Less-than-Significant Impact. The Project proposes a 10.3-acre site to accommodate the development of an on-site elementary school facility. Construction and operation of this proposed on-site facility would not result in additional physical impacts to the environment that are not already addressed throughout this EIR. Where significant impacts are identified, mitigation measures have been imposed to reduce potential effects to the maximum feasible extent.

Additionally, the Project Applicant would be required to contribute fees to the CJUSD in accordance with SB 50 and Colton Municipal Code Chapter 16.92 to offset the costs associated with increasing school capacity needs. Thus, with mandatory regulatory compliance, a less-than-significant physical impact would occur as a result of Project-related demand for school services.

Threshold d): Less-than-Significant Impact. Implementation of the Project would meet the City's parkland dedication standard on-site. The development of on-site parks would not result in additional physical impacts to the environment that are not already addressed throughout this EIR. Where significant impacts are identified, mitigation measures have been imposed to reduce potential effects to the maximum feasible extent. Accordingly, a less-than-significant physical impact would occur as a result of Project-related demand for park services.

Threshold e): Less-than-Significant Impact. Implementation of the Project would increase demand for library resources which are expected to be met by, the City of Colton Public Library Main Branch. It is not reasonably foreseeable that new or expanded library space would be required as a result of the proposed Project. Accordingly, a less-than-significant physical impact would occur as a result of Project-related demand for library services.

4.12.7 MITIGATION

Impacts would be less than significant; therefore, mitigation is not required.

4.13 RECREATION

This Subsection provides an overview of the existing parks and recreational facilities that exist within the Project site's vicinity and that could potentially be directly or indirectly affected by implementation of the proposed Project. This Subsection also describes on-site recreational facilities proposed by the Project Applicant and provides an analysis of the potential adverse environmental effects that could result due to the development of such recreational facilities. The analysis herein is based in part on the City of Colton General Plan Open Space and Conservation Element (City of Colton, 1987b); City of Colton General Plan Mobility Element (City of Colton, 2013b); City of Colton Comprehensive Park and Facilities Master Plan (City of Colton, 2004); and City of Colton Municipal Code (City of Colton, 2016a). All references used in this Subsection are listed in EIR Section 7.0, *References*.

4.13.1 EXISTING CONDITIONS

A. Federal Parks

There are no federal parks within the City of Colton or in the Project site's immediate vicinity. According to the U.S. National Park Service (NPS), the nearest federal park is Joshua Tree National Park, located approximately 51 miles east of Project site (NPS, 2016; Google Earth Pro, 2016)

B. State Parks

There are no state parks located within the City of Colton or in the Project site's immediate vicinity. According to the California Department of Parks and Recreation (CDPR), the nearest state park is the San Timoteo Canyon State Park, located approximately 13.3 miles southeast of the Project site. (CDPR, 2016; Google Earth Pro, 2016)

C. Local Parks

The City of Colton has 11 parks that collectively comprise approximately 54.09 acres of parkland. According to the General Plan Land Use Plan, the nearest city park to the Project site is Veteran's Park, located approximately 1.8 miles northeast of the Project site. (City of Colton, 2013a; Google Earth Pro, 2016)

In addition, although the Project site is located in the City of Colton and as such the City of Colton is the governing agency for parks and recreation services, the following parks located outside of the City of Colton would also be within the general vicinity of the Project site:

- Reid Park, located approximately 0.5-mile south of the Project site, within the City of Riverside;
- Highgrove Community Park, located approximately 1.1 miles southeast of the Project site, within unincorporated Riverside County; and
- Pico Park, located approximately 0.6-mile east of the Project site, within the City of Grand Terrace (Google Earth Pro, 2016).

D. Pedestrian and Bicycle Facilities

1. Pedestrian Facilities

No existing sidewalks or other pedestrian facilities are located on-site. Nearby pedestrian facilities include the Santa Ana River Trail to the west/north of the Project site, and the sidewalks located within the residential neighborhoods to the east and south of the Project site. According to field observations conducted by Urban Crossroads, the nearest pedestrian facility is a discontinuous sidewalk segment located approximately 0.3-mile east of the Project site, along La Cadena Drive (Urban Crossroads, 2016d, Exhibit 3-17).

2. Bicycle Facilities

The Colton General Plan Mobility Element defines three classifications of bicycle facilities, Class I, Class II, or Class III, as described below:

- Class I (Bicycle Path): Intended for the exclusive use of bicycles and is physically separated by distance or a vertical barrier.

- Class II (Bicycle Lane): Shares the right-of-way with a roadway or walkway and are indicated by a bikeway pictograph on the pavement and a continuous stripe on the pavement, or are separated by a continuous or intermittent curb or other low barrier.

- Class III (Bike Route): Shares the right-of-way with a roadway or walkway and are not indicated by a continuous stripe on the pavement or separated by any type of barrier. A Class III facility is instead identified as a bikeway through the sole use of signage. (City of Colton, 2013b, p. M-40)

The City of Colton Bicycle Plan shows that no bikeways occur or are planned to occur on the Project site. The following bicycle facilities are located within the vicinity of the Project site: an existing Class I bikeway is located along the southern/eastern side of the Santa Ana River (Santa Ana River Trail); an existing Class III bikeway and planned Class II and Class III bikeways along La Cadena Drive; and a planned Class II bikeway along Riverside Avenue. (City of Colton, 2013b, Figure M-7)

4.13.2 APPLICABLE ENVIRONMENTAL REGULATIONS

The following is a brief description of the state and local environmental laws and related regulations associated with recreation and parks.

A. Quimby Act, California Government Code § 66477

The State of California's Quimby Act was established by the California Legislature for the purpose of preserving open space and providing park facilities for California's growing communities. The Quimby Act allows local agencies to establish ordinances requiring residential subdivisions to provide land or "in-lieu of" fees for park and recreation purposes. This State Act requires the dedication of

land and/or imposes a requirement of fees for park and recreational purposes as a condition of approval of tentative map or parcel map.

B. *City of Colton Open Space and Conservation Element (1987)*

The Open Space and Conservation Element, a mandatory General Plan element, was prepared pursuant to California Planning, Zoning, and Development Law, Government Code § 65302(e). The element identifies standards and principles to preserve hillsides and environmentally sensitive areas, protect scenic vistas and visual resources, and ensure a wide range of passive and active recreational uses.

Pursuant to Open Space and Conservation Element Standard No. 1, "there shall be five (5) acres of park land per 1,000 residents" in the City of Colton (City of Colton, 1987b, p. 6-6). According to the City of Colton General Plan EIR, based on 2011 population estimates, the City provided approximately 2.07 acres of parkland (with the addition of school parkland space) per 1,000 residents and did not meet the City's parkland standard (City of Colton, 2013c, p. 4.14-2).

C. *City of Colton Comprehensive Park and Facilities Master Plan (2004)*

The City of Colton Comprehensive Park and Facilities Master Plan assesses existing recreational amenities throughout the City, identifies planned parks and recreational facilities, and sets forth park service goals and standards for the City of Colton. According to the Park and Facilities Master Plan, the nearest planned recreational area is a "Proposed County Camping Area" that abuts the Santa Ana River, approximately 0.7-mile northeast of the Project site. There are no other existing or planned recreational facilities on or within the vicinity of the Project site. (City of Colton, 2004, p. F-2; Google Earth Pro, 2016)

Pursuant to the Park and Facilities Master Plan, the "the City of Colton's park standard is 5 acres per 1,000 residents." (City of Colton, 2004, p. L-2) As described above, according to the City of Colton General Plan EIR, the City does not currently meet this established parkland standard (City of Colton, 2013c, p. 4.14-2).

D. *City of Colton Municipal Code, Chapter 16.58*

The City of Colton Municipal Code Chapter 16.58, *Dedication of Land or Payment of Fees for Park and Recreational Facilities*, requires that development projects provide and dedicate park land on-site at a ratio of 3 acres per 1,000 people, contribute a fair-share payment of park impact fees in lieu of dedication, or contribute a combination of park impact fees and on-site parkland dedication (City of Colton, 2016a, Ch. 16.58).

4.13.3 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact associated with recreation if the Project or any Project-related component 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; or*

b. *Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.*

The thresholds above address the Project's potential direct or indirect environmental impacts associated with parkland development and usage in accordance with CEQA Guidelines, Appendix G. For purposes of analysis herein, the Project would have the potential to result in a significant impact to recreation if the Project proposes parkland development on-site that could result in a significant environmental impact or if the Project does not meet the objective of the Colton Municipal Code, *Chapter 16.58*, to provide 3.0 acres of parkland per 1,000 residents, which could have an indirect environmental effect by causing accelerated deterioration of park facilities by over-use, or cause the development of off-site parks.

4.13.4 IMPACT ANALYSIS

Threshold a)	***Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

Implementation of the Project would allow for the development of up to 1,050 residences on the Project site. Pursuant to the City of Colton General Plan Housing Element the average household size in the City of Colton is 3.46 persons per dwelling unit (City of Colton, 2014, p. H-37). Accordingly, the Project could generate an estimated population of 3,633 residents (1,050 homes x 3.46 persons = 3,633 residents). Per the City of Colton Municipal Code, the established parkland dedication standard is 3.0 acres of parkland per 1,000 residents, meaning the Project would generate a need for approximately 10.9 acres of parkland (3,633 persons x 3.0 acres/1,000 persons = 10.89 acres, rounded up to 10.9 acres) (City of Colton, 2016a, Ch. 16.58).

Implementation of the Project would provide one public community park, four neighborhood parks, one private recreational facility, and six pocket parks on-site that would provide a combined total of 19.3 acres of parkland, which is 8.4 acres above the City's Municipal Code parkland requirement (and 1.1 acre above the City's General Plan parkland objective of 5.0 acres per 1,000 residents). Implementation of the proposed Project would meet the City's parkland dedication standard of 3.0 acres per 1,000 residents and the Project applicant would not be required to pay in-lieu parkland dedication fees to the City of Colton.

Although the Project could generate an increased use of off-site parks in the area, it is unlikely that future residents of the proposed Project would frequently utilize off-site existing parks to a degree that would result in physical environmental impacts because the Project would adequately provide recreational amenities within the Project site to future residents. Accordingly, because the proposed Project plans to provide a more than sufficient amount of on-site recreational amenities, the proposed

Project would not directly result in a physical deterioration to existing national, state, or local parks. The Project's impacts to existing recreational facilities would be less-than-significant and no mitigation is required.

Threshold b)	***Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment?***

As discussed under Threshold (a), above, the Project proposes the development of up to a total of 19.3 acres of recreational amenities. Impacts due to the physical construction of these recreational facilities are addressed under the relevant issue areas identified throughout this EIR (e.g., air quality, biological resources, cultural resources, etc.). Under each of these Subsections, the Project's construction-related impacts were determined to be less than significant, or mitigation measures were imposed to reduce impacts to the maximum feasible extent. There are no components of the planned on-site recreation facilities that would result in impacts that have not already been addressed within this EIR or that are inherent to recreation. Additionally, no off-site parks or recreational improvements are proposed or required by the Project or its implementing development. Accordingly, Project-related recreational impacts associated with the construction of recreation facilities on the Project site would be less than significant.

4.13.5 CUMULATIVE IMPACT ANALYSIS

In accordance with Colton Municipal Code (Chapter 16.58), all development projects in the City would be required to dedicate and construct on-site parkland and/or pay in-lieu fees to the City of Colton (which would be used for construction of new local parks or maintenance of existing parks) in order to accommodate the demand for recreational facilities that would result from new development and minimize the enticement for residents to use park facilities in neighboring jurisdictions. Furthermore, new development would generate on-going streams of property tax revenue, which would provide funds that could be used by the City of Colton, County of San Bernardino, and State of California to provide new local, regional, and state parks and recreation facilities and/or maintain existing parks/facilities. By constructing new park facilities and paying fees/taxes to off-set the cost of additional maintenance, new development projects (including Project-related development) would not result in a substantial cumulative effect to recreational facilities.

Cumulative effects associated with implementation of the Project, including impacts due to the construction of on-site parkland, are evaluated throughout this EIR under the appropriate issue headings. Where cumulative impacts have been identified, mitigation measures have been imposed to reduce such impacts to the maximum feasible extent. There are no conditions associated with on-site parkland construction that would result in cumulatively significant impacts to the environment that are not already disclosed by this EIR or that are inherent to recreation. Therefore, a cumulatively considerable impact associated with the construction of on-site recreation facilities would not occur.

4.13.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a): Less than Significant Impact. Project-related development would be required to comply with Colton Municipal Code, *Chapter 16.58*, which requires that residential development proposals provide on-site park land and recreational amenities and/or pay fees to the City of Colton. The Project would more than exceed the City's parkland dedication requirement through the provision of sufficient parkland on-site.

Threshold b): Less than Significant Impact. The Project would not result in physical impacts to the environment associated with the construction of on-site parks that have not already been addressed throughout this EIR. Where significant impacts are identified, mitigation measures have been imposed to reduce potential effects to the maximum feasible extent.

4.13.7 MITIGATION

Impacts would be less than significant; therefore, mitigation is not required.

4.14 TRANSPORTATION / TRAFFIC

The following analysis is primarily based on a traffic impact analysis (TIA) prepared by Urban Crossroads titled *Roquet Ranch Specific Plan Traffic Impact Analysis, City of Colton* and dated November 30, 2016. A copy of TIA report is included as *Technical Appendix L* to this EIR. The TIA evaluates the potential operating deficiencies of traffic and circulation facilities in the proposed Project's study area and identifies improvements that would be needed to relieve operational deficiencies. As directed by the City of Colton, the TIA was prepared in accordance with the San Bernardino County Congestion Management Program (CMP) *Guidelines for CMP Traffic Impact Analysis Reports* (Appendix "C", 2005 Update), the California Department of Transportation (Caltrans) *Guide for the Preparation of Traffic Impact Studies* (December 2002), and consultation with City staff during the scoping process. (Urban Crossroads, 2016, p. 1)

This Subsection also provides an analysis of potential effects on other modes of travel, including public transit, pedestrian, and bicycle modes. Transportation impacts are examined with respect to performance standards established by the City of Colton and Caltrans, based on the locations of affected roadway segments and intersections.

4.14.1 STUDY AREA DESCRIPTION

The scope of study for the proposed Project as evaluated in *Technical Appendix L* and herein was based on a traffic study scoping package prepared by Urban Crossroads and approved by the City of Colton staff. The scoping package provided an outline of the study area, the Project's calculated vehicular trip generation, trip distribution, and analysis methodology (Urban Crossroads, 2016, p. 4). The study area was then determined based on locations where the Project would contribute 50 or more peak hour trips, which includes 39 intersections, 35 roadway segments, six freeway mainline segments, and six freeway merge/diverge ramp junctions, as described below.

A. Intersections and Roadway Segments

The 39 study area intersections listed in Table 4.14-1, *Intersection Analysis Locations*, and the 35 roadway segments listed in Table 4.14-2, *Roadway Segment Analysis Locations*, were selected for analysis based on the City of Colton's decision to use the San Bernardino County Congestion Management Program (CMP) *Guidelines for CMP Traffic Impact Analysis Reports* (Appendix "C", 2005 Update). At these locations, the Project is calculated to contribute 50 or more peak-hour trips. The "50 peak hour trip" criterion utilized by the County of San Bernardino represents a minimum number of trips at which a typical intersection or roadway segment would have the potential to be substantively affected by a given development proposal. (Urban Crossroads, 2016, pp. 4-5) Thus, any intersection or roadway segment located outside of the study area, and that would receive less than 50 peak hour Project-related trips, would have no potential to be significantly impacted by the Project.

B. *Freeway Mainline Segments*

In accordance with Caltrans' traffic study guidelines, the City of Colton consulted with Caltrans to determine which segments of the State highway system (SHS) required study to determine the Project's potential to impact the SHS. Consistent with recent Caltrans guidance, and because impacts to freeway segments tend to dissipate with distance from the point of State Highway System (SHS) entry, quantitative study of the freeway segments adjacent to the Project's traffic primary points of SHS entry were studied. The analysis herein evaluates the following freeway segments where the Project is calculated to contribute 50 or more peak hour trips. (Urban Crossroads, 2016, p. 10):

- I-215 Freeway Southbound, North of Barton Road
- I-215 Freeway Southbound, between Barton Road and La Cadena Drive
- I-215 Freeway Southbound, South of La Cadena Drive
- I-215 Freeway Northbound, North of Barton Road
- I-215 Freeway Northbound, between Barton Road and La Cadena Drive
- I-215 Freeway Northbound, South of La Cadena Drive

C. *Freeway Merge/Diverge Ramp Junctions*

The scope of study as evaluated in *Technical Appendix L* and herein includes the following freeway ramp junctions for each direction of flow as listed below:

- I-215 Freeway – Southbound, Off-Ramp at Barton Road (Diverge)
- I-215 Freeway – Southbound, Off-Ramp at South Iowa Avenue (Diverge)
- I-215 Freeway – Southbound, On-Ramp at South La Cadena Drive (Merge)
- I-215 Freeway – Northbound, On-Ramp at Barton Road (Merge)
- I-215 Freeway – Northbound, On-Ramp at South Iowa Avenue (Merge)
- I-215 Freeway – Northbound, Off-Ramp at South Iowa Avenue (Diverge)

4.14.2 METHODOLOGIES FOR DETERMINING TRANSPORTATION FACILITY DEFICIENCIES

A. *Level of Service (LOS)*

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

The City of Colton has established LOS D as the minimum acceptable LOS for intersections in the City's jurisdiction. The City of Grand Terrace, City of Riverside, and County of Riverside also have established LOS D as the minimum level of service for their intersections. Therefore, any intersection

operating at LOS E or F will be considered deficient for the purposes of this analysis. (Urban Crossroads, 2016, p. 35)

For Caltrans, in general, the region-wide goal for an acceptable LOS on all freeways, roadway segments, and intersections is LOS D. Consistent with the City of Colton LOS threshold of LOS D and in excess of the San Bernardino County Congestion Management Plan (CMP) stated LOS threshold of LOS E, LOS D is used herein as the target LOS for freeway ramps, freeway segments, and freeway merge/diverge ramp junctions (Urban Crossroads, 2016, pp. 35-36). Similarly, the CMP definition of deficiency is based on maintaining a LOS standard of LOS E or better, except where an existing LOS F condition is identified in the 2007 San Bernardino County CMP document or the 2011 Riverside County CMP document. However, in an effort to conduct a conservative analysis and overstate, as opposed to understate potential traffic impacts, the more conservative LOS requirements of the local jurisdictions and Caltrans (i.e., LOS D) is utilized herein for the purposes of determining significance. (Urban Crossroads, 2016, pp. 35-36)

LOS has been used as the basis for determining the significance of traffic impacts as standard practice in CEQA documents for decades. In 2013, California Senate Bill (SB) 743 was passed, which is intended to balance the need for LOS for traffic planning with the need to build infill housing and mixed-use commercial developments within walking distance of mass transit facilities, downtowns, and town centers and to provide greater flexibility to local governments to balance these sometimes competing needs. At full implementation of SB 743, the California Governor's Office of Planning and Research (OPR) is expected to replace LOS as the metric against which traffic impacts are evaluated, with a metric based on vehicle miles traveled (VMT). At the time the NOP for this EIR was released (June 24, 2016), a VMT metric was not published by OPR, and the City of Colton in its capacity as Lead Agency, as well as surrounding local agencies in which the Project's traffic would circulate, use LOS as the significance criteria for evaluating a Project's traffic impacts. For this reason, a LOS metric and not a VMT metric is appropriately used in this EIR.

B. Traffic Signal Warrant Analysis Methodology

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the potential need for the installation of a traffic signal at an otherwise unsignalized intersection. The TIA used the signal warrant criteria presented in the latest edition of the Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices (MUTCD)*, as amended by the *MUTCD 2014 California Supplement*, for all study area intersections. (Urban Crossroads, 2016, p. 30)

The signal warrant criteria for existing intersections are based upon several factors, including the volume of vehicular and pedestrian traffic, frequency of accidents, and location of schools. Both the FHWA's *MUTCD* and the *MUTCD 2014 California Supplement* indicate that the installation of a traffic signal should be considered if one or more of the signal warrants are met. Specifically, the TIA utilized the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing intersections. Warrant 3 criteria are basically identical for both the FHWA's

MUTCD and the *MUTCD 2014 California Supplement*. Warrant 3 is appropriate and was used 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). For the purposes of the analysis in this EIR, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection. (Urban Crossroads, 2016, pp. 30-31)

Future unsignalized intersections are assessed regarding the potential need for traffic signals based on future average daily traffic (ADT), using the Caltrans planning level ADT based signal warrant analysis worksheets and the previously mentioned Warrant 3.

Signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. Signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant. (Urban Crossroads, 2016, pp. 30-31)

C. *Freeway Off-Ramp Queuing Analysis*

The freeway-to-arterial interchanges of the I-215 Freeway at Barton Road off-ramps, South Iowa Avenue off-ramps, and La Cadena Drive West off-ramps are included in the study area. Consistent with Caltrans requirements, the 95th percentile queuing of vehicles is assessed at the off-ramps to determine potential queuing impacts at the freeway ramp intersections on Barton Road, South Iowa Avenue, and La Cadena Drive West off-ramps. Specifically, the queuing analysis is used to identify any potential queuing and "spill back" onto the I-215 Freeway from the off-ramps. The traffic progression analysis tool and HCM intersection analysis program, SimTraffic, was used to assess the potential impacts/needs of the intersections with traffic added from the proposed Project. (Urban Crossroads, 2016, p. 32)

D. *Freeway Mainline Segment Analysis Methodology*

The portions of I-215 included in the study area are broken into segments defined by the freeway-to-arterial interchange locations. The freeway segments are evaluated based upon peak hour directional volumes. The freeway segment analysis is based on the methodology described in Chapter 11 of the Highway Capacity Manual (HCP) 2010 and performed using HCS 2010 software. Actual vehicles (as opposed to passenger-car-equivalent volumes) were utilized for the purposes of the freeway segment analysis. (Urban Crossroads, 2016, p. 32)

4.14.3 EXISTING CONDITIONS

The Project site is located in the southwest portion of San Bernardino County, along the western edge of the San Bernardino Valley and within the southern portion of the City of Colton. The Project site is currently vacant, with the exception of the Roquet Paving Company facility located on the southeast

portion of the Project site. The Project site does not include any roadways or transportation facilities, with the exception of the driveway entrance to the southeast portion of the site from Maryknoll Drive via Graymoor Avenue which leads to an on-site asphalt parking lot that serves the Roquet Paving Company facility. A description of the existing circulation network in the Project area is provided below.

A. *Existing Circulation Network*

The closest freeway to the Project site is I-215, located approximately 250 feet to the east. The nearest freeway access points are the northbound ramps at Barton Road and South Iowa Avenue and the southbound ramps at South La Cadena Drive at South Iowa Avenue. No roads currently run through the Project site, with the exception of South Graymoor Avenue, which provides access via Maryknoll Drive to the existing parking lot serving the Roquet Paving Company facility located on the southeast portion of the subject property. In the vicinity of the Project site, the local street network is in the form of cul-de-sacs serving residential land uses to the east and south of the Project site, with South La Cadena Drive (Major Arterial) located immediately east of the Project site and South Iowa Avenue (Secondary Arterial) located further east of the Project site. The Project site is bounded on the west by vacant land which features no roadways except for Pellissier Road, a Secondary Arterial located to the immediate southwest of the Project site, and Riverside Avenue, a Major Arterial located approximately 0.75-mile west of the Project site. The Project site is bounded to the north by vacant land with the nearest roadway being Litton Avenue, a local road located approximately 0.25-mile north of the Project site. (Urban Crossroads, 2016, Exhibit 3-2)

B. *Existing (2016) Conditions Intersection Operations Analysis*

Existing AM peak hour traffic volumes were determined by collecting count data over a two-hour period from 7:00 to 9:00 AM in February 2016. Similarly, the PM peak hour traffic volumes were identified by counting traffic volumes in the two-hour period from 4:00 to 6:00 PM in February 2016. The field conditions during the counts were typical of weekday traffic. There were no road construction projects, lane blockages, or other atypical conditions observed. Existing weekday average daily trip (ADT) volumes were calculated by Urban Crossroads on arterial highways throughout the study area. The traffic count data is provided in *Technical Appendix L* of this EIR.

The intersection operations analysis results are summarized in Table 4.14-3, *Intersection Analysis for Existing (2016) Conditions*. The existing count data and ADT volumes indicate that all intersections in the Project's study area operate at acceptable LOS during the peak hours, with the exception of the following five intersections with AM or PM peak hour deficiencies indicated in parentheses (Urban Crossroads, 2016, p. 62):

- Main Street / Strong Street – LOS E (PM peak hour only);
- La Cadena Drive West / Stephens Avenue / I-215 southbound ramps – LOS E (PM peak hour only);

- S. Iowa Avenue / South La Cadena Drive / I-215 southbound off-ramp – LOS E (AM peak hour only);
- South Iowa Avenue / I-215 northbound ramps – LOS E (AM peak hour only); and
- Michigan Avenue / West Main Street – LOS E (AM peak hour only).

C. *Existing (2016) Conditions Roadway Segment Analysis*

The roadway segment capacities utilized for the purposes of this analysis are approximate figures and are used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet traffic demand. Table 4.14-4, *Roadway Segment Volume/Capacity Analysis for Existing (2016) Conditions*, provides a summary of the Existing (2016) conditions roadway segment capacity analysis based on the applicable roadway segment capacities. All but three of the study area roadway segments operate at acceptable LOS based on the applicable planning level daily roadway capacity thresholds. The following roadway segments are currently operating at LOS E, which is below the City of Colton's acceptable threshold of LOS D (Urban Crossroads, 2016, p. 71):

- South Iowa Avenue, between I-215 southbound off-ramp and I-215 northbound ramps – LOS E;
- South Iowa Avenue, south of I-215 northbound ramps – LOS E; and
- South Iowa Avenue, north of West Main Street – LOS E.

D. *Existing (2016) Conditions Traffic Signal Warrants Analysis*

Traffic signal warrants for existing traffic conditions were evaluated based on peak hour intersection volumes. For Existing (2016) conditions, the following intersections, which are located in the City of Colton, currently warrant the consideration of a traffic signal (Urban Crossroads, 2016, p. 67):

- South Iowa Avenue, between I-215 southbound off-ramp and I-215 northbound ramps – LOS E
- South Iowa Avenue, south of I-215 northbound ramps – LOS E
- South Iowa Avenue, north of West Main Street – LOS E

Signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting the warrant condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. Signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant. (Urban Crossroads, 2016, p. 67)

E. Existing (2016) Conditions Off-Ramp Queuing Analysis

A queuing analysis was performed for the off-ramps of I-215 at Barton Road, Iowa Avenue, and Stephens Avenue to assess vehicle queues that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-215 Freeway mainline. Based on the analysis, the off-ramps at Barton Road, Iowa Avenue, and Stephens Avenue do not experience queuing deficiencies during the weekday AM or weekday PM peak 95th percentile traffic flows. For more information, refer to Table 3-3 of *Technical Appendix L*. (Urban Crossroads, 2016, p. 69)

F. Existing (2016) Conditions Basic Freeway Segment Analysis

The I-215 mainline segments in the Project's study area (located along the I-215 Freeway between the Barton Road and La Cadena Drive/Iowa Avenue interchanges) are calculated to operate at an acceptable LOS (i.e., LOS D or better) during the peak hours for Existing (2016) traffic conditions, with the exception of the following mainline segments (Urban Crossroads, 2016, p. 69):

- I-215 Freeway Northbound, north of Barton Road – LOS E (AM peak hour only); and
- I-215 Freeway Northbound, between Barton Road and La Cadena Drive – LOS E (AM peak hour only).

For more information, refer to Table 3-4 of *Technical Appendix L*.

G. Existing (2016) Conditions Freeway Merge/Diverge Analysis

Ramp merge and diverge operations were evaluated for Existing (2016) traffic conditions at the on-ramps and off-ramps of I-215 at Barton Road, South Iowa Avenue, and South La Cadena Drive. The evaluation concluded that the ramp merge and diverge areas operate at an acceptable LOS (LOS D or better), with the exception of the following ramp merge and diverge areas:

- I-215 Freeway – northbound, on-ramp at Barton Road – LOS E (AM peak hour only); and
- I-215 Freeway – northbound, off-ramp at South Iowa Avenue – LOS E (AM peak hour only)

For more information, refer to Table 3-5 of *Technical Appendix L*. (Urban Crossroads, 2016, p. 69)

H. Existing Transit Service

The Project's study area is currently served by the OmniTrans, OmniGo, and Riverside Transit Authority (RTA), public transit agencies serving the City of Colton, City of Grand Terrace, City of Riverside, and unincorporated Riverside County region. The bus routes that service the study area include OmniTrans Route 215, OmniGo Route 325, RTA Route 12, and RTA Route 14. Under existing conditions, bus service is provided along Barton Road, Michigan Avenue, Center Street, Iowa Avenue, Main Street, Orange Street, La Cadena Drive, and Columbia Avenue. There are no transit routes that serve roadways in the immediate vicinity of the Project site. The nearest bus stop is located

approximately 0.23-mile southeast of the Project site along West Center Street, north of Debbie Lane, east of Cliffhill Place, south of Tolica Place, and west of Stephens Avenue. (Urban Crossroads, 2016, p. 41; Google Earth Pro, 2016)

I. Existing Pedestrian and Bicycle Facilities

The City of Colton General Plan includes a Bicycle Plan, which shows that no bikeways occur or are planned to occur on the Project site. The Bicycle Plan shows bikeways in the Project site's vicinity to include: an existing Class I bikeway is located along the southern/eastern side of the Santa Ana River (Santa Ana River Trail); an existing Class III bikeway and planned Class II and Class III bikeways along La Cadena Drive; and a planned Class II bikeway along Riverside Avenue. (City of Colton, 2013b, Figure M-6 Bikeway Classifications)

No existing sidewalks or other pedestrian facilities are located on-site. Nearby pedestrian facilities include the Santa Ana River Trail to the west/north of the Project site, and the sidewalks located within the residential neighborhoods to the east and south of the Project site. (Urban Crossroads, 2016, Exhibit 3-17)

4.14.4 APPLICABLE ENVIRONMENTAL REGULATIONS

A. SCAG Regional Transportation Plan

The Southern California Association of Governments (SCAG) is a regional agency established pursuant to California Government Code § 6500, also referred to as the Joint Powers Authority law. SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). The Project site is within SCAG's regional authority. On April 7, 2016, SCAG adopted the *2016-2040 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS)* with goals to: 1) Align the plan investments and policies with improving regional economic development and competitiveness; 2) Maximize mobility and accessibility for all people and goods in the region; 3) Ensure travel safety and reliability for all people and goods in the region; 4) Preserve and ensure a sustainable regional transportation system; 5) Maximize the productivity of our transportation system; 6) Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking); 7) Actively encourage and create incentives for energy efficiency, where possible; 8) Encourage land use and growth patterns that facilitate transit and active transportation; and 9) Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies (SCAG, 2016a, p. 64). Performance measures and funding strategies also are included to ensure that the adopted goals are achieved through implementation of the RTP. It should be noted that the Project-specific TIA relied on growth forecasts cited in the *2012-2035 RTP/SCS* because TIA preparation commenced prior to the adoption of the *2016-2040 RTP/SCS*.

On March 9, 2015, SCAG, as Lead Agency, published a Notice of Preparation (NOP) of a Program Environmental Impact Report (PEIR) for the *2016-2040 RTP/Sustainable Communities Strategy (2016*

RTP/SCS), which was adopted April 7, 2016. The 2016 RTP/SCS forecasts reflect reduced growth rates and total growth when compared to the 2012-2035 RTP/SCS forecasts (used in the TIA to calculate expected ambient growth), with the exception of employment. The 2016-2040 RTP/SCS growth rate for employment is approximately 1.2% greater than the 2012-2035 RTP/SCS; however, this slight increase in projected regional employment growth would have a *de minimus* effect on the impact conclusions drawn by the TIA and would not result in any additional traffic impacts when considered in conjunction with the reduced growth rates for both population and households, and the addition of cumulative developments utilized for the purposes of this analysis. (Urban Crossroads, 2016, p. 85)

B. County of San Bernardino Congestion Management Program

The intent of the County of San Bernardino Congestion Management Program (CMP) is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related impacts, and improve air quality. Counties within California have developed CMPs with varying methods and strategies to meet the intent of the CMP legislation. There are seven study area intersections that are ramp-to-arterial intersections with the I-215 Freeway or are located along South Rancho Avenue (at Agua Mansa Road and South La Cadena Drive) or Barton Road (at Michigan Avenue and Mt. Vernon Avenue), which are all identified as San Bernardino County CMP facilities:

- South La Cadena Drive / South Rancho Avenue (City of Colton);
- La Cadena Drive South / Pellissier Road / I-215 southbound on-ramp (City of Colton/Caltrans);
- La Crosse Avenue / I-215 southbound off-ramp (City of Grand Terrace/Caltrans);
- La Crosse Avenue / I-215 southbound on-ramp / Barton Road (City of Grand Terrace/Caltrans);
- I-215 northbound ramps / Barton Road (City of Grand Terrace/Caltrans);
- Michigan Avenue / Barton Road (City of Grand Terrace); and
- Mt. Vernon Avenue / Barton Road (City of Grand Terrace).

Additionally, the mainline segments of I-215 are listed as CMP facilities. (Urban Crossroads, 2016, pp. 5-6)

C. County of Riverside Congestion Management Program

There are three study area intersections that are ramp-to-arterial intersections with the I-215 Freeway, which is identified as a Riverside County CMP facility. These intersections are listed below (Urban Crossroads, 2016, pp. 5-6):

- La Cadena Drive West / Stephens Avenue / I-215 southbound ramps (County of Riverside/Caltrans);
- South Iowa Avenue / South La Cadena Drive / I-215 southbound off-ramp (City of Colton/Caltrans); and

- South Iowa Avenue / I-215 northbound ramps (City of Colton/Caltrans).

D. City of Colton General Plan Mobility Element

The City of Colton General Plan is a policy document that is the City's long-term plan for the future of Colton. The General Plan includes a Mobility Element (2013), a core component of the General Plan that discusses transportation facilities as well as alternative modes of transportation, and establishes objectives and policies associated with transportation within the City. The General Plan Mobility Element identifies the circulation facilities located onsite and in the vicinity the Project site; discusses planned circulation system improvements on and in the vicinity of the Project site; and issues standards for the design and construction of new roadways within the City.

E. City of Colton Development Impact Fee Program

The City of Colton development impact fee (DIF) program imposes and collects fees from new development projects to fund roadways and intersections necessary to accommodate the growth of the City as identified in the City's General Plan Circulation Element. The City's DIF includes regional improvements to comply with Measure "I". Measure "I" is a one-half percent sales tax on retail transactions applied in San Bernardino County which funds transportation projects within the County. Under the City's DIF program, the City may grant to developers a credit against specific components of fees when those developers construct certain facilities and landscaped medians identified in the list of improvements funded by the DIF program. The timing to use the DIF fees is established through periodic capital improvement programs which are overseen by the City's Public Works Department, as well as data collection and analysis to ensure that City circulation facilities are operating at acceptable LOS standards. The Project would be subject to the City's DIF fee program; therefore, the Project applicant would be required to pay the requisite City DIF fees at the effective rates. The Project's impacts to DIF-funded facilities would be mitigated by the Project applicant's payment of the requisite DIF fees.

4.14.5 PROJECT TRIP GENERATION AND DISTRIBUTION

A. Project Trip 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 therefore based upon 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 evaluate the proposed Project are based upon data collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, 2012, and are shown in Table 4-1 of the TIA (*Technical Appendix L*). Based on the trip generation rates used, the Project is calculated to generate a net total of 10,021 trip-ends per day on a typical weekday, with approximately 819 AM peak hour trips and 991 PM peak hour trips. (Urban Crossroads, 2016, p. 77, Table 4-1)

B. Project Trip Distribution

Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the routes where the Project traffic would distribute. The Project trip distribution was developed based on reasonably expected travel patterns to and from the Project site. The Project residential trip distribution patterns are graphically depicted on Figure 4.14-1, *Project (Residential) Trip Distribution* and Figure 4.14-2, *Project (Commercial) Trip Distribution*. (Urban Crossroads, 2016, p. 79)

4.14.6 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to transportation/traffic if the Project or any Project-related component would:

a. *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;*

b. *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;*

c. *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;*

d. *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);*

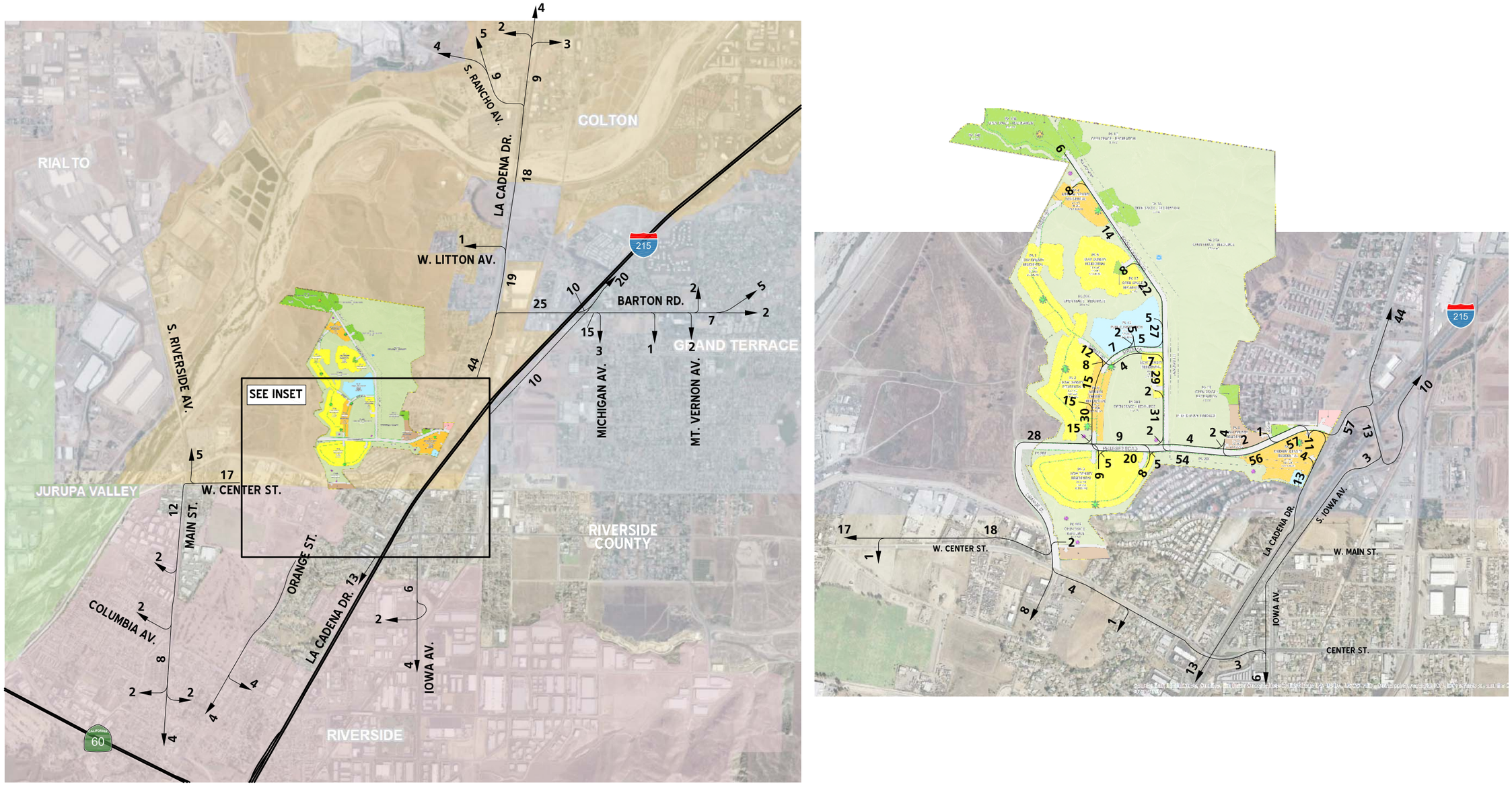
e. *Result in inadequate emergency access; or*

f. *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities*.

A. Determining Significance of Impacts

1. Intersections

For purposes of determining the significance of traffic impacts in this Subsection, a significant direct traffic impact would occur when the addition of Project traffic under Existing plus Project (E+P) traffic conditions causes an intersection that operates at LOS D or better to fall to LOS E or F. Additionally, a significant direct impact would also occur in the E+P scenario if the Project-generated 50 or more peak hour trips worsen the pre-project LOS at a deficiently operating (LOS E or F) study area intersection. (Urban Crossroads, 2016, p. 35)

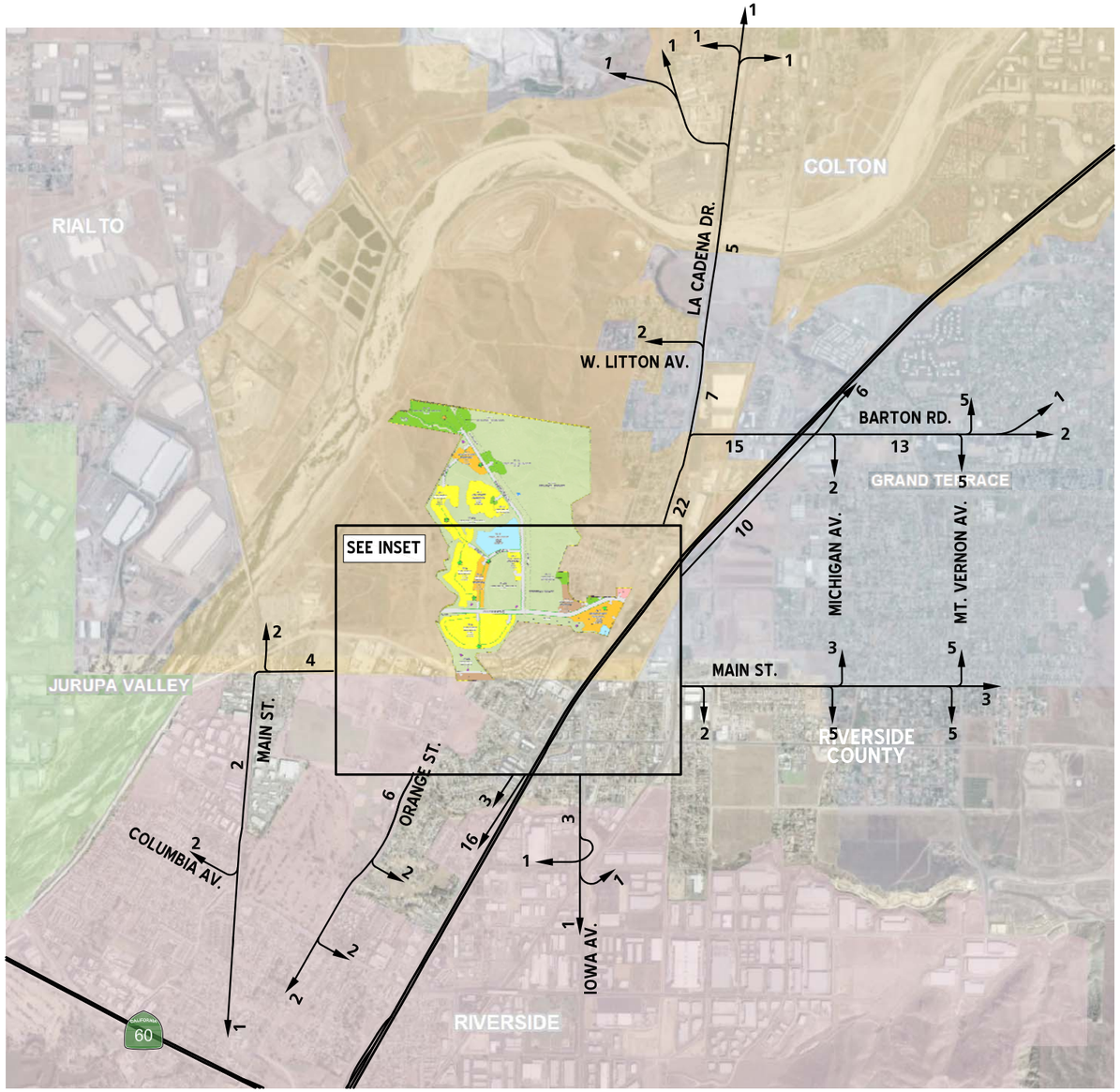


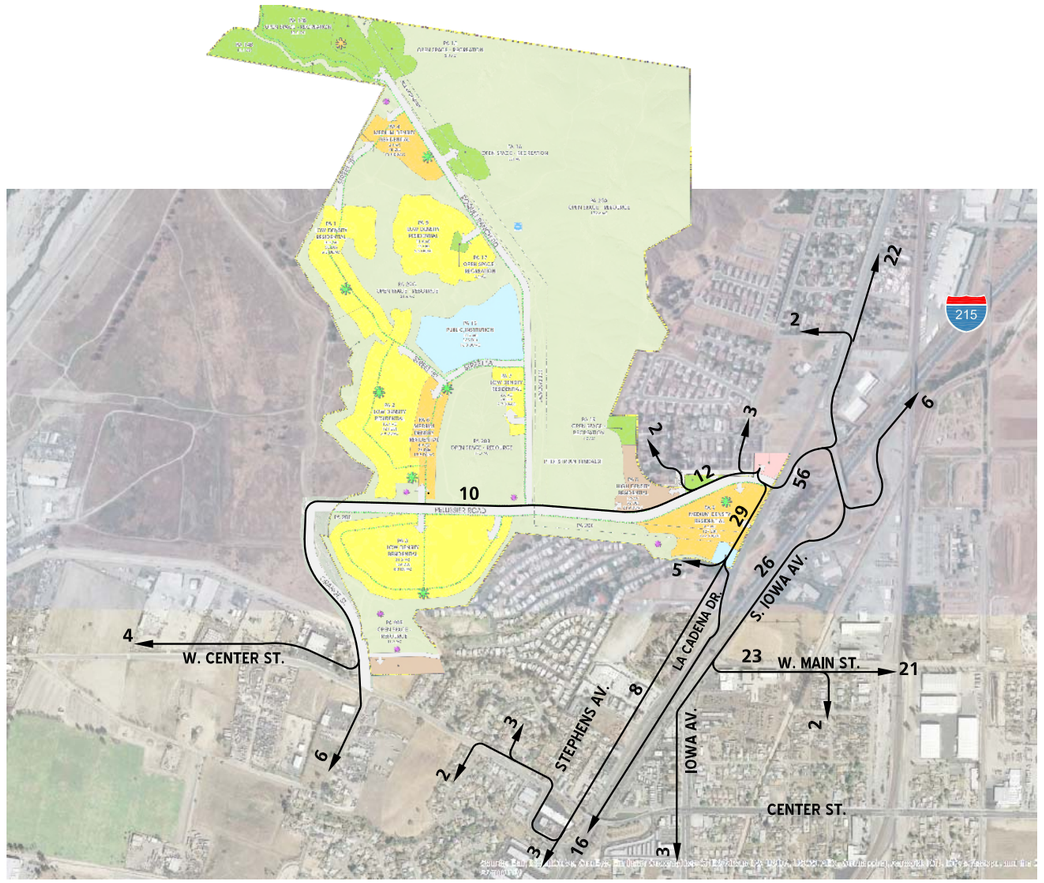
Source(s): Urban Crossroads (07-28-2016)

Figure 4.14-1

NOT TO SCALE

PROJECT (RESIDENTIAL) TRIP DISTRIBUTION





Source(s): Urban Crossroads (07-28-2016)

Figure 4.14-2

NOT TO SCALE

PROJECT (COMMERCIAL) TRIP DISTRIBUTION

Cumulative traffic impacts are deficiencies that are not directly caused by the Project, but occur as a result of regional growth combined with other nearby cumulative development projects. Under the Opening Year Cumulative (2020) and/or Horizon Year (2040) traffic scenarios, the Project's contribution of traffic to an intersection is deemed cumulatively considerable if (Urban Crossroads, 2016, p. 35):

- The addition of project-generated trips reduces the peak hour level of service of the study intersection to change from acceptable level of service (LOS A, B, C, or D) to an unacceptable level of service (LOS E or F); or
- The project-generated 50 or more peak hour trips worsen the pre-Project LOS grade at a deficiently operating (LOS E or F) intersection.

A Project's contribution to a cumulative impact can be reduced to less than significant if the Project is required to implemented or fund its fair share of physical improvements designed to alleviate the potential cumulative impact. If full funding of future physical improvements is not reasonably assured, a short-term unmitigated cumulative impact may occur until the needed improvement is fully funded and constructed.

2. Freeway Mainline Segments and Ramp Junctions

For purposes of the analysis in this EIR Subsection, if a freeway mainline segment or ramp junction is projected to operate at LOS D or better without the Project and the Project would contribute traffic that is expected to cause the facility to operate at LOS E or LOS F under E+P traffic conditions, then the Project's impact is considered direct and significant. If the facility would operate at a deficient LOS under any traffic analysis scenario without the Project and the Project would contribute substantial traffic (50 or more peak hour trips) to the deficiency, the Project's impact would be cumulatively considerable. (Urban Crossroads, 2016, p. 36)

3. Freeway Off-Ramp Queuing

To determine whether the addition of Project traffic at a freeway ramp results in a significant impact, the stacking distance is measured to determine if the addition of Project traffic would result in a deficiency. Stacking distance on freeway ramps is acceptable if the required 95th percentile stacking distance is less than or equal to the stacking distance provided. Therefore, a significant impact would occur if the 95th percentile stacking distance need was greater than the available stacking distance. The impact would be considered a significant direct impact of the Project if the Project's traffic causes the queue to exceed the 95th percentile under E+P traffic conditions. The impact would be considered cumulatively considerable if the Project's traffic would contribute to queues that exceed the 95th percentile under Opening Year Cumulative (2020) and/or Horizon Year (2040) traffic conditions.

4.14.7 IMPACT ANALYSIS

Threshold a)	***Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?***

The analysis of Threshold a) focuses on potential impacts to local roadway intersections and roadway segments, based on acceptable LOS standards established by the City of Colton, as discussed in Subsection 4.14.2A. Refer to Threshold b) for an analysis of potential impacts to CMP roadway facilities under the jurisdiction of Caltrans. The use of mass-transit and non-motorized travel by persons traveling to or from the Project site would lower the Project's vehicular traffic by a nominal amount. Regardless, no lowering of the Project's calculated traffic trip generation was considered in order to present a conservative analysis and to avoid potential understating of the Project's potential impacts to the vehicular circulation system. Traffic during the Project's construction phase is not analyzed herein because based on the construction characteristics identified in Section 3.0, *Project Description*, the volume of construction-related traffic would result in fewer peak hour and daily trips than would result from operation of the Project; thus, the analyses of the Project's operational traffic covers any impacts that could occur from construction-related traffic.

A. Analysis Scenarios

Potential deficiencies to traffic and circulation facilities are assessed for each of the following conditions:

- Existing (2016) Conditions
- Existing plus Project (Project Buildout) Conditions (E+P)
- Opening Year Cumulative (2020) Without and With Project Conditions
- Horizon Year (2040) Without and With Project (Project Buildout) Conditions

Information for the Existing plus Project (E+P) conditions analysis determines traffic deficiencies that would occur on the existing roadway system in the theoretical scenario of the Project being placed upon Existing (2016) conditions. (Urban Crossroads, 2016, p. 3)

The Opening Year Cumulative (2020) conditions analysis determines the potential for near-term cumulative circulation system deficiencies when the Project reaches full buildout (year 2020). The Opening Year Cumulative (2020) traffic forecasts were developed by applying an ambient growth factor to Existing (2016) conditions of 4.06% (e.g., 1% per year over 4 years, compounded annually). In addition, traffic associated with other cumulative projects in the area (refer to the list of projects provided in Table 4.0-1 of EIR Section 4.0) were also added in addition to Project traffic for Opening

Year Cumulative (2020) conditions, in order to identify potential traffic deficiencies associated with Opening Year Cumulative (2020) conditions. (Urban Crossroads, 2016, p. 3)

The Horizon Year (2040) conditions analysis determines the potential for long-term cumulative circulation system deficiencies when the Colton General Plan reaches full buildout in the year 2040. The Horizon Year (2040) traffic forecasts were derived from the San Bernardino County Transportation Analysis Model (SBTAM), the sub-regional model for San Bernardino County. In addition, traffic associated with other cumulative projects in the area (refer to the list of projects provided in Table 4.0-1 of EIR Section 4.0) was also added in addition to Project traffic for Horizon Year (2040) conditions, to identify the potential traffic deficiencies associated with Horizon Year (2040) conditions. Based on a comparison of Existing traffic volumes to the Horizon Year forecasts, the average growth rate is estimated at approximately 2.4% compounded annually between Existing and Horizon Year traffic conditions. (Urban Crossroads, 2016, p. 4)

The Horizon Year (2040) conditions analysis also is utilized to determine if improvements funded through transportation mitigation fee programs, such as the City of Colton's DIF program, or other approved funding mechanisms, can accommodate the forecasted cumulative traffic at the target level of service (LOS) identified by the City of Colton, as discussed in Subsection 4.14.2A. The 2040 roadway networks analyzed herein include the future improvements proposed by the Project. (Urban Crossroads, 2016, p. 4)

B. Background Traffic

Future year traffic forecasts are based upon three and five years of background (ambient) growth at 1% per year for 2020 traffic conditions. The Opening Year Cumulative traffic forecasts were developed by applying an ambient growth factor to Existing Conditions of 4.06% (e.g., 1% per year over 4 years, compounded annually). This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies (refer to Table 4.0-1 of this EIR). (Urban Crossroads, 2016, p. 85)

The adopted *Southern California Association of Governments (SCAG) 2012 Regional Transportation Plan (RTP)* (April 2012) growth forecasts for the City of Colton identifies projected growth in population of 52,100 in 2008 to 71,700 in 2035, or a 37.6% increase over the 27-year period. The change in population equates to roughly a 1.19% growth rate compounded annually. Similarly, growth over the same 27-year period in households is projected to increase by 40.7%, or a 1.27% annual growth rate. Finally, growth in employment over the same 27-year period is projected to increase by 23.3%, or a 0.78% annual growth rate. As such, use of a growth rate of 4.06% for 2020 conditions is more conservative than historical data and would overstate, as opposed to understate, potential traffic impacts. (Urban Crossroads, 2016, p. 85)

C. *Existing Plus Project (E+P) Traffic Conditions*

This scenario analyzes the effects of Project traffic when added to Existing (2016) traffic volumes. Although this scenario is hypothetical, CEQA requires the evaluation of a project's impact on the existing environment and the existing environment for purposes of this EIR is approximately June 2016 (the date that the Notice of Preparation for this EIR was published). Refer to Exhibit 5-1 of *Technical Appendix L* for an illustration of weekday ADT and Exhibit 5-2 of *Technical Appendix L* for an illustration of peak hour intersection volumes for E+P traffic conditions (Urban Crossroads, 2016, pp. 96-97). Any significant impacts identified under this scenario would be considered direct impacts.

1. *Intersection Operations Analysis*

E+P peak hour traffic operations were evaluated for the Project's study area intersections based on the analysis methodologies discussed in Subsection 4.14.2, *Methodologies for Determining Transportation Facility Deficiencies.* The intersection analysis results are summarized in Table 4.14-5, *Intersection Analysis for Existing Plus Project Conditions*, which indicates that the addition of Project traffic would result in a significant direct impact at the following intersections, because the addition of Project traffic would either (1) Change the LOS of the intersection from an acceptable LOS to a deficient LOS of E or F in AM and/or PM peak hour, or (2) Worsen the pre-Project LOS grade at a deficiently operating (LOS E or F) intersection due to the addition of 50 or more Project peak hour trips (Urban Crossroads, 2016, p. 95):

- South La Cadena Drive / West Maryknoll Drive – LOS F (AM and PM peak hours);
- Main Street / Strong Street (PM peak hour only);
- South Iowa Avenue / South La Cadena Drive / I-215 southbound off-ramp; and
- South Iowa Avenue / I-215 northbound ramps.

2. *Roadway Segment Analysis*

The roadway segment capacities for the E+P conditions scenario are summarized in Table 4.14-6, *Roadway Segment Volume/Capacity Analysis for Existing Plus Project Conditions*. As shown on Table 4.14-6, the addition of Project traffic is calculated to result in the following additional roadway segment capacity deficiency, in addition to those previously identified for Existing traffic conditions:

- Barton Road between I-215 southbound ramps and I-215 northbound ramps. (Urban Crossroads, 2016, pp. 95-103)

However, in instances where intersections at both legs of a roadway segment operate at acceptable LOS, the roadway segment is considered to experience acceptable traffic flow. Therefore, because Intersection #26 – La Crosse Avenue / I-215 Southbound On-Ramp & Barton Road and Intersection #28 – I-215 Northbound Ramps & Barton Road operate at an acceptable LOS under the E+P conditions scenario, the proposed Project would also result in a corresponding less-than-significant direct impact to Roadway Segment #13 – Barton Road between I-215 southbound ramps and I-215 northbound.

3. *Traffic Signal Warrants Analysis*

For E+P conditions, the following unsignalized study area intersection, in the jurisdiction of the City of Colton, would meet peak hour volume based traffic signal warrants, in addition to the intersections previously meeting signal warrants under Existing traffic conditions (Urban Crossroads, 2016, p. 103):

- South La Cadena Drive / West Maryknoll Drive.

As indicated previously, meeting the warrant condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. Signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant. In the case of this intersection, it would operate at an unacceptable LOS E in the E+P condition; therefore, the Project's impact on this intersection is considered to be significant. The TIA recommends that a traffic signal be installed at this intersection.

D. *Opening Year Cumulative (2020) Without and With Project Conditions*

This section discusses the traffic forecasts for Opening Year Cumulative (2020) conditions, and the resulting peak hour intersection operations, roadway segment capacities and traffic signal warrant analyses.

The Without Project scenario includes Existing (2016) traffic volumes plus an ambient growth factor of 4.06% plus traffic from pending and approved but not yet constructed known development projects in the area. The weekday ADT volumes for Opening Year Cumulative (2020) Without Project traffic conditions are shown on Exhibit 6-1 of *Technical Appendix L*. Weekday AM and PM peak hour volumes which can be expected for Opening Year Cumulative (2020) Without Project traffic conditions are shown on Exhibit 6-2 of *Technical Appendix L*. (Urban Crossroads, 2016, p. 111)

The With Project scenario includes Existing (2016) traffic volumes, plus an ambient growth factor of 4.06%, traffic from pending and approved but not yet constructed known development projects in the area (refer to Table 4.0-1 of this EIR), and the addition of Project traffic. The weekday ADT volumes for Opening Year Cumulative (2020) With Project traffic conditions are shown on Exhibit 6-3 of *Technical Appendix L*. Weekday AM and PM peak hour volumes which can be expected for Opening Year Cumulative (2020) With Project traffic conditions are shown on Exhibit 6-4 of *Technical Appendix L*. (Urban Crossroads, 2016, pp. 111-117)

1. *Intersection Operations Analysis*

The study area intersections were evaluated to determine whether the contribution of Project traffic would have a cumulatively considerable effect on the LOS at any of the intersections under the Opening Year Cumulative (2020) conditions scenario. The intersection analysis results are summarized in Table 4.14-7, *Intersection Analysis for Opening Year Cumulative (2020) Conditions.*

Table 4.14-7 indicates that the addition of 4.06% ambient growth, along with the addition of traffic from cumulative development projects (refer to Table 4.0-1 of this EIR), along with Project-related traffic, would result in LOS deficiencies at the following study area intersections. This is regarded as a cumulatively significant impact. For the six intersections listed below, the Project would either: (1) Change the LOS of the intersection from an acceptable LOS to a deficient LOS of E or F in AM and/or PM peak hour, or (2) Worsen the pre-Project LOS grade at a deficiently operating (LOS E or F) intersection due to the addition of 50 or more Project-related peak hour trips. Thus, the Project's addition of traffic would be cumulatively considerable at these seven locations (Urban Crossroads, 2016, Table 6-1):

- Main Street / Strong Street – LOS F (PM peak hour);
- South Riverside Avenue / Main Street / Placentia Lane – LOS F (AM and PM peak hours);
- Stephens Avenue / West Center Street – LOS F (AM peak hour) / LOS E (PM peak hour);
- Orange Street / West Center Street – LOS E (PM peak hour only);
- Michigan Avenue / West Main Street – LOS F (AM peak hour only); and
- South La Cadena Drive / South Iowa Avenue – LOS F (PM peak hour only).
- South La Cadena Drive / West Maryknoll Drive – LOS F (AM and PM peak hours).

2. Roadway Segment Analysis

The roadway segment capacities for the Opening Year Cumulative (2020) conditions scenario are summarized in Table 4.14-8, *Roadway Segment Volume/Capacity Analysis for Opening Year Cumulative (2020) Conditions.* As shown on Table 4.14-8, the addition of ambient growth along with the addition of traffic from cumulative development projects (refer to Table 4.0-1 of this EIR), along with Project-related traffic would result in deficiencies at the following roadway segment during one or both peak hours (Urban Crossroads, 2016, pp. 118-125):

- Barton Road, Between I-215 southbound Ramps and I-215 northbound Ramps – LOS E

Under the Opening Year Cumulative (2020) conditions scenario, the roadway segment would have a deficient LOS of E without the contribution of Project traffic (Urban Crossroads, 2016, p. 125). The contribution of Project traffic would worsen the LOS grade at this deficient roadway segment from LOS E to LOS F under the Opening Year Cumulative (2020) scenario. However, because the intersections at both legs of the roadway segment are calculated to operate at an acceptable LOS, the roadway segment would also experience acceptable traffic flow. Therefore, the Project would result in less-than-cumulatively considerable impacts to this roadway segment under the Opening Year Cumulative (2020) conditions scenario.

3. Traffic Signal Warrants Analysis

For Opening Year Cumulative (2020) With Project traffic conditions, there are no additional unsignalized study area intersections that are calculated to meet peak hour volume based traffic signal warrants, in addition to the intersections previously warranted under Existing and E+P traffic

conditions (Urban Crossroads, 2016, p. 125). The signal warrant information is provided herein for informational purposes only.

E. Horizon Year (2040) Without and With Project (Project Buildout) Conditions

This section discusses Horizon Year (2040) conditions, and the resulting peak hour intersection operations, roadway segment capacities, and traffic signal warrant analyses.

The Without Project scenario includes Existing (2016) traffic volumes plus the refined post-processed volumes obtained from the recently updated 2040 SBTAM. The weekday ADT volumes for Horizon Year (2040) Without Project traffic conditions are shown on Exhibit 7-1 of *Technical Appendix L*. Weekday AM and PM peak hour volumes which can be expected for Horizon Year (2040) Without Project traffic conditions are shown on Exhibit 7-2 of *Technical Appendix L*. (Urban Crossroads, 2016, pp. 137-140)

The With Project scenario includes the refined post-processed volumes obtained from the SBTAM, plus proposed Project (Buildout) volumes. The weekday ADT volumes for Horizon Year (2040) With Project traffic conditions are shown on Exhibit 7-3 of *Technical Appendix L*. Weekday AM and PM peak hour volumes which can be expected for Horizon Year (2040) With Project traffic conditions are shown on Exhibit 7-4 of *Technical Appendix L*. (Urban Crossroads, 2016, pp. 141-143)

1. Intersection Operations Analysis

The Project's study area intersections were evaluated to determine whether the contribution of Project traffic would result in a cumulatively considerable impact to the LOS at any of the intersections under the Horizon Year Cumulative (2040) conditions scenario. The intersection analysis results are summarized in Table 4.14-9, *Intersection Analysis for Horizon Year (2040) Conditions*, which indicates that the average estimated annual growth rate of approximately 2.4% (compounded annually) along with the addition of cumulative project traffic (refer to Table 4.0-1 of this EIR) and the Project-related traffic would result in a LOS deficiency several of the study area intersections. At the following six intersections, the contribution of Project traffic would either: (1) Change the LOS of the intersection from an acceptable LOS to a deficient LOS of E or F in AM and/or PM peak hour, or (2) Worsen the pre-Project LOS grade at a deficiently operating (LOS E or F) intersection due to the addition of 50 or more Project-related peak hour trips. Thus, the Project's addition of traffic would be cumulatively considerable at these seven intersections (Urban Crossroads, 2016, p. 144):

- Main Street / Strong Street – LOS E (AM peak hour) and LOS F (PM peak hour);
- Orange Street / West Center Street – LOS F (PM peak hour only);
- South La Cadena Drive / West Litton Avenue – LOS E (AM and PM peak hours);
- South La Cadena Drive / South Iowa Avenue – LOS F (AM and PM peak hours);
- South La Cadena Drive / West Maryknoll Drive – LOS F (AM and PM peak hours);
- La Cadena Drive South / Pellissier Road / I-215 southbound on-ramp – LOS F (AM peak hour) and LOS E (PM peak hour); and

- Mt. Vernon Avenue / Main Street – LOS F (AM and PM peak hours).

Thus, the Project's addition of traffic to these intersections would be cumulatively considerable.

2. Roadway Segment Analysis

The roadway segment capacities for the Horizon Year (2040) conditions scenario are summarized in Table 4.14-10, *Roadway Segment Volume/Capacity Analysis for Horizon Year (2040) Conditions*. As shown on Table 4.14-10, the addition of ambient growth along with the addition of traffic from cumulative development projects (refer to Table 4.0-1 of this EIR), along with Project-related traffic would result in deficiencies several roadway segments (Urban Crossroads, 2016, p. 150). At the following four intersections, the contribution of Project traffic would either: (1) Change the LOS of the segment from an acceptable LOS to a deficient LOS of E or F in AM and/or PM peak hour, or (2) Worsen the pre-Project LOS grade at a deficiently operating (LOS E or F) segment due to the addition of 50 or more Project-related peak hour trips. Thus, under the Horizon Year (2040) conditions scenario, the Project's addition of traffic would worsen deficiencies at these four segments (Urban Crossroads, 2016, Table 7-2):

- La Cadena Drive between West Litton Avenue and Barton Road;
- Barton Road east of La Cadena Drive;
- Barton Road west of La Crosse Avenue; and
- Barton Road between La Crosse Avenue and I-215 southbound ramps.

However, because the intersections at either leg of the three Barton Road roadway segments listed above calculated to operate at an acceptable LOS, these three roadway segments are considered to experience acceptable traffic flow. Therefore, the Project would result in less-than-cumulatively considerable impacts to these three roadway segments under the Horizon Year Cumulative (2040) conditions scenario. The Project would result in cumulatively considerable impacts to the segment of La Cadena Drive between West Litton Avenue and Barton Road (Segment #5) because Intersection #18 – South La Cadena Drive / West Litton Avenue (the northern leg of Roadway Segment #5) would operate at a deficient LOS in the PM peak hour under the Horizon Year Cumulative (2040) conditions scenario without mitigation.

3. Traffic Signal Warrants Analysis

For Horizon Year (2040) Without Project traffic conditions, the following City of Colton unsignalized study area intersection is calculated to meet peak hour volume-based traffic signal warrants, in addition to the intersections previously warranted under Existing, E+P, and Opening Year Cumulative (2020) without Project traffic conditions (Urban Crossroads, 2016, p. 152):

- La Cadena Drive South / Pellissier Road / I-215 southbound on-ramp

For Horizon Year (2040) With Project traffic conditions, the following City of Colton unsignalized study area intersection is calculated to meet a peak hour volume based traffic signal warrant, in addition to the intersection previously warranted under Horizon Year (2040) Without Project traffic conditions (Urban Crossroads, 2016, p. 152):

- Orange Street / West Center Street

As indicated above, meeting the warrant condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. Signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant. In the case of the intersection listed above, it would operate at an unacceptable LOS in the Horizon Year (2040) With Project condition, and thus the Project is identified as having a cumulatively considerable impact to the intersection. The signal warrant information is provided herein for informational purposes only (Urban Crossroads, 2016, p. 152).

Threshold b)	***Would the Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion / management agency for designated roads or highways?***

The San Bernardino County CMP is applicable to the Project because the Project would contribute traffic to freeway mainline segments (I-215) and major intersections that are designated as part of the regional CMP roadway system. The seven study area intersections which are identified as CMP facilities were previously described in Subsection 4.14.4, and include the following:

- South La Cadena Drive / South Rancho Avenue;
- La Cadena Drive South / Pellissier Road / I-215 southbound on-ramp;
- La Crosse Avenue / I-215 southbound off-ramp;
- La Crosse Avenue / I-215 southbound on-ramp / Barton Road;
- I-215 northbound ramps / Barton Road (City of Grand Terrace/Caltrans);
- Michigan Avenue / Barton Road; and
- Mt. Vernon Avenue / Barton Road.

Additionally, the Riverside County CMP is applicable to the Project because the Project would contribute traffic to freeway mainline segments (I-215) and major intersections that are designated as part of the regional CMP roadway system. The three study area intersections which are identified as CMP facilities were previously described in Subsection 4.14.4, and include the following:

- La Cadena Drive West / Stephens Avenue / I-215 southbound ramps;
- South Iowa Avenue / South La Cadena Drive / I-215 southbound off-ramp; and

- South Iowa Avenue / I-215 northbound ramps.

The I-215 Freeway is identified as a CMP facility in the San Bernardino County CMP and Riverside County CMP. The Project would contribute 50 or more peak hour trips to the northbound and southbound segments north and south of La Cadena Drive and Barton Road, so those segments are studied herein (Urban Crossroads, 2016, p. 10). Because the Project would contribute fewer than 50 peak hour trips to CMP freeway segments beyond the Project's study area, the Project's effect to other CMP freeway facilities would be less than cumulatively considerable and, therefore, do not require quantified study.

Potential deficiencies to CMP facilities are assessed below for each of the following scenarios. Refer to the discussion under Threshold a), for more detailed information regarding each scenario.

- Existing plus Project Conditions (E+P)
- Opening Year Cumulative (2020) Without and With Project Conditions
- Horizon Year (2040) Without and With Project Conditions

A. Existing Plus Project (E+P) Traffic Conditions

This scenario addresses the theoretical situation of the Project being placed on the Existing (2016) environment. Any significant impact identified under this scenario would be considered a near-term direct impact.

1. Off-Ramp Queuing Analysis

A queuing analysis was performed for the off-ramps of I-215 at the Barton Road, Iowa Avenue, and Stephens Avenue interchanges to assess vehicle queues that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-215 freeway mainline. According to the queuing analysis conducted for the E+P scenario as summarized in Table 5-3 of *Technical Appendix L*, no study-area off-ramps are calculated to experience queuing issues during the weekday AM or weekday PM peak hours. Therefore, direct impacts to off-ramps in the E+P conditions scenario would be less than significant. (Urban Crossroads, 2016, pp. 103-104)

2. Freeway Segment Analysis

Traffic volumes on the I-215 mainline segments in the Project's study area (the northbound and southbound segments north and south of Barton Road and La Cadena Drive) for the E+P scenario in the AM and PM peak hours are summarized in Table 5-4 of *Technical Appendix L*. As indicated, the mainline segments would operate at an acceptable LOS, with the exception of the following two segments:

- I-215 northbound to the north of Barton Road (AM peak hour only); and
- I-215 northbound between Barton Road and La Cadena Drive (AM peak hour only).

As shown in Table 5-4 of *Technical Appendix L*, these two freeway segments operate at an unacceptable LOS (E) during the AM peak hour under existing conditions and the addition of Project traffic would not result in change to the LOS on these segments. However, since the contribution of Project traffic would result in the addition of 50 or more peak hour trips to these already deficient freeway segments, the Project would have a cumulatively considerable impact on these two freeway segments. (Urban Crossroads, 2016, p. 107)

3. Freeway Merge/Diverge Analysis

Ramp merge and diverge operations were evaluated at the on-ramps and off-ramps of I-215 at Barton Road, South Iowa Avenue, and South La Cadena Drive. As indicated in Table 5-5 of *Technical Appendix L*, the ramps would operate at an acceptable LOS, with the exception of the following two ramps:

- I-215 northbound on-ramp at Barton Road (AM peak hour only); and
- I-215 northbound off-ramp at South Iowa Avenue (AM peak hour only).

As shown in Table 5-5 of *Technical Appendix L*, these two ramps operate at an unacceptable LOS (E) during the AM peak hour under existing conditions and the addition of Project traffic would not change the LOS at these locations. Additionally, the addition of Project traffic would not contribute 50 or more trips to a freeway ramp deficiency. Accordingly, impacts to freeway ramps in the E+P conditions scenario would be less than significant. (Urban Crossroads, 2016, p. 105)

B. Opening Year Cumulative (2020) Traffic Analysis

The Opening Year Cumulative (2020) conditions analysis determines the potential for near-term cumulative CMP facility deficiencies. The Opening Year Cumulative (2020) traffic forecasts were developed by applying an ambient growth factor to Existing (2016) conditions of 4.06% (e.g., 1% per year over 4 years, compounded annually). In addition, traffic associated with other cumulative projects in the area (refer to Table 4.0-1 of this EIR) along with Project traffic was added (Urban Crossroads, 2016, p. 111). Any significant impacts identified under this scenario would be considered a near-term cumulatively considerable impact.

1. Off-Ramp Queuing Analysis

A queuing analysis was performed for the off-ramps of I-215 at the Barton Road, Iowa Avenue, and Stephens Avenue interchanges to assess vehicle queues that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-215 freeway mainline. According to the queuing analysis conducted for the Opening Year Cumulative (2020) Without Project conditions scenario summarized in Table 6-3 of *Technical Appendix L*, queuing issues would occur at the following facilities during the weekday PM peak 95th percentile traffic flows (Urban Crossroads, 2016, p. 126):

- South Iowa Avenue / I-215 northbound ramps (PM peak hour only).

Under the Opening Year Cumulative (2020) With Project Conditions, queuing issues would occur at the following facilities during the weekday PM peak 95th percentile traffic flows (Urban Crossroads, 2016, p. 126):

- South Iowa Avenue / I-215 northbound ramps (AM and PM peak hours).

Because the contribution of Project traffic would result in a deficiency during the AM peak hour at these facilities, the Project result in a cumulatively considerable impact with respect to the issue of off-ramp queuing at these facilities. (Urban Crossroads, 2016, pp. 125-127)

2. Freeway Segment Analysis

Traffic volumes on the I-215 mainline segments in the Project's study area (the northbound and southbound segments north and south of Barton Road and La Cadena Drive) for the Opening Year (2020) Cumulative scenario in the AM and PM peak hours are summarized in Table 6-4 of *Technical Appendix L*. As indicated, without the contribution of Project traffic, an LOS deficiency would occur along the northbound I-215 mainline segment south of La Cadena Drive during the AM peak hour under Opening Year Cumulative (2020) Without Project Conditions (in addition to the mainline freeway segments that operate at an unacceptable LOS under the Existing condition). The contribution of Project traffic would not cause any additional freeway segments to operate at an unacceptable LOS. Although the proposed Project would not contribute toward a freeway segment LOS deficiency that would not otherwise occur without the contribution of Project traffic, the proposed Project would contribute 50 or more vehicular trips during the AM and/or PM peak hour to the following freeway segments which are estimated to operate at an unacceptable LOS without the contribution of Project traffic (Urban Crossroads, 2016, pp. 127-130):

- Northbound I-215 North of Barton Road (AM and PM peak hour);
- Northbound Barton Road to La Cadena Drive (AM and PM peak hour); and
- Northbound South of La Cadena Drive (AM peak hour only).

Because this contribution of trips would exceed the threshold of 50 or more trips contributed to a deficient LOS at a freeway facility, a cumulatively considerable impact to these freeway segments would occur.

3. Freeway Merge/Diverge Analysis

Ramp merge and diverge operations were evaluated at the on-ramps and off-ramps of I-215 at Barton Road, South Iowa Avenue, and South La Cadena Drive. As indicated in Table 6-5 of *Technical Appendix L*, the following freeway ramps would operate at a deficient LOS under the Opening Year Cumulative (2020) Without Project scenario (Urban Crossroads, 2016, p. 132):

- I-215 southbound off-ramp at South Iowa Avenue (AM peak hour only);
- I-215 northbound on-ramp at Barton Road (AM and PM peak hours);

- I-215 northbound on-ramp at South Iowa Avenue (AM and PM peak hours); and
- I-215 northbound off-ramp at South Iowa Avenue (AM and PM peak hours).

The contribution of Project traffic would result in an additional LOS deficiency during the AM and PM peak hours at the southbound I-215 off-ramp at Barton Road by changing the LOS to an unacceptable LOS (LOS E), which would result in a cumulatively considerable impact.

Additionally, the proposed Project would contribute 50 or more peak hour vehicular trips to the following freeway ramps that operate at a deficient LOS:

- I-215 northbound on-ramp at South Iowa Avenue (AM peak hour only); and
- I-215 northbound off-ramp at South Iowa Avenue (PM peak hour only).

Because this contribution of trips would exceed the threshold of 50 or more trips contributed to a deficient LOS at a freeway facility, the Project's contribution of traffic to these two freeway ramps would be cumulatively considerable. (Urban Crossroads, 2016, p. 131)

C. *Horizon Year (2040) Traffic Analysis*

The Horizon Year (2040) conditions analysis determines the potential for long-term cumulative CMP facility deficiencies. The Horizon Year (2040) traffic forecasts were developed by including the refined post-processed volumes obtained from the SBTAM. In addition, traffic associated with other cumulative projects in the area (refer to Table 4.0-1 of this EIR) was added along with Project traffic (Urban Crossroads, 2016, p. 137). Any significant impacts identified under this scenario would be considered a long-term cumulatively considerable impact.

1. *Off-Ramp Queuing Analysis*

A queuing analysis was performed for the off-ramps at the I-215 Freeway and Barton Road, Iowa Avenue, and Stephens Avenue to assess vehicle queues that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-215 freeway mainline. According to the queuing analysis conducted for the Horizon Year (2040) conditions scenario summarized in Table 7-3 of *Technical Appendix L*, the contribution of Project traffic along with cumulative traffic would not result in a LOS deficiency at any of the ramps studied. Therefore, the Project would not result in a cumulatively considerable impact with respect to off-ramp queuing. (Urban Crossroads, 2016, pp. 152-153)

2. *Freeway Segment Analysis*

Traffic volumes on the I-215 mainline segments in the Project's study area (the northbound and southbound segments north and south of Barton Road and La Cadena Drive) for the Horizon Year (2040) Cumulative scenario in the AM and PM peak hours are summarized in Table 7-4 of *Technical Appendix L*. As indicated, without the contribution of Project traffic, all six of the I-215 Freeway segments analyzed are calculated to operate at an unacceptable LOS. Therefore, the contribution of

Project traffic would not result in any additional freeway segments operating at an unacceptable LOS in addition to those previously identified under Horizon Year (2040) Without Project conditions. Although the proposed Project would not contribute toward a freeway segment LOS deficiency that would not otherwise occur without the contribution of Project traffic, the proposed Project would contribute 50 or more vehicular trips during the AM and/or PM peak hour to the following freeway segments which are calculated to operate at LOS F without the contribution of Project traffic (Urban Crossroads, 2016, p. 154):

- Northbound I-215 between Barton Road and La Cadena Drive (AM peak hour only);
- Southbound I-215 between Barton Road and La Cadena Drive (PM peak hour only);
- Northbound I-215 north of Barton Road (AM and PM peak hours);
- Southbound I-215 north of Barton Road (PM peak hour only);
- Southbound I-215 south of La Cadena Drive (AM and PM peak hours); and
- Northbound I-215 south of La Cadena Drive (PM peak hour only).

Because this contribution of trips would exceed the threshold of 50 or more trips contributed to deficient LOS at the freeway segments identified above, the Project's impact on these freeway segments is considered to be cumulatively considerable (Urban Crossroads, 2016, p. 154).

3. Freeway Merge/Diverge Analysis

Ramp merge and diverge operations were evaluated at the on-ramps and off-ramps of I-215 at Barton Road and South Iowa Avenue, and the on-ramp at South La Cadena Drive. As indicated in Table 7-5 of *Technical Appendix L*, all of the ramps studied would operate at a deficient LOS during both peak hours without the contribution of Project traffic. Although the proposed Project would not contribute toward an AM or PM Peak Hour deficiency at these ramps that would not otherwise occur without the contribution of Project traffic, the proposed Project would contribute 50 or more vehicular trips during the AM and/or PM Peak Hours to the following ramps which are calculated to operate at an unacceptable LOS without the contribution of Project traffic (Urban Crossroads, 2016, p. 154):

- I-215 southbound off-ramp at Barton Road (PM peak hour only);
- I-215 southbound on-ramp at South La Cadena Drive (AM and PM peak hour);
- I-215 southbound off-ramp at South Iowa Avenue (PM peak hour only);
- I-215 northbound on-ramp at South Iowa Avenue (AM peak hour only); and
- I-215 northbound off-ramp at South Iowa Avenue (PM peak hour only).

Because this contribution of trips would exceed the threshold of 50 or more trips contributed to a deficient LOS at a freeway facility, the Project would result in cumulatively considerable impacts to these freeway ramps with respect to merge and diverge operations.

Threshold c) Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The Project does not propose an air travel component (e.g., runways, helipads, or any direct increase in air travel); thus, air traffic would not be directly generated by the proposed Project. As previously described in EIR Section 3.0, *Project Description*, the Project site is proposed to be developed a master-planned community that would include up to 1,050 residential dwelling units, a neighborhood-serving commercial retail area, an elementary school, fire station, parks, and infrastructure. The tallest vertical improvements would be limited to trees, utility (light) poles, attached townhomes, which would have a maximum building height of 42 feet, commercial signage (which would have a maximum height of 45 feet), and structures in the parks (gazebos, shade structures, restrooms, etc.) which have a maximum height limit of 45 feet (T&B Planning, Inc., 2016, p. III-4, III-10, and III-11). Thus, the Project would not include any vertical component that would be of sufficient height to obstruct the flight path or change air traffic patterns at any of the nearby airport facilities, including Flabob Airport (approximately 4.1 miles to the southwest of the Project site), Riverside Municipal Airport (approximately 7.2 miles to the southwest of the Project site), Rialto Municipal Airport (approximately 7.0 miles north of the Project site), San Bernardino International Airport (approximately 6.0 miles northeast of the Project site), and March Air Reserve Base (approximately 9.5 miles southeast of the Project site) (Google Earth Pro, 2016). The Project lies outside of the planning areas of all of these airports.

The proposed Project would generate a resident population at the Project site, which could result in a nominal increase in demand for passenger airline service in the Southern California area. However, the relatively small scale of the development in relation to the demand for passenger air travel within the area would not result in a small, immeasurable, de minimus increase in air traffic levels such that air traffic patterns and safety risks would not change. Therefore, impacts associated air traffic would be less than significant.

Threshold d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Threshold e) Would the Project result in inadequate emergency access?

The Project proposes a network of internal roadways that would be constructed within the Project site and in limited off-site areas. During the City's review process for the Project's proposed Specific Plan and Tentative Tract Map, City of Colton reviewed the proposed design plans to ensure that no hazardous roadway features would be implemented and that adequate emergency access would be available at the site. The proposed master-planned community would not include any components that would result in incompatible uses on roadways, including heavy equipment, etc. Accordingly, the proposed Project would not create or substantially increase safety hazards due to a design feature or incompatible use and would not result in inadequate emergency access during long-term operation of the Project. Impacts associated with these issues would be less than significant.

During the Project's construction phase, no temporary hazards are reasonably foreseeable. Regardless, all Project-related construction traffic will be required to comply with a temporary traffic control plan that meets the applicable requirements of the California Manual on Uniform Traffic Control Devices. Although impacts would be less than significant, compliance with the traffic control plan would be assured by Mitigation Measure MM 4.14-1.

Threshold f)	***Would the Project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?***

Existing conditions relating to bicycle and pedestrian facilities are described in Subsection 4.14.3I above. There are no existing pedestrian facilities or bikeways located on the Project site. The nearest existing bikeway to the proposed Project site is a Class I bike lane located to the west and north of the Project site that follows the Santa Ana River Trail. The Project proposes to accommodate a future connection to the Santa Ana River Trail, and does not propose any components that would adversely affect this existing bike path. There is also an existing Class III bikeway along Rancho Avenue west of La Cadena Drive, as well as along La Cadena Drive south of Rancho Avenue. (Urban Crossroads, 2016, p. 54)

The City's Bike Plan (Figure M-7 of the Colton General Plan Mobility Element) identifies the following future improvements to existing bike paths in the Project site's vicinity (City of Colton, 2013b, Exhibit M-7):

- Planned Class II bikeway along La Cadena Drive; and
- A planned Class II bikeway along Riverside Avenue.

As discussed in Subsection 3.0, *Project Description*, and illustrated on Figure 3-12, *Proposed Physical Disturbances*, proposed off-site improvements include half-width improvements along the Project's frontage with La Cadena Drive; utility improvements along La Cadena Drive between approximately Maryknoll Drive and Tropicana Ranch Road; full-width improvements to Orange Street between Pellissier Road and Center Street; utility improvements in Center Street between Orange Street and Riverside Avenue; utility improvements in unnamed residential streets to the southeast of the Project site; and the construction of overhead electric utilities within the RCFCD right-of-way from Orange Street to Riverside Avenue, or (as an alternative) construct utility improvements in Riverside Avenue between Center Street and the point of connection on the north side of the Santa Ana River. The Project would require temporary closures to portions of the roadways along Center Street, Riverside Avenue, Maryknoll Drive, the unnamed residential streets to the southeast of the Project site, La Cadena Drive, and Tropicana Ranch Road. Additionally, portions of the bike lane and sidewalk located on the west side of La Cadena may also require closure during construction activities that affect this road. A Construction Management and Traffic Control Plan which conforms to the applicable City of Colton and City of Riverside municipal code requirements would be required to be prepared by the Project Applicant and approved by the City of Colton and City of Riverside prior to issuance of

building permits and encroachment permits within the respective jurisdictions. The Construction Management and Traffic Control Plan would specify routing of pedestrian and bike traffic during sidewalk and bike lane closures. Accordingly, the Project would not impede the use of existing bicycle facilities or the implementation of planned bicycle facilities along off-site roadways in the Project area.

The proposed Project is designed to encourage pedestrian movement within the Project site through the incorporation of pedestrian facilities that includes the construction of pedestrian trails and sidewalks to facilitate pedestrian connectivity throughout the Project site. The Project would construct an interconnected, paved sidewalk system and bike lanes within the roadway rights-of-way. These pedestrian and bicycle linkages would connect each residential Planning Area with the Commercial Retail uses (Planning Area 11) and recreational facilities located throughout the community. Additionally, the Project would provide access to existing informal trails located within the Open Space-Resource Planning Areas via Hillcrest Park in Planning Area 16. (T&B Planning, Inc., 2016)

As detailed in the Tentative Tract Map for the Project, 5-foot wide Class II bike lanes are proposed on both sides of Roquet Ranch Road, Pellissier Road, and Orange Street. Proposed pedestrian improvements include 5-foot wide curb-separated sidewalks along Pellissier Road; 8-foot wide recreational trail and 5-foot wide curb-separated sidewalks on both sides of Orange Street; 8-foot wide recreational trail on the east side of Roquet Ranch Road and 5-foot wide curb-separated sideaks on the west side of Roquet Ranch Road; and 5-foot wide curb-separated sidewalks on both sides of the local streets. (T&B Planning, Inc., 2016, p. II-13)

The bus routes that service the study area include OmniTrans Route 215, OmniGo Route 325, RTA Route 12, and RTA Route 14. Under existing conditions, bus service is provided along Barton Road, Michigan Avenue, Center Street, Iowa Avenue, Main Street, Orange Street, La Cadena Drive, and Columbia Avenue. There are no transit routes that serve roadways in the immediate vicinity of the Project site. The nearest bus stop is located approximately 0.23-mile southeast of the Project site along West Center Street, north of Debbie Lane, east of Cliffhill Place, south of Tolica Place, and west of Stephens Avenue (Urban Crossroads, 2016, p. 52; Google Earth Pro, 2016). The proposed Project does not include any components that would impede operation of bus service, and would therefore not decrease performance or safety of such facilities.

In summary, the Project has no potential to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. As such, a less-than-significant would occur, and no mitigation is required.

4.14.8 CUMULATIVE IMPACT ANALYSIS

Cumulative impacts associated with transportation and traffic were evaluated in the preceding Subsection (Subsection 4.14.7), which identified that the Project would result in cumulatively considerable impacts to the following transportation facilities:

For the Opening Year 2020, the Project's addition of traffic would be cumulatively considerable at the following intersections:

- Main Street / Strong Street – LOS F (PM peak hour);
- South Riverside Avenue / Main Street / Placentia Lane – LOS F (AM and PM peak hours);
- Stephens Avenue / West Center Street – LOS F (AM peak hour) / LOS E (PM peak hour);
- Orange Street / West Center Street – LOS E (PM peak hour only);
- Michigan Avenue / West Main Street – LOS F (AM peak hour only);
- South La Cadena Drive / South Iowa Avenue – LOS F (PM peak hour only); and
- South La Cadena Drive / West Maryknoll Drive – LOS F (AM and PM peak hours).

For the year 2020, roadway segments would have a deficient LOS without the contribution of Project traffic (Urban Crossroads, 2016, p. 125). However, under the Opening Year Cumulative (2020) conditions scenario, the contribution of Project traffic would worsen the LOS grade (from LOS E to LOS F) at Roadway Segment #13 – Barton Road between I-215 southbound ramps and I-215 northbound ramps. However, because the intersections on each leg of Roadway Segment #13 would operate at an acceptable LOS, the proposed Project would not result in a cumulatively considerable impact to this roadway segment under the Opening Year Cumulative (2020) conditions scenario.

Under the E+P scenario, the Project would result in cumulatively considerable impacts to the following two freeway mainline segments:

- I-215 northbound to the north of Barton Road (AM peak hour only); and
- I-215 northbound between Barton Road and La Cadena Road (AM peak hour only).

For the year 2020, the contribution of Project traffic along with cumulative traffic would result in a LOS deficiency at the following off-ramp with respect to off-ramp queuing:

- South Iowa Avenue / I-215 northbound ramps (AM peak hour only).

Accordingly, the Project would result in cumulatively considerable impact to this freeway off-ramp for the Opening Year Cumulative (2020) scenario.

For the year 2020, the Project would not result in additional deficiencies at the freeway mainline segments that were studied beyond those which would result without the Project. However, the Project would contribute 50 or more trips to an LOS deficiency at the following I-215 mainline freeway segments (Urban Crossroads, 2016, p. 130):

- Northbound I-215 North of Barton Road (AM and PM peak hour);
- Northbound Barton Road to La Cadena Drive (AM and PM peak hour); and
- Northbound South of La Cadena Drive (AM peak hour only).

Accordingly, the Project would result in a cumulatively considerable impact to the three freeway segments listed above.

For the year 2020, the contribution of Project traffic would result in an LOS deficiency during the AM peak hour and PM peak hours to the southbound I-215 off-ramp at Barton Road with respect to merge and diverge operations. Additionally, the Project would contribute 50 or more peak hour trips to LOS deficiencies at the following freeway ramps:

- I-215 northbound on-ramp at South Iowa Avenue (AM peak hour only); and
- I-215 northbound off-ramp at South Iowa Avenue (PM peak hour only).

As such, the Project would result in significant cumulatively considerable impacts to these freeway ramps. (Urban Crossroads, 2016, p. 131)

For the Horizon Year (2040) conditions, the Project's addition of traffic would be cumulatively considerable at the following seven intersections (Urban Crossroads, 2016, pp. 178-179):

- Main Street / Strong Street – LOS E (AM peak hour) and LOS F (PM peak hour);
- Orange Street / West Center Street – LOS F (PM peak hour only);
- South La Cadena Drive / West Litton Avenue – LOS E (AM and PM peak hours);
- South La Cadena Drive / South Iowa Avenue – LOS F (AM and PM peak hours);
- South La Cadena Drive / West Maryknoll Drive – LOS F (AM and PM peak hours);
- La Cadena Drive South / Pellissier Road / I-215 southbound on-ramp – LOS F (AM peak hour) and LOS E (PM peak hour); and
- Mt. Vernon Avenue / Main Street – LOS F (AM and PM peak hours).

Under the Horizon Year (2040) conditions, at the following four roadway segments, the contribution of Project traffic would either: (1) Change the LOS of the segment from an acceptable LOS to a deficient LOS of E or F in AM and/or PM peak hour, or (2) Worsen the pre-Project LOS grade at a deficiently operating (LOS E or F) segment: (Urban Crossroads, 2016, Table 7-2).

- La Cadena Drive between West Litton Avenue and Barton Road;
- Barton Road east of La Cadena Drive;
- Barton Road west of La Crosse Avenue; and
- Barton Road between La Crosse Avenue and I-215 southbound ramps.

Although these roadway segments would operate at unacceptable LOS based on volume-based metrics, the intersections that abut three of the four roadway segments would operate at acceptable LOS under the Horizon Year (2040) conditions scenario. In instances where intersections at both legs of roadway segments operate at acceptable LOS, the roadway segments are considered to experience acceptable traffic flow. Therefore, the Project would only have a cumulatively considerable impact on Roadway

Segments #5 – La Cadena Drive between West Litton Avenue and Barton Road, where one of the intersections would operate at a deficient LOS under the Horizon Year (2040) conditions scenario.

For the year 2040, the contribution of Project traffic along with cumulative traffic would not result in a LOS deficiency for off-ramp queuing at any of the study area off-ramps. Accordingly, the Project would not result in impacts that would be cumulatively considerable with respect to off-ramp queuing. (Urban Crossroads, 2016, pp. 152-153)

For the year 2040, the proposed Project would not contribute toward a freeway segment LOS deficiency that would not otherwise occur without the contribution of Project traffic, but would contribute 50 or more vehicular trips during the AM and/or PM peak hour to the following five freeway segments which are calculated to operate at a without the contribution of Project traffic (Urban Crossroads, 2016, p. 154):

- Northbound I-215 between Barton Road and La Cadena Drive (AM peak hour only);
- Southbound I-215 between Barton Road and La Cadena Drive (PM peak hour only);
- Northbound I-215 north of Barton Road (AM and PM peak hours);
- Southbound I-215 north of Barton Road (PM peak hour only);
- Southbound I-215 south of La Cadena Drive (AM and PM peak hours); and
- Northbound I-215 south of La Cadena Drive (PM peak hour only).

Because this contribution of trips would exceed the threshold of 50 or more trips contributed to deficient LOS at the identified freeway segments, the Project would result in cumulatively considerable impacts to these freeway segments under Horizon Year (2040) conditions. (Urban Crossroads, 2016, p. 154)

For the year 2040, all of the I-215 freeway ramps studied would operate at a deficient LOS during one or both peak hours without the contribution of Project traffic. Although the proposed Project would not contribute toward an AM or PM Peak Hour deficiency at these ramps that would not otherwise occur without the contribution of Project traffic, the proposed Project would contribute 50 or more vehicular trips during the AM and/or PM Peak Hours to the following ramps which are estimated to operate at an unacceptable LOS without the contribution of Project traffic (Urban Crossroads, 2016, p. 154):

- I-215 southbound off-ramp at Barton Road (PM peak hour only);
- I-215 southbound on-ramp at South La Cadena Drive (AM and PM peak hour);
- I-215 southbound off-ramp at South Iowa Avenue (PM peak hour only);
- I-215 northbound on-ramp at South Iowa Avenue (AM peak hour only); an
- I-215 northbound off-ramp at South Iowa Avenue (PM peak hour only).

Because this contribution of trips would exceed the threshold of 50 or more trips contributed to a deficient LOS at a freeway facility, that Project would result in cumulatively considerable impacts to these freeway ramps under the Horizon Year (2040) scenario.

Other cumulative projects in the vicinity of the proposed Project could result in a cumulatively considerable impact regarding traffic. However, the proposed Project as well as other cumulative projects (listed in Table 4.0-1 of this EIR) would be required to implement mitigation measures to reduce potential impacts to traffic; however, because even with fair share funding contributions, the timing of such improvements cannot be assured. Further, some improvements require approvals from agencies other than the lead agency, and are thus outside the jurisdiction and control of the lead agency which cannot assure the improvements would be in place by the time the Project is completed. Accordingly, this impact is considered significant and unavoidable.

4.14.9 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a): Significant Direct and Cumulatively Considerable Impact. Project-generated traffic would result in level of service deficiencies and direct impacts at four intersections (Intersection #21- South La Cadena Drive / West Maryknoll Drive; Intersection #3 – Main Street / Strong Street; Intersection #27 – South Iowa Avenue / South La Cadena Drive / I-215 southbound off-ramp; and Intersection #29 – South Iowa Avenue / I-215 northbound ramps) for Existing Plus Project conditions. Project traffic would also have a cumulatively considerable impact on the forecasted level of service at seven intersections (Intersection #1 – South Riverside Avenue / Main Street / Placentia Lane; Intersection #3 – Main Street / Strong Street; Intersection #14 - Stephens Avenue / West Center Street; Intersection #5 – Orange Street / West Center Street; Intersection #36 – Michigan Avenue / West Main Street; Intersection #20 – South La Cadena Drive / South Iowa Avenue; and Intersection #21 – South La Cadena Drive / West Maryknoll Drive) in the Opening Year Cumulative (2020) condition. The Project would result in cumulatively considerable impacts to seven intersections in the Horizon Year Cumulative (2040) condition, including: Intersection #3 – Main Street / Strong Street, Intersection #5 – Orange Street / West Center Street; Intersection #18 – South La Cadena Drive / West Litton Avenue; Intersection #20 – South La Cadena Drive / South Iowa Avenue; Intersection #21 – South La Cadena Drive / West Maryknoll Drive; Intersection# 22 – La Cadena Drive South / Pellissier Road / I-215 southbound on-ramp; and Intersection #38 – Mt. Vernon Avenue / Main Street. Project traffic would also result in a cumulatively considerable impact on one roadway segment (La Cadena Drive between West Litton Avenue and Barton Road) under the Horizon Year Cumulative (2040) condition.

Threshold b): Cumulatively Considerable Impact. The contribution of Project traffic would have a significant direct impact to two freeway segments (I-215 northbound to the north of Barton Road and I-215 northbound between Barton Road and La Cadena Drive) under the E+P scenario. Under the Opening Year (2020) scenario, the Project would result in a cumulatively considerable impact to one off-ramp (South Iowa Avenue / I-215 northbound ramps (AM peak hour only)) due to off-ramp queuing. Project traffic would have a cumulatively considerable impact on the forecasted LOS at three freeway segments and two freeway ramps in the Opening Year (2020) condition. Project-generated traffic would have a cumulatively considerable impact on the forecasted level of service at six freeway

segments and five of the on- and off-ramps (with respect to merge/diverge operations) in the Horizon Year (2040) condition.

Threshold c): Less-than-Significant Impact. The Project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

Threshold d): Less-than-Significant Impact. The Project would not create or substantially increase safety hazards due to a design feature or incompatible use.

Threshold e): Less-than-Significant Impact. Adequate emergency access would be provided to the Project site during both short-term construction and long-term operation. Thus, the Project would not result in inadequate emergency access to the site or surrounding properties.

Threshold f): Less-than-Significant Impact. The Project does not have the potential to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

4.14.10 MITIGATION

The following mitigation measures are identified to reduce the Project's direct and cumulative considerable impacts to local intersections, roadway segments, and CMP facilities. Although it is not necessary to list mandatory regulatory requirements as mitigation measures, compliance with the City's fee program ordinances that address traffic mitigation are included below.

MM 4.14-1 Prior to the issuance of grading or building permits, the Project Applicant shall prepare and the City of Colton shall approve a temporary traffic control plan. The temporary traffic control plan shall comply with the applicable requirements of the California Manual on Uniform Traffic Control Devices. A requirement to comply with the temporary traffic control plan shall be noted on all grading and building plans and also shall be specified in bid documents issued to prospective construction contractors.

MM 4.14-2 Prior to issuance of the first certificate of occupancy for the Project, City of Colton Director of Public Works or their assignee shall verify that the Project has implemented the following intersection improvements in accordance with the recommendations identified in the "Roquet Ranch Specific Plan Traffic Impact Analysis," prepared by Urban Crossroads (dated November 30, 2016):

- Intersection #21 – South La Cadena Drive / West Maryknoll Drive: (1) Add a traffic signal, (2) Add a northbound left turn lane, and (3) Add an eastbound left turn lane and an eastbound shared right turn lane.

- Intersection #27 – South Iowa Avenue / South La Cadena Drive / I-215 southbound off-ramp: (1) Install a traffic signal, (2) Add 2nd eastbound left turn lane, and (3) Add 2nd northbound through lane.
- Intersection #29 – South Iowa Avenue / I-215 northbound ramps: (1) Add southbound right turn lane, and (2) Add 2nd eastbound left turn lane.

MM 4.14-3 Prior to issuance of the first certificate of occupancy for the Project, the Project Applicant shall make a fair share fee payment to the City of Colton for the roadway improvements listed in Table 1-5 of the "Roquet Ranch Specific Plan Traffic Impact Analysis," prepared by Urban Crossroads (dated November 30, 2016), that are located within the geographical limits of the City of Colton and not included within the City of Colton's Development Impact Fee (DIF) program. The fair share fee attributable to the Project shall be calculated according to the percentages specified in Table 1-5 of the "Roquet Ranch Specific Plan Traffic Impact Analysis," prepared by Urban Crossroads (dated November 30, 2016). Specifically, the fair share fee payment required by this Mitigation Measure shall be used by the City to make the following improvements (Urban Crossroads, 2016, Table 1-5):

- Intersection #1 – South Riverside Avenue / Main Street / Placentia Lane: (1) Install a traffic signal, and (2) Add 2nd westbound left turn lane.
- Intersection #18 – South La Cadena Drive / West Litton Avenue: Install a traffic signal.
- Intersection #20 – South La Cadena Drive / South Iowa Avenue: (1) Add northbound through lane, and (2) Add southbound through lane.
- Intersection #22 – La Cadena Drive South / Pellissier Road / I-215 southbound on-ramp: Install a traffic signal.

The following mitigation measures would minimize the Project's cumulative impacts to freeway mainline segments, ramp merge/diverge junctions, and off-ramps under Horizon Year (2040) conditions:

MM 4.14-4 In the event that Caltrans prepares a valid study, as defined below, that identifies fair share contribution funding sources attributable to and paid from private and public development to supplement other regional and State funding sources necessary undertake improvements to I-215 in the Project study area, then the Project Applicant shall use reasonable efforts to pay the applicable fair share amount to Caltrans.

The study shall include fair share contributions related to private and/or public development based on nexus requirements contained in the Mitigation Fee Act (Govt. Code § 66000 et seq.) and 14 Cal. Code of Regs. § 15126.4(a)(4) and, to this end, the study shall recognize that impacts to Caltrans I-215 facilities that are not attributable to development located within the City of Colton are not required to pay in excess of such developments' fair share obligations. The fee study shall also be compliant with

Government Code § 66001(g) and any other applicable provisions of law. The study shall set forth a timeline and other relevant criteria for implementation of the recommendations contained within the study to the extent the other agencies agree to participate in the fee study program.

4.14.11 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a): Significant Unavoidable Direct and Cumulatively Considerable Impact. Implementation of Mitigation Measure MM 4.14-2 would require the Project to implement intersection geometrics and roadway improvements at Intersection #21, #27 and #29.

As shown in Table 4.14-11, *Intersection Analysis for E+P Conditions with Improvements*, Table 4.14-14, *Intersection Analysis for Opening Year Cumulative (2020) Conditions with Improvements*, and Table 4.14-14, *Intersection Analysis for Horizon Year (2040) Conditions with Improvements*, intersections #21, #27, and #29 would operate at acceptable LOS with implementation of the improvements required by Mitigation Measure MM 4.14-2. Therefore, with implementation of Mitigation Measure MM 4.14-2, the Project's direct significant impacts and cumulatively considerable impacts to Intersections #21, #27, and #29 would be reduced to levels that are less than significant.

Implementation of Mitigation Measure MM 4.14-3 would require the Project make a fair share fee payment to the City of Colton for roadway improvements as specified in Table 1-5 of the "Roquet Ranch Specific Plan Traffic Impact Analysis," prepared by Urban Crossroads (dated November 30, 2016), that are wholly or partially located within the geographical limits of the City of Colton and are not included within the City of Colton's DIF program. These intersections include: Intersection #1 (South Riverside Avenue / Main Street / Placentia Lane), Intersection #18 (South La Cadena Drive / West Litton Avenue), Intersection #20 (South La Cadena Drive / South Iowa Avenue), and Intersection #22 (La Cadena Drive South / Pellissier Road / I-215 southbound on-ramp). However, because the intersection improvements listed in Mitigation Measure MM 4.14-3 are not part of an established City of Colton fee program, there is no assurance that the improvements will be implemented at their time of need and therefore the impact is considered unavoidable in the short-term.

The Project would also result in cumulatively considerable impacts to Intersections #1, #3, #5, #14 and #36 under the Opening Year Cumulative (2020) conditions scenario. Intersections #3, #5, and #14 are located outside of the geographic limits of the City of Colton. Because there is no funding mechanism available for development projects to contribute toward the construction of needed improvements located outside of the geographic limits of the City of Colton, the Project's cumulatively considerable impacts to Intersections #3, #5, #14, and #36 would be significant and unavoidable. As stated above, because the improvements to Intersection #1 that are listed in Mitigation Measure MM 4.14-3 are not part of an established City of Colton fee program, there is no assurance that the improvements will be implemented at their time of need and therefore the Project's cumulatively considerable impacts to Intersection #1 would be unavoidable.

The Project would result in cumulatively considerable impacts to Intersections #3, #5, #18, #20, #22, and #38 under the Horizon Year (2040) conditions scenario. Intersections #3 and #5 are located outside of the geographic limits of the City of Colton. Because there is no funding mechanism available for development projects to contribute toward the construction of needed improvements located outside of the geographic limits of the City of Colton, the Project's cumulatively considerable impacts to Intersections #3 and #5 would be significant and unavoidable. Because the improvements to Intersections #18, #20, and #22 that are listed in Mitigation Measure MM 4.14-3 are not part of an established City of Colton fee program, there is no assurance that the improvements will be implemented at their time of need. Therefore, the Project's cumulatively considerable impacts to Intersections #18, #20, and #22 would be unavoidable. Under the Horizon Year Cumulative (2040) scenario, the Project would result in a cumulatively considerable impact to Roadway Segment #5 – La Cadena Drive between West Litton Avenue and Barton Road, which is located outside of the geographic limits of the City of Colton. Because there is no funding mechanism available for development projects to contribute toward the construction of needed improvements located outside of the geographic limits of the City of Colton, the Project's cumulatively considerable impacts to Roadway Segment #5 would be unavoidable.

No other feasible mitigation measures for these cumulatively considerable impacts are available to the Project that would have a proportional nexus to the Project's traffic impact to these facilities. Thus, the impacts would be significant and unavoidable. More detail is below.

Existing Plus Project

As shown in Table 4.14-11, *Intersection Analysis for E+P Conditions with Improvements*, Intersection #21 (South La Cadena Drive / West Maryknoll Drive), #27 (South Iowa Avenue / South La Cadena Drive / I-215 southbound off-ramp), and #29 (South Iowa Avenue / I-215 northbound ramps) would operate at an acceptable LOS (LOS D or better) under the Existing plus Project scenario with implementation of the improvements identified in Mitigation Measure MM 4.14-2. Because Intersection #3 (Main Street / Strong Street) is located in the City of Riverside outside of the geographic limits of the City of Colton (Lead Agency), there is no funding mechanism in place to allow development projects within the City of Colton to contribute a fair-share payment to contribute to future improvements and off-set significant traffic impacts within another jurisdiction. As such, the Lead Agency could not assure that construction of improvements within a different jurisdiction would be completed in a timely manner to fully mitigate impacts resulting from the Project. Accordingly, the Project would have a direct significant and unavoidable impact on Intersection #3 (Main Street / Strong Street) in the City of Riverside under the E+P conditions scenario.

Opening Year Cumulative (2020) Conditions

As shown in Table 4.14-12, *Intersection Analysis for Opening Year Cumulative (2020) Conditions with Improvements*, all intersections in the Project study area would operate at acceptable LOS with implementation of the recommended improvements. Implementation of the improvements required by Mitigation Measure MM 4.14-2 would reduce the Project's cumulatively considerable impacts to

Intersection #21 to less than cumulatively considerable (as shown in Table 4.14-12). However, the Project would result in cumulatively considerable impacts to five intersections (#1, #3, #5, #14 and #36) which the Project would have cumulatively considerable impacts under the Open Year Cumulative (2020) conditions scenario would require improvements that are: 1) located outside the geographic limits of the City of Colton (meaning the City of Colton cannot assure that the recommended improvements would be implemented); 2) funded by existing mitigation funding programs, for which a timetable for construction is not yet available (meaning the necessary improvements may not be in place when the Project becomes operational and starts to contribute traffic to the facilities); and/or 3) not included in any existing mitigation funding program (meaning there is no mechanism available for development projects to contribute toward the construction of needed improvements). Intersections #3, #5, #14, and #36 are located outside of the geographic limits of the City of Colton. Because there is no funding mechanism available for development projects to contribute toward the construction of needed improvements located outside of the geographic limits of the City of Colton, the Project's cumulatively considerable impacts to Intersections #3, #5, #14, and #36 would be unavoidable. Because the improvements to Intersection #1 that are listed in Mitigation Measure MM 4.14-3 are not part of an established City of Colton fee program, there is no assurance that the improvements will be implemented at their time of need and therefore the Project's cumulatively considerable impacts to Intersection #1 would be unavoidable. No other feasible mitigation measures for these cumulatively considerable impacts are available to the Project that would have a proportional nexus to the Project's traffic impact to these facilities.

Horizon Year (2040) Conditions

As shown in Table 4.14-14, *Intersection Analysis for Horizon Year (2040) Conditions with Improvements*, all intersections in the Project study area would operate at acceptable LOS with recommended improvements. Implementation of the improvements required by Mitigation Measure MM 4.14-2 would reduce the Project's cumulatively considerable impacts to Intersection #21 to levels that are less than cumulatively considerable (as shown in Table 4.14-14). The Project would result in cumulatively considerable impacts to Intersections #3, #5, #18, #20, #22, and #38 under the Horizon Year (2040) conditions scenario. Intersections #3 and #5 are located outside of the geographic limits of the City of Colton. Because there is no funding mechanism available for development projects to contribute toward the construction of needed improvements located outside of the geographic limits of the City of Colton, the Project's cumulatively considerable impacts to Intersections #3 and #5 would be significant and unavoidable. Because the improvements to Intersections #18, #20, and #22 that are listed in Mitigation Measure MM 4.14-3 are not part of an established City of Colton fee program, there is no assurance that the improvements will be implemented at their time of need. Therefore, the Project's cumulatively considerable impacts to Intersections #18, #20, and #22 would be unavoidable. No other feasible mitigation measures for these cumulatively considerable impacts are available to the Project that would have a proportional nexus to the Project's traffic impact to these facilities.

As shown on Table 4.14-15, *Roadway Segment Volume/Capacity Analysis for Horizon Year (2040) Conditions with Improvements*, with implementation of recommended improvements, all intersections and roadway segments in the Project study area would operate at acceptable levels under Horizon Year

(2040) Conditions (refer to Table 4.14-14 and Table 4.14-15). However, because there is no funding mechanism available for development projects to contribute toward the construction of needed improvements located outside of the geographic limits of the City of Colton, the Project's cumulatively considerable impacts to Roadway Segment #5 (located outside of the geographic limits of the City of Colton) would be unavoidable. No other feasible mitigation measures for these cumulatively considerable impacts are available to the Project that would have a proportional nexus to the Project's traffic impact to Roadway Segment #5.

Threshold b): Significant Unavoidable Direct and Cumulatively Considerable Impact.

Existing Plus Project

Under the Existing Plus Project scenario, the Project would have cumulatively considerable impacts on two freeway segments. The implementation of Mitigation Measure MM 4.14-4 would require the Project Applicant to make a fair share contribution payment to Caltrans in order to undertake improvements to I-215 in the Project study area, in the event that Caltrans prepares a valid study. However, because the Lead Agency (City of Colton) cannot assure the recommended improvements would be implemented and/or in place at the time of need, the Project's direct impacts to the two freeway segments discussed within Subsection 4.1.1A.2 under the E+P Conditions scenario are recognized as significant and unavoidable. No other feasible mitigation measures for this direct impact are available to the Project that would have a proportional nexus to the Project's traffic impact to these facilities.

Opening Year Cumulative (2020) Conditions

The Project would result in cumulatively considerable impacts to one freeway ramp facility with respect to off-ramp queuing for the Opening Year Cumulative (2020) scenario. The Project would result in a cumulatively considerable impact to three freeway segments, as it would contribute 50 or more trips during the AM peak hour and/or PM peak hour to these three freeway mainline segments which are estimated to operate at an unacceptable LOS without the contribution of Project traffic for the Opening Year Cumulative (2020) scenario. The contribution of Project traffic would result in an LOS deficiency (LOS E) during the AM and PM peak hours at the southbound I-215 off-ramp at Barton Road, which would result in a potentially significant cumulative impact. Additionally, under the Opening Year Cumulative (2020) scenario, the proposed Project would contribute 50 or more peak hour vehicular trips to deficiencies at four freeway ramps. Accordingly, the Project would result in cumulatively considerable impacts to these four freeway ramps with respect to merge and diverge operations. Mitigation Measure MM 4.14-4 requires the Project Applicant to make fair share fee contributions to Caltrans to fund improvements to freeway facilities in the Project study area in the event that Caltrans establishes a fair share funding program that is applicable to the Project. However, there is no assurance that planned improvements will be in place prior to the time that the Project begins to contribute traffic to the facilities. Accordingly, the Project's contribution of traffic to the congested freeway facilities under the Opening Year Cumulative (2020) scenario that are discussed above would be considered significant and unavoidable cumulative impacts.

Horizon Year (2040) Conditions

The Project would not result in a significant cumulatively considerable impact with respect to off-ramps with respect to off-ramp queuing. Additionally, the Project would 50 or more vehicular trips during the AM and/or PM peak hour to six I-215 freeway mainline segments within the Project study area (northbound and southbound segments north and south of Barton Road and La Cadena Drive) which are estimated to operate at LOS F without the contribution of Project traffic for the Horizon Year (2040) scenario. Accordingly, the Project would result in potentially significant cumulative impacts to these six freeway segments. Additionally, the Project would contribute 50 or more vehicular trips during the AM and/or PM Peak Hours to five I-215 freeway ramps which are estimated to operate at an unacceptable LOS without the contribution of Project traffic. Accordingly, the Project would result in potentially significant cumulative impacts to these five freeway ramps under the Horizon Year (2040) condition.

All I-215 freeway facilities in the Project study area and associated merge/diverge ramp junction areas and ramps are under the jurisdiction of Caltrans. As such, the City of Colton cannot assure the construction of improvements to freeway facilities that may be needed to improve traffic flow. Furthermore, Caltrans does not have any funding mechanism in place to allow development projects to contribute a fair-share payment to contribute to future improvements and off-set cumulatively considerable traffic impacts. Although Mitigation Measure MM 4.14-4 requires the Project Applicant to make fair share fee contributions to Caltrans to fund improvements to freeway facilities in the Project study area (in the event that Caltrans establishes a fair share funding program that is applicable to the Project), there is no assurance that planned improvements will be in place prior to the time that the Project begins to contribute traffic to the facilities. Accordingly, under the Horizon Year (2040) scenario, the Project's cumulatively considerable impacts to the freeway facilities discussed above would be unavoidable.

Table 4.14-1 Intersection Analysis Locations

ID	Intersection Location	Jurisdiction
1	S. Riverside Av. / Main St. / Placentia Ln.	City of Colton, City of Riverside
2	Main St. / Columbia Av.	City of Riverside
3	Main St. / Strong St.	City of Riverside
4	Orange St. / Pellissier Rd. – Future Intersection	City of Colton
5	Orange St. / W. Center St.	City of Riverside
6	Orange St. / Columbia Av.	City of Riverside
7	Street "C" / Street "A" – Future Intersection	City of Colton
8	Street "A" / Pellissier Rd. – Future Intersection	City of Colton
9	Roquet Ranch Rd. / Street "A" – Future Intersection	City of Colton
10	Roquet Ranch Rd. / Pellissier Rd. – Future Intersection	City of Colton
11	S. Graymoor Av. / W. Maryknoll Dr.	City of Colton
12	S. Graymoor Av. / Pellissier Rd. – Future Intersection	City of Colton
13	S. Rosedale Av. / W. Maryknoll Dr.	City of Colton
14	Stephens Av. / W. Center St.	County of Riverside
15	S. Rancho Av. / Agua Mansa Rd.	City of Colton
16	La Cadena Dr. / W. N. St.	City of Colton
17	S. La Cadena Dr. / S. Rancho Av. (San Bernardino CMP Intersection)	City of Colton
18	S. La Cadena Dr. / W. Litton Av.	City of Colton
19	S. La Cadena Dr. / Barton Rd.	City of Colton
20	S. La Cadena Dr. / S. Iowa Av.	City of Colton
21	S. La Cadena Dr. / W. Maryknoll Dr.	City of Colton
22	La Cadena Dr. S. / Pellissier Rd. / I-215 SB On-Ramp (San Bernardino CMP intersection)	City of Colton, Caltrans
23	La Cadena Dr. W. / Stephens Av. / I-215 SB Ramps (Riverside CMP Intersection)	County of Riverside, Caltrans
24	La Crosse Av. / I-215 SB Off-Ramp (San Bernardino CMP intersection)	City of Grand Terrace, Caltrans
25	La Crosse Av. / Barton Rd.	City of Grand Terrace
26	La Crosse Av. / I-215 SB On-Ramp / Barton Rd. (San Bernardino CMP intersection)	City of Grand Terrace, Caltrans
27	S. Iowa Av. / S. La Cadena Dr. / I-215 SB Off-Ramp (Riverside CMP Intersection)	City of Colton, Caltrans
28	I-215 NB Ramps / Barton Rd. (San Bernardino CMP intersection)	City of Grand Terrace, Caltrans
29	S. Iowa Av. / I-215 NB Ramps (Riverside CMP Intersection)	City of Colton, Caltrans
30	Iowa Av. / W. Main St.	City of Colton, County of Riverside
31	Iowa Av. / E. La Cadena Dr.	County of Riverside
32	Iowa Av. / Center St.	County of Riverside
33	Iowa Av. / W. Citrus St.	City of Riverside
34	Iowa Av. / E. Citrus St.	City of Riverside
35	Michigan Av. / Barton Rd. (San Bernardino CMP Intersection)	City of Grand Terrace

ID	Intersection Location	Jurisdiction
36	Michigan Av. / W. Main St.	City of Grand Terrace
37	Mt. Vernon Av. / Barton Rd. (San Bernardino CMP Intersection)	City of Grand Terrace
38	Mt. Vernon Av. / Main St.	City of Grand Terrace
39	Palm Av. / Barton Rd.	City of Grand Terrace

Note: Intersections located within multiple jurisdictions have been noted.

Source: (Urban Crossroads, 2016, Table 1-1)

Table 4.14-2 Roadway Segment Analysis Locations

ID	Roadway Segment Location	Jurisdiction
1	S. Rancho Av., Agua Mansa Rd. to La Cadena Dr.	City of Colton
2	La Cadena Dr., N. St. to S. Rancho Av.	City of Colton
3	La Cadena Dr., South of S. Rancho Av.	City of Colton
4	La Cadena Dr., North of W. Litton Av.	City of Colton, City of Grand Terrace
5	La Cadena Dr., between W. Litton Av. and Barton Rd.	City of Grand Terrace
6	La Cadena Dr., South of Barton Rd.	City of Colton
7	La Cadena Dr., North of S. Iowa Av.	City of Colton
8	La Cadena Dr., between S. Iowa Av. and Maryknoll Dr.	City of Colton
9	La Cadena Dr., between W. Maryknoll Dr. and Pellissier Rd.	City of Colton
10	Barton Rd., East of La Cadena Dr.	City of Grand Terrace
11	Barton Rd., West of La Crosse Av.	City of Grand Terrace
12	Barton Rd., between La Crosse Av. and I-215 SB Ramps	City of Grand Terrace
13	Barton Rd., between I-215 SB Ramps and I-215 NB Ramps	City of Grand Terrace
14	Barton Rd., between I-215 NB Ramps and Michigan Av.	City of Grand Terrace
15	Barton Rd., East of Michigan Av.	City of Grand Terrace
16	Barton Rd., West of Mt. Vernon Av.	City of Grand Terrace
17	Barton Rd., Mt. Vernon Av. to Palm Av.	City of Grand Terrace
18	Placentia Ln./W. Center St., East of S. Riverside Av./Main St.	City of Colton, County of Riverside
19	Placentia Ln./W. Center St., West of Orange St.	City of Riverside
20	Main St., South of Placentia Ln.	County of Riverside
21	Main St., North of Columbia Av.	City of Riverside
22	Main St., Columbia Av. to Strong St.	City of Riverside
23	Orange St., South of Pellissier Rd.	City of Colton
24	Orange St., North of W. Center St.	City of Colton, City of Riverside
25	Orange St., South of W. Center St.	City of Riverside
26	Orange St., North of Columbia Av.	City of Riverside
27	Pellissier Rd., between Orange St. and St. "A"	City of Colton
28	Pellissier Rd., between St. "A" and Roquet Ranch Rd.	City of Colton
29	Pellissier Rd., East of Roquet Ranch Rd.	City of Colton
30	Pellissier Rd., West of Graymoor Av.	City of Colton
31	W. Maryknoll Dr., between Graymoor Av. and Rosedale Av.	City of Colton
32	W. Maryknoll Dr., between Rosedale Av. and La Cadena Dr.	City of Colton
33	S. Iowa Av., between La Cadena Dr. and I-215 SB Off-Ramp	City of Colton
34	S. Iowa Av., between I-215 SB Off-Ramp and I-215 NB Ramps	City of Colton
35	S. Iowa Av., South of I-215 NB Ramps	City of Colton
36	S. Iowa Av., North of W. Main St.	City of Colton
37	W. Main St., East of S. Iowa Av.	City of Grand Terrace, County of Riverside
38	W. Main St., West of Michigan Av.	City of Grand Terrace, County of Riverside

Note: Roadway segments located within multiple jurisdictions have been noted.

Source: (Urban Crossroads, 2016, Table 1-2)

Table 4.14-3 Intersection Analysis for Existing (2016) Conditions

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	S. Riverside Av. / Main St. / Placentia Ln.	CSS	1	2	d	1	2	d	0	1	0	0	1	0	17.3	21.2	C	C
2	Main St. / Columbia Av.	TS	1	2	1>	2	2	d	1	1	0	1	1	1	22.3	29.4	C	C
3	Main St. / Strong St.	TS	1	2	d	1	2	0	0	1	1	0	1	1	43.3	**78.7**	D	**E**
4	Orange St. / Pellissier Rd.		Future Intersection															
5	Orange St. / W. Center St.	AWS	0	1	0	0	1	0	0	1	0	0	1	0	8.2	9.9	A	A
6	Orange St. / Columbia Av.	TS	0	1	0	0	1	0	1	2	0	1	2	0	20.2	18.9	C	B
7	Street "C" / Street "A"		Future Intersection															
8	Street "A" / Pellissier Rd.		Future Intersection															
9	Roquet Ranch Rd. / Street "A"		Future Intersection															
10	Roquet Ranch Rd. / Pellissier Rd.		Future Intersection															
11	S. Graymoor Av. / W. Maryknoll Dr.	CSS	0	1	0	0	0	0	0	1	0	0	1	0	8.4	8.4	A	A
12	S. Graymoor Av. / Pellissier Rd.		Future Intersection															
13	S. Rosedale Av. / W. Maryknoll Dr.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	8.9	8.9	A	A
14	Stephens Av. / W. Center St.	TS	0	1	0	0	1	0	0	1	1	0	1	d	40.5	36.8	D	D
15	S. Rancho Av. / Agua Mansa Rd.	TS	1	2	0	1	2	0	0	1	0	0	1	0	11.9	20.4	B	C
16	La Cadena Dr. / W. N. St.	TS	1	2	d	1	2	d	0	1	0	0	1	0	6.1	6.9	A	A
17	S. La Cadena Dr. / S. Rancho Av.	CSS	1	2	0	0	2	0	1	0	1	0	0	0	18.6	23.7	C	C
18	S. La Cadena Dr. / W. Litton Av.	CSS	1	2	0	0	2	0	0	1	0	0	0	0	21.7	20.3	C	C
19	S. La Cadena Dr. / Barton Rd.	TS	0	2	1	1	2	0	0	0	0	1	0	1	12.7	18.5	B	B
20	S. La Cadena Dr. / S. Iowa Av.	CSS	1	1	0	0	1	2>>	1	0	1	0	0	0	11.6	14.1	B	B
21	S. La Cadena Dr. / W. Maryknoll Dr.	CSS	0	2	0	0	2	1	0	1	d	0	1	0	24.3	23.5	C	C
22	La Cadena Dr. S. / Pellissier Rd. / I-215 SB On-Ramp	AWS	1	2	0	1	1	0	0	1	0	0	0	0	17.7	13.0	C	B
23	La Cadena Dr. W. / Stephens Av. / I-215 SB Ramps	AWS	0	1	1	0	1	0	0	1	0	0	1	1	21.3	**38.6**	C	**E**
24	La Crosse Av. / I-215 SB Off-Ramp	CSS	0	1	0	0	1	0	0	0	0	0	1	0	0.0	0.0	A	A
25	La Crosse Av. / Barton Rd.	CSS	0	1	0	0	1	0	0	2	0	0	1	0	10.4	10.5	B	B
26	La Crosse Av. / I-215 SB On-Ramp / Barton Rd.	TS	0	0	0	0	1	0	1	1	0	1	1	0	36.2	32.5	D	C
27	S. Iowa Av. / S. La Cadena Dr. / I-215 SB Off-Ramp	CSS	0	1	0	0	1	0	1	0	1	0	0	0	**35.2**	28.8	**E**	D
28	I-215 NB Ramps / Barton Rd.	TS	1	0	1>>	0	0	0	1	1	0	0	1	1>>	10.0	11.8	A	B
29	S. Iowa Av. / I-215 NB Ramps	TS	0	0	0	0	1	0	1	1	0	0	1	0	**69.0**	54.4	**E**	D
30	Iowa Av. / W. Main St.	TS	0	1	1	1	1	0	0	0	0	1	0	1	35.0	20.8	D	C
31	Iowa Av. / E. La Cadena Dr.	CSS	1	2	0	0	2	1>>	0	1	0	0	0	0	13.8	20.0	B	C
32	Iowa Av. / Center St.	TS	1	2	d	1	2	0	1	2	0	1	1	1	38.9	35.0	D	D
33	Iowa Av. / W. Citrus St.	TS	1	2	1	1	2	d	0	1	0	0	1	1	5.1	6.0	A	A
34	Iowa Av. / E. Citrus St.	TS	0	2	d	1	2	0	0	0	0	1	0	1	6.7	6.6	A	A
35	Michigan Av. / Barton Rd.	TS	1	0	1	0	0	0	0	2	0	1	2	0	28.5	16.0	C	B
36	Michigan Av. / W. Main St.	TS	1	1	0	1	1	0	1	1	1	1	1	0	**64.0**	25.0	**E**	C
37	Mt. Vernon Av. / Barton Rd.	TS	1	2	0	1	2	0	1	2	0	2	2	0	39.7	32.1	D	C
38	Mt. Vernon Av. / Main St.	AWS	0	1	d	0	2	0	0	1	d	0	1	0	24.9	10.9	C	B
39	Palm Av. / Barton Rd.	CSS	1	0	1	0	0	0	0	2	0	1	2	0	12.3	12.7	B	B

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

[2] Per the 2010 Highway Capacity Manual, 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] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal

Source: (Urban Crossroads, 2016, Table 3-1)

Table 4.14-4 Roadway Segment Volume/Capacity Analysis for Existing (2016) Conditions

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	Existing (2016)	V/C[2]	LOS[3]	Acceptable LOS[3]
1	S. Rancho Avenue	Agua Mansa Rd. to La Cadena Dr.	4D	33,000	8,692	0.26	A	D
2	La Cadena Drive	N St. to S. Rancho Av.	4D	33,000	12,152	0.37	A	D
3		South of S. Rancho Av.	4D	33,000	18,411	0.56	A	D
4		North of W. Litton Av.	4D	33,000	18,657	0.57	A	D
5		Between W. Litton Av. and Barton Rd.	4D	33,000	18,813	0.57	A	D
6		South of Barton Rd.	5D	41,250	17,653	0.43	A	D
7		North of S. Iowa Av.	4D	33,000	16,169	0.49	A	D
8		Between S. Iowa Av. and W. Maryknoll Dr.	4D	33,000	11,125	0.34	A	D
9		Between W. Maryknoll Dr. and Pellissier Rd.	4D	33,000	10,322	0.31	A	D
10	Barton Road	East of La Cadena Dr.	2U	18,000	8,190	0.46	A	D
11		West of La Crosse Av.	2U	18,000	8,860	0.49	A	D
12		Between La Crosse Av. and I-215 SB Ramps	2D	18,000	8,436	0.47	A	D
13		Between I-215 SB Ramps and I-215 NB Ramps	2D	18,000	14,272	0.79	C	D
14		Between I-215 NB Ramps and Michigan Av.	4D	33,000	20,509	0.62	B	D
15		East of Michigan Av.	4D	33,000	15,387	0.47	A	D
16		West of Mt. Vernon Av.	4D	33,000	14,171	0.43	A	D
17		Mt. Vernon Av. to Palm Av.	4D	33,000	15,298	0.46	A	D
18	Placentia Lane / West	East of S. Riverside Av. / Main St.	2U	18,000	4,095	0.23	A	D
19	Center Street	West of Orange St.	2U	18,000	3,972	0.22	A	D
20	Main Street	South of Placentia Ln.	4D	33,000	20,498	0.62	B	D
21		North of Columbia Av.	4D	33,000	25,490	0.77	C	D
22		Columbia Av. to Strong St.	4D	33,000	20,777	0.63	B	D
23	Orange Street	South of Pellissier Rd.	2U	12,500	0	0.00	--	D
24		North of W. Center St.	2U	12,500	424	0.03	A	D
25		South of W. Center St.	2U	12,500	2,633	0.21	A	D
26		North of Columbia Av.	2U	12,500	4,530	0.36	A	D
27	Pellissier Road / Maryknoll Dr.	Between Orange St. and Street "A"	4D	33,000	0	0.00	--	D
28		Between Street "A" and Roquet Ranch Rd.	4D	33,000	0	0.00	--	D
29		East of Roquet Ranch Rd.	4D	33,000	0	0.00	--	D
30		West of Graymoor Av.	4D	33,000	0	0.00	--	D
31		Between Graymoor Av. and Rosedale Av.	2U	12,500	335	0.03	A	D
32		Between Rosedale Av. and La Cadena Dr.	2D	12,500	982	0.08	A	D
33	South Iowa Avenue	Between La Cadena Dr. and I-215 SB Off-Ramp	2U	18,000	12,274	0.68	B	D
34		Between I-215 SB Off-Ramp and I-215 NB Ramps	2U	18,000	16,236	**0.90**	**E**	D
35		South of I-215 NB Ramps	2D	18,000	17,407	**0.97**	**E**	D
36		North of W. Main St.	2U	18,000	18,300	**1.02**	**F**	D
37	West Main Street	East of S. Iowa Av.	2U	18,000	5,501	0.31	A	D
38		West of Michigan Av.	2D	18,000	4,374	0.24	A	D

[1] These maximum roadway capacities have been extracted from the City of Colton General Plan Circulation Element, City of Grand Terrace General Plan Circulation Element, City of Riverside General Plan Circulation Element, County of Riverside General Plan Circulation Element, and County of San Bernardino Article III Designation of Streets. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

[2] V/C = Volume-to-capacity Ratio

[3] LOS = Level of Service

(Urban Crossroads, 2016, Table 3-2)

Table 4.14-5 Intersection Analysis for Existing Plus Project Conditions

#	Intersection	Traffic Control[3]	Existing (2016)				E+P			
			Delay[2] (secs.)		Level of Service		Delay[2] (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	S. Riverside Av. / Main St. / Placentia Ln.	CSS	17.3	21.2	C	C	25.1	28.7	D	D
2	Main St. / Columbia Av.	TS	22.3	29.4	C	C	22.0	29.1	C	C
3	Main St. / Strong St.	TS	43.3	**78.7**	D	**E**	45.9	**91.6**	D	**F**
4	Orange St. / Pellissier Rd.	**CSS**	Future Intersection				0.0	0.0	A	A
5	Orange St. / W. Center St.	AWS	8.2	9.9	A	A	9.6	14.3	A	B
6	Orange St. / Columbia Av.	TS	20.2	18.9	C	B	20.2	19.1	C	B
7	Street "C" / Street "A"	**CSS**	Future Intersection				8.9	9.0	A	A
8	Street "A" / Pellissier Rd.	**CSS**	Future Intersection				10.3	11.8	B	B
9	Roquet Ranch Rd. / Street "A"	**CSS**	Future Intersection				9.3	10.1	A	B
10	Roquet Ranch Rd. / Pellissier Rd.	**CSS**	Future Intersection				11.5	12.8	B	B
11	S. Graymoor Av. / W. Maryknoll Dr.	CSS	8.4	8.4	A	A	7.3	8.5	A	A
12	S. Graymoor Av. / Pellissier Rd.	**CSS**	Future Intersection				11.8	13.5	B	B
13	S. Rosedale Av. / W. Maryknoll Dr.	CSS	8.9	8.9	A	A	17.3	20.3	C	C
14	Stephens Av. / W. Center St.	TS	40.5	36.8	D	D	41.6	38.2	D	D
15	S. Rancho Av. / Agua Mansa Rd.	TS	11.9	20.4	B	C	12.5	21.7	B	C
16	La Cadena Dr. / W. N. St.	TS	6.1	6.9	A	A	6.3	7.2	A	A
17	S. La Cadena Dr. / S. Rancho Av.	CSS	18.6	23.7	C	C	21.2	27.4	C	D
18	S. La Cadena Dr. / W. Litton Av.	CSS	21.7	20.3	C	C	23.3	22.7	C	C
19	S. La Cadena Dr. / Barton Rd.	TS	12.7	18.5	B	B	15.2	36.0	B	D
20	S. La Cadena Dr. / S. Iowa Av.	CSS	11.6	14.1	B	B	19.7	33.1	C	B
21	S. La Cadena Dr. / W. Maryknoll Dr.	CSS	24.3	23.5	C	C	**>100.0**	**>100.0**	**F**	**F**
22	La Cadena Dr. S. / Pellissier Rd. / I-215 SB On-Ramp	AWS	17.7	13.0	C	B	23.8	13.9	C	B
23	La Cadena Dr. W. / Stephens Av. / I-215 SB Ramps	AWS	21.3	**38.6**	C	**E**	21.5	**39.2**	C	**E**
24	La Crosse Av. / I-215 SB Off-Ramp	CSS	0.0	0.0	A	A	0.0	0.0	A	A
25	La Crosse Av. / Barton Rd.	CSS	10.4	10.5	B	B	11.1	11.1	B	B
26	La Crosse Av. / I-215 SB On-Ramp / Barton Rd.	TS	36.2	32.5	D	C	39.8	33.4	D	C
27	S. Iowa Av. / S. La Cadena Dr. / I-215 SB Off-Ramp	CSS	**35.2**	28.8	**E**	D	**54.3**	**36.9**	**F**	**E**
28	I-215 NB Ramps / Barton Rd.	TS	10.0	11.8	A	B	16.3	20.9	B	C
29	S. Iowa Av. / I-215 NB Ramps	TS	**69.0**	54.4	**E**	D	**100.9**	**87.3**	**F**	**F**
30	Iowa Av. / W. Main St.	TS	35.0	20.8	D	C	39.3	23.4	D	C
31	Iowa Av. / E. La Cadena Dr.	CSS	13.8	20.0	B	C	14.0	20.7	B	C
32	Iowa Av. / Center St.	TS	38.9	35.0	D	D	40.1	38.1	D	D
33	Iowa Av. / W. Citrus St.	TS	5.1	6.0	A	A	5.6	6.8	A	A
34	Iowa Av. / E. Citrus St.	TS	6.7	6.6	A	A	6.8	6.7	A	A
35	Michigan Av. / Barton Rd.	TS	28.5	16.0	C	B	30.5	16.6	C	B
36	Michigan Av. / W. Main St.	TS	**64.0**	25.0	**E**	C	**66.5**	25.2	**E**	C
37	Mt. Vernon Av. / Barton Rd.	TS	39.7	32.1	D	C	40.6	32.9	D	C
38	Mt. Vernon Av. / Main St.	AWS	24.9	10.9	C	B	26.7	11.1	D	B
39	Palm Av. / Barton Rd.	CSS	12.3	12.7	B	B	12.7	13.3	B	B

Bold = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

[2] Per the 2010 Highway Capacity Manual, 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] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; **CSS** = Improvement

Source: (Urban Crossroads, 2016, Table 5-1)

Table 4.14-6 Roadway Segment Volume/Capacity Analysis for Existing Plus Project Conditions

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	Existing (2016)	V/C[2]	LOS[3]	E+P	V/C[2]	LOS[3]	Acceptable LOS[3]
1	S. Rancho Avenue	Agua Mansa Rd. to La Cadena Dr.	4D	33,000	8,692	0.26	A	9,514	0.29	A	D
2	La Cadena Drive	N St. to S. Rancho Av.	4D	33,000	12,152	0.37	A	12,986	0.39	A	D
3		South of S. Rancho Av.	4D	33,000	18,411	0.56	A	20,068	0.61	B	D
4		North of W. Litton Av.	4D	33,000	18,657	0.57	A	20,314	0.62	B	D
5		Between W. Litton Av. and Barton Rd.	4D	33,000	18,813	0.57	A	20,582	0.62	B	D
6		South of Barton Rd.	5D	41,250	17,653	0.43	A	21,813	0.53	A	D
7		North of S. Iowa Av.	4D	33,000	16,169	0.49	A	20,352	0.62	B	D
8		Between S. Iowa Av. and W. Maryknoll Dr.	4D	33,000	11,125	0.34	A	17,494	0.53	A	D
9		Between W. Maryknoll Dr. and Pellissier Rd.	4D	33,000	10,322	0.31	A	11,138	0.34	A	D
10	Barton Road	East of La Cadena Dr.	2U	18,000	8,190	0.46	A	10,582	0.59	A	D
11		West of La Crosse Av.	2U	18,000	8,860	0.49	A	11,252	0.63	B	D
12		Between La Crosse Av. and I-215 SB Ramps	2D	18,000	8,436	0.47	A	10,383	0.58	A	D
13		Between I-215 SB Ramps and I-215 NB Ramps	2D	18,000	14,272	0.79	C	16,220	**0.90**	E	D
14		Between I-215 NB Ramps and Michigan Av.	4D	33,000	20,509	0.62	B	22,012	0.67	B	D
15		East of Michigan Av.	4D	33,000	15,387	0.47	A	16,601	0.50	A	D
16		West of Mt. Vernon Av.	4D	33,000	14,171	0.43	A	15,295	0.46	A	D
17		Mt. Vernon Av. to Palm Av.	4D	33,000	15,298	0.46	A	15,954	0.48	A	D
18	Placentia Lane / West	East of S. Riverside Av. / Main St.	2U	18,000	4,095	0.23	A	5,653	0.31	A	D
19	Center Street	West of Orange St.	2U	18,000	3,972	0.22	A	5,618	0.31	A	D
20	Main Street	South of Placentia Ln.	4D	33,000	20,498	0.62	B	21,588	0.65	B	D
21		North of Columbia Av.	4D	33,000	25,490	0.77	C	26,402	0.80	C	D
22		Columbia Av. to Strong St.	4D	33,000	20,777	0.63	B	21,499	0.65	B	D
23	Orange Street	South of Pellissier Rd.	2U	12,500	0	0.00	--	2,612	0.21	A	D
24		North of W. Center St.	2U	12,500	424	0.03	A	3,206	0.26	A	D
25		South of W. Center St.	2U	12,500	2,633	0.21	A	3,413	0.27	A	D
26		North of Columbia Av.	2U	12,500	4,530	0.36	A	5,286	0.42	A	D
27	Pellissier Road / Maryknoll Dr.	Between Orange St. and Street "A"	4D	33,000	0	0.00	--	2,612	0.08	A	D
28		Between Street "A" and Roquet Ranch Rd.	4D	33,000	0	0.00	--	2,862	0.09	A	D
29		East of Roquet Ranch Rd.	4D	33,000	0	0.00	--	5,630	0.17	A	D
30		West of Graymoor Av.	4D	33,000	0	0.00	--	5,652	0.17	A	D
31		Between Graymoor Av. and Rosedale Av.	2U	12,500	335	0.03	A	6,099	0.49	A	D
32		Between Rosedale Av. and La Cadena Dr.	2D	12,500	982	0.08	A	10,590	0.85	D	D
33	South Iowa Avenue	Between La Cadena Dr. and I-215 SB Off-Ramp	2U	18,000	12,274	0.68	B	14,460	0.80	D	D
34		Between I-215 SB Off-Ramp and I-215 NB Ramps	2U	18,000	16,236	**0.90**	E	17,944	**1.00**	E	D
35		South of I-215 NB Ramps	2D	18,000	17,407	**0.97**	E	17,967	**1.00**	E	D
36		North of W. Main St.	2U	18,000	18,300	**1.02**	F	18,860	**1.05**	F	D
37	West Main Street	East of S. Iowa Av.	2U	18,000	5,501	0.31	A	5,761	0.32	A	D
38		West of Michigan Av.	2D	18,000	4,374	0.24	A	4,610	0.26	A	D

[1]These maximum roadway capacities have been extracted from the City of Colton General Plan Circulation Element, City of Grand Terrace General Plan Circulation Element, City of Riverside General Plan Circulation Element, County of Riverside General Plan Circulation Element, and County of San Bernardino Article III Designation of Streets. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

[2] V/C = Volume-to-capacity ratio

[3] LOS = Level of Service

Source: (Urban Crossroads, 2016, Table 5-2)

Table 4.14-7 Intersection Analysis for Opening Year Cumulative (2020) Conditions

#	Intersection	Traffic Control[3]	2020 Without Project				2020 With Project			
			Delay[2] (secs.)		Level of Service		Delay[2] (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	S. Riverside Av. / Main St. / Placentia Ln.	CSS	**49.3**	**62.0**	**E**	**F**	**>100.0**	**86.3**	**F**	**F**
2	Main St. / Columbia Av.	TS	22.8	30.6	C	C	22.9	30.8	C	C
3	Main St. / Strong St.	TS	49.1	**83.9**	D	**F**	51.6	**96.7**	D	**F**
4	Orange St. / Pellissier Rd.	**CSS**	Future Intersection				0.0	0.0	A	A
5	Orange St. / W. Center St.	AWS	10.5	13.8	B	B	13.7	**36.9**	B	**E**
6	Orange St. / Columbia Av.	TS	20.5	21.3	C	C	20.7	21.9	C	C
7	Street "C" / Street "A"	**CSS**	Future Intersection				8.9	9.0	A	A
8	Street "A" / Pellissier Rd.	**CSS**	Future Intersection				10.3	11.8	B	B
9	Roquet Ranch Rd. / Street "A"	**CSS**	Future Intersection				9.3	10.1	A	B
10	Roquet Ranch Rd. / Pellissier Rd.	**CSS**	Future Intersection				11.5	12.8	B	B
11	S. Graymoor Av. / W. Maryknoll Dr.	CSS	8.4	8.4	A	A	8.8	8.7	A	A
12	S. Graymoor Av. / Pellissier Rd.	**CSS**	Future Intersection				11.8	13.6	B	B
13	S. Rosedale Av. / W. Maryknoll Dr.	CSS	8.9	8.9	A	A	17.5	20.7	C	C
14	Stephens Av. / W. Center St.	TS	**91.8**	54.8	**F**	D	**>100.0**	**64.3**	**F**	**E**
15	S. Rancho Av. / Agua Mansa Rd.	TS	13.0	22.8	B	C	13.9	25.6	B	C
16	La Cadena Dr. / W. N. St.	TS	6.2	6.9	A	A	6.4	7.3	A	A
17	S. La Cadena Dr. / S. Rancho Av.	CSS	20.5	27.0	C	D	24.1	32.6	C	D
18	S. La Cadena Dr. / W. Litton Av.	CSS	23.7	22.3	C	C	25.9	25.7	D	D
19	S. La Cadena Dr. / Barton Rd.	TS	13.4	25.4	B	C	15.8	39.6	B	D
20	S. La Cadena Dr. / S. Iowa Av.	CSS	24.7	18.0	C	C	28.9	**>100.0**	D	**F**
21	S. La Cadena Dr. / W. Maryknoll Dr.	CSS	29.8	28.5	D	D	**>100.0**	**>100.0**	**F**	**F**
22	La Cadena Dr. S. / Pellissier Rd. / I-215 SB On-Ramp	AWS	22.6	15.5	C	C	32.1	16.7	D	C
23	La Cadena Dr. W. / Stephens Av. / I-215 SB Ramps	AWS	**40.9**	**55.5**	**E**	**F**	**41.1**	**55.5**	**E**	**F**
24	La Crosse Av. / I-215 SB Off-Ramp	CSS	Intersection Does Not Exist[4]							
25	La Crosse Av. / Barton Rd.	CSS	Intersection Does Not Exist[4]							
26	La Crosse Av. / I-215 SB On-Ramp / Barton Rd.	RA	8.2	9.8	A	A	9.5	12.0	A	B
27	S. Iowa Av. / S. La Cadena Dr. / I-215 SB Off-Ramp	CSS	**68.5**	**96.2**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
28	I-215 NB Ramps / Barton Rd.	TS	11.1	10.0	B	B	21.7	12.2	C	B
29	S. Iowa Av. / I-215 NB Ramps	TS	**108.0**	**89.5**	**F**	**F**	**145.0**	**129.1**	**F**	**F**
30	Iowa Av. / W. Main St.	TS	45.2	37.2	D	D	47.4	43.2	D	D
31	Iowa Av. / E. La Cadena Dr.	CSS	14.7	24.8	B	C	15.0	26.0	C	D
32	Iowa Av. / Center St.	TS	46.7	50.0	D	D	47.9	53.6	D	D
33	Iowa Av. / W. Citrus St.	TS	5.1	6.2	A	A	5.8	7.0	A	A
34	Iowa Av. / E. Citrus St.	TS	6.7	6.7	A	A	6.9	6.8	A	A
35	Michigan Av. / Barton Rd.	TS	22.7	16.9	C	B	23.3	28.9	C	C
36	Michigan Av. / W. Main St.	TS	**78.7**	25.8	**E**	C	**88.2**	26.4	**F**	C
37	Mt. Vernon Av. / Barton Rd.	TS	34.8	35.1	C	D	34.9	36.0	C	D
38	Mt. Vernon Av. / Main St.	AWS	**45.5**	14.8	**E**	B	**47.9**	15.2	**E**	C
39	Palm Av. / Barton Rd.	CSS	12.4	12.8	B	B	12.7	13.3	B	B

* **Bold** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

[2] Per the 2010 Highway Capacity Manual, overall average intersection delay and LOS are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and LOS for the worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; **CSS** = Improvement; RA = Roundabout

[4] The proposed I-215 Freeway and Barton Road Interchange Improvement Project (Modified Alternative 7) is assumed to be completed and in use by year 2020. The Modified Alternative 7 includes a roundabout at the southbound ramp to preserve local access at La Crosse Avenue and direct access between Barton Road and the I-215 Freeway. The construction of this design alternative will eliminate analysis locations #24 and #25. As such, these locations have not been evaluated for this analysis scenario.

Source: (Urban Crossroads, 2016, Table 6-1)

Table 4.14-8 Roadway Segment Volume/Capacity Analysis for Opening Year Cumulative (2020) Conditions

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	2020 NP	V/C[2]	LOS[3]	2020 WP	V/C[2]	LOS[3]	Acceptable LOS[3]
1	S. Rancho Avenue	Agua Mansa Rd. to La Cadena Dr.	4D	33,000	9,526	0.29	A	10,348	0.31	A	D
2	La Cadena Drive	N St. to S. Rancho Av.	4D	33,000	13,152	0.40	A	13,986	0.42	A	D
3		South of S. Rancho Av.	4D	33,000	20,020	0.61	B	21,677	0.66	B	D
4		North of W. Litton Av.	4D	33,000	20,276	0.61	B	21,933	0.66	B	D
5		Between W. Litton Av. and Barton Rd.	4D	33,000	20,479	0.62	B	22,248	0.67	B	D
6		South of Barton Rd.	5D	41,250	19,426	0.47	A	23,586	0.57	A	D
7		North of S. Iowa Av.	4D	33,000	18,014	0.55	A	22,197	0.67	B	D
8		Between S. Iowa Av. and W. Maryknoll Dr.	4D	33,000	11,937	0.36	A	18,306	0.55	A	D
9		Between W. Maryknoll Dr. and Pellissier Rd.	4D	33,000	11,735	0.36	A	12,551	0.38	A	D
10	Barton Road	East of La Cadena Dr.	2U	18,000	9,421	0.52	A	11,813	0.66	B	D
11		West of La Crosse Av.	2U	18,000	10,082	0.56	A	12,474	0.69	B	D
12		Between La Crosse Av. and I-215 SB Ramps	2D	18,000	10,277	0.57	A	12,224	0.68	B	D
13		Between I-215 SB Ramps and I-215 NB Ramps	2D	18,000	16,350	**0.91**	E	18,298	**1.02**	F	D
14		Between I-215 NB Ramps and Michigan Av.	4D	33,000	23,437	0.71	C	24,940	0.76	C	D
15		East of Michigan Av.	4D	33,000	18,147	0.55	A	19,361	0.59	A	D
16		West of Mt. Vernon Av.	4D	33,000	15,926	0.48	A	17,050	0.52	A	D
17		Mt. Vernon Av. to Palm Av.	4D	33,000	16,647	0.50	A	17,303	0.52	A	D
18	Placentia Lane / West Center Street	East of S. Riverside Av. / Main St.	2U	18,000	5,850	0.33	A	7,408	0.41	A	D
19		West of Orange St.	2U	18,000	5,422	0.30	A	7,068	0.39	A	D
20	Main Street	South of Placentia Ln.	4D	33,000	22,749	0.69	B	23,839	0.72	C	D
21		North of Columbia Av.	4D	33,000	27,460	0.83	D	28,372	0.86	D	D
22		Columbia Av. to Strong St.	4D	33,000	22,198	0.67	B	22,920	0.69	B	D
23	Orange Street	South of Pellissier Rd.	2U	12,500	0	0.00	--	2,612	0.21	A	D
24		North of W. Center St.	2U	12,500	457	0.04	A	3,239	0.26	A	D
25		South of W. Center St.	2U	12,500	2,970	0.24	A	3,750	0.30	A	D
26		North of Columbia Av.	2U	12,500	4,914	0.39	A	5,670	0.45	A	D
27	Pellissier Road / Maryknoll Dr.	Between Orange St. and Street "A"	4D	33,000	0	0.00	--	2,612	0.08	A	D
28		Between Street "A" and Roquet Ranch Rd.	4D	33,000	0	0.00	--	2,862	0.09	A	D
29		East of Roquet Ranch Rd.	4D	33,000	0	0.00	--	5,630	0.17	A	D
30		West of Graymoor Av.	4D	33,000	0	0.00	--	5,652	0.17	A	D
31		Between Graymoor Av. and Rosedale Av.	2U	12,500	379	0.03	A	6,143	0.49	A	D
32		Between Rosedale Av. and La Cadena Dr.	2D	12,500	1,082	0.09	A	10,690	0.86	D	D
33	South Iowa Avenue	Between La Cadena Dr. and I-215 SB Off-Ramp	2U	18,000	13,759	0.76	C	15,945	0.89	D	D
34		Between I-215 SB Off-Ramp and I-215 NB Ramps	2U	18,000	18,244	**1.01**	F	19,952	**1.11**	F	D
35		South of I-215 NB Ramps	2D	18,000	20,037	**1.11**	F	20,597	**1.14**	F	D
36		North of W. Main St.	2U	18,000	20,966	**1.16**	F	21,526	**1.20**	F	D
37	West Main Street	East of S. Iowa Av.	2U	18,000	6,618	0.37	A	6,878	0.38	A	D
38		West of Michigan Av.	2D	18,000	5,446	0.30	A	5,682	0.32	A	D

[1] These maximum roadway capacities have been extracted from the City of Colton General Plan Circulation Element, City of Grand Terrace General Plan Circulation Element, City of Riverside General Plan Circulation Element, County of Riverside General Plan Circulation Element, and County of San Bernardino Article III Designation of Streets. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

[2] V/C = Volume-to-Capacity ratio

[3] LOS = Level of Service

Source: (Urban Crossroads, 2016, Table 6-2)

Table 4.14-9 Intersection Analysis for Horizon Year (2040) Conditions

#	Intersection	Traffic Control[3]	2040 Without Project				2040 With Project			
			Delay[2] (secs.)		Level of Service		Delay[2] (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	S. Riverside Av. / Main St. / Placentia Ln.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
2	Main St. / Columbia Av.	TS	**92.4**	**107.0**	**F**	**F**	**93.8**	**108.8**	**F**	**F**
3	Main St. / Strong St.	TS	**61.6**	**120.0**	**E**	**F**	**64.1**	**149.7**	**E**	**F**
4	Orange St. / Pellissier Rd.	**CSS**	Future Intersection				0.0	0.0	A	A
5	Orange St. / W. Center St.	AWS	15.9	24.7	C	C	34.2	**51.0**	D	**F**
6	Orange St. / Columbia Av.	TS	23.2	31.7	C	C	23.8	34.6	C	C
7	Street "C" / Street "A"	**CSS**	Future Intersection				8.9	9.0	A	A
8	Street "A" / Pellissier Rd.	**CSS**	Future Intersection				10.3	11.8	B	B
9	Roquet Ranch Rd. / Street "A"	**CSS**	Future Intersection				9.3	10.1	A	B
10	Roquet Ranch Rd. / Pellissier Rd.	**CSS**	Future Intersection				11.5	12.8	B	B
11	S. Graymoor Av. / W. Maryknoll Dr.	CSS	8.4	8.4	A	A	8.6	8.6	A	A
12	S. Graymoor Av. / Pellissier Rd.	**CSS**	Future Intersection				11.9	13.7	B	B
13	S. Rosedale Av. / W. Maryknoll Dr.	CSS	8.9	9.0	A	A	18.1	21.5	C	C
14	Stephens Av. / W. Center St.	TS	**165.8**	**173.2**	**F**	**F**	**177.4**	**191.8**	**F**	**F**
15	S. Rancho Av. / Agua Mansa Rd.	TS	19.2	511.0	B	D	22.1	53.2	C	D
16	La Cadena Dr. / W. N. St.	TS	6.6	8.0	A	A	6.8	8.4	A	A
17	S. La Cadena Dr. / S. Rancho Av.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
18	S. La Cadena Dr. / W. Litton Av.	CSS	**35.6**	31.3	**E**	D	**40.5**	**38.1**	**E**	**E**
19	S. La Cadena Dr. / Barton Rd.	TS	25.5	45.5	C	D	36.1	54.1	D	D
20	S. La Cadena Dr. / S. Iowa Av.	CSS	16.2	**>100.0**	C	**F**	**64.5**	**>100.0**	**F**	**F**
21	S. La Cadena Dr. / W. Maryknoll Dr.	CSS	29.8	**>100.0**	D	**F**	**>100.0**	**>100.0**	**F**	**F**
22	La Cadena Dr. S. / Pellissier Rd. / I-215 SB On-Ramp	AWS	22.6	**37.7**	C	**E**	**51.5**	**39.4**	**F**	**E**
23	La Cadena Dr. W. / Stephens Av. / I-215 SB Ramps	AWS	**63.8**	**66.9**	**F**	**F**	**64.7**	**67.8**	**F**	**F**
24	La Crosse Av. / I-215 SB Off-Ramp	CSS	Intersection Does Not Exist[4]							
25	La Crosse Av. / Barton Rd.	CSS	Intersection Does Not Exist[4]							
26	La Crosse Av. / I-215 SB On-Ramp / Barton Rd.	RA	28.0	27.6	D	D	30.6	32.8	D	D
27	S. Iowa Av. / S. La Cadena Dr. / I-215 SB Off-Ramp	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
28	I-215 NB Ramps / Barton Rd.	TS	40.7	31.5	D	C	37.4	33.5	D	C
29	S. Iowa Av. / I-215 NB Ramps	TS	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**
30	Iowa Av. / W. Main St.	TS	53.1	47.3	D	D	54.4	50.8	D	D
31	Iowa Av. / E. La Cadena Dr.	CSS	24.8	**149.5**	C	**F**	26.0	**160.7**	D	**F**
32	Iowa Av. / Center St.	TS	**98.3**	**192.5**	**F**	**F**	**102.9**	**>200.0**	**F**	**F**
33	Iowa Av. / W. Citrus St.	TS	10.4	14.5	B	B	11.1	15.8	B	B
34	Iowa Av. / E. Citrus St.	TS	16.4	9.5	B	A	17.0	9.8	B	A
35	Michigan Av. / Barton Rd.	TS	52.0	47.9	D	D	53.8	49.5	D	D
36	Michigan Av. / W. Main St.	TS	**177.7**	**145.6**	**F**	**F**	**190.5**	**149.4**	**F**	**F**
37	Mt. Vernon Av. / Barton Rd.	TS	49.7	45.4	D	D	50.4	54.6	D	D
38	Mt. Vernon Av. / Main St.	AWS	**63.6**	**38.8**	**F**	**E**	**63.9**	**39.0**	**F**	**F**
39	Palm Av. / Barton Rd.	CSS	15.7	15.3	C	C	16.5	16.2	C	C

Bold = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

[2] Per the 2010 Highway Capacity Manual, 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] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; CSS = Improvement; RA = Roundabout

[4] The proposed I-215 Freeway and Barton Road Interchange Improvement Project (Modified Alternative 7) is assumed to be completed and in use by year 2020. The Modified Alternative 7 includes a roundabout at the southbound ramp to preserve local access at La Crosse Avenue and direct access between Barton Road and the I-215 Freeway. The construction of this design alternative will eliminate analysis locations #24 and #25. As such, these locations have not been evaluated for this analysis scenario.

Source: (Urban Crossroads, 2016, Table 7-1)

Table 4.14-10 Roadway Segment Volume/Capacity Analysis for Horizon Year (2040) Conditions

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	2040 NP	V/C[2]	LOS[3]	2040 WP	V/C[2]	LOS[3]	Acceptable LOS[3]
1	S. Rancho Avenue	Agua Mansa Rd. to La Cadena Dr.	4D	33,000	21,447	0.65	B	21,928	0.66	B	D
2	La Cadena Drive	N St. to S. Rancho Av.	4D	33,000	16,436	0.50	A	17,270	0.52	A	D
3		South of S. Rancho Av.	4D	33,000	35,338	**1.07**	**F**	36,995	**1.12**	**F**	D
4		North of W. Litton Av.	4D	33,000	24,549	0.74	C	26,206	0.79	C	D
5		Between W. Litton Av. and Barton Rd.	4D	33,000	31,930	**0.97**	E	33,699	**1.02**	**F**	D
6		South of Barton Rd.	5D	41,250	32,203	0.78	C	36,363	0.88	D	D
7		North of S. Iowa Av.	4D	33,000	25,286	0.77	C	29,469	0.89	D	D
8		Between S. Iowa Av. and W. Maryknoll Dr.	4D	33,000	17,680	0.54	A	24,049	0.73	C	D
9		Between W. Maryknoll Dr. and Pellissier Rd.	4D	33,000	19,100	0.58	A	19,916	0.60	B	D
10	Barton Road	East of La Cadena Dr.	2U	18,000	14,157	0.79	C	16,549	**0.92**	E	D
11		West of La Crosse Av.	2U	18,000	16,668	**0.93**	E	19,060	**1.06**	**F**	D
12		Between La Crosse Av. and I-215 SB Ramps	2D	18,000	16,668	**0.93**	E	18,615	**1.03**	**F**	D
13		Between I-215 SB Ramps and I-215 NB Ramps	2D	18,000	24,241	**1.35**	**F**	26,189	**1.45**	**F**	D
14		Between I-215 NB Ramps and Michigan Av.	4D	33,000	31,178	**0.94**	E	32,681	**0.99**	E	D
15		East of Michigan Av.	4D	33,000	21,673	0.66	B	22,887	0.69	B	D
16		West of Mt. Vernon Av.	4D	33,000	19,174	0.58	A	20,298	0.62	B	D
17		Mt. Vernon Av. to Palm Av.	4D	33,000	20,153	0.61	B	20,809	0.63	B	D
18	Placentia Lane / West Center Street	East of S. Riverside Av. / Main St.	2U	18,000	11,390	0.63	B	12,948	0.72	C	D
19		West of Orange St.	2U	18,000	8,095	0.45	A	9,741	0.54	A	D
20	Main Street	South of Placentia Ln.	4D	33,000	43,511	**1.32**	**F**	44,601	**1.35**	**F**	D
21		North of Columbia Av.	4D	33,000	38,357	**1.16**	**F**	39,269	**1.19**	**F**	D
22		Columbia Av. to Strong St.	4D	33,000	32,116	**0.97**	E	32,838	**1.00**	E	D
23	Orange Street	South of Pellissier Rd.	2U	12,500	0	0.00	--	2,612	0.21	A	D
24		North of W. Center St.	2U	12,500	554	0.04	A	3,336	0.27	A	D
25		South of W. Center St.	2U	12,500	3,574	0.29	A	4,354	0.35	A	D
26		North of Columbia Av.	2U	12,500	5,952	0.48	A	6,708	0.54	A	D
27	Pellissier Road / Maryknoll Dr.	Between Orange St. and Street "A"	4D	33,000	0	0.00	--	2,612	0.08	A	D
28		Between Street "A" and Roquet Ranch Rd.	4D	33,000	0	0.00	--	2,862	0.09	A	D
29		East of Roquet Ranch Rd.	4D	33,000	0	0.00	--	5,630	0.17	A	D
30		West of Graymoor Av.	4D	33,000	0	0.00	--	5,652	0.17	A	D
31		Between Graymoor Av. and Rosedale Av.	2U	12,500	455	0.04	A	6,219	0.50	A	D
32		Between Rosedale Av. and La Cadena Dr.	2D	12,500	1,307	0.10	A	10,915	0.87	D	D
33	South Iowa Avenue	Between La Cadena Dr. and I-215 SB Off-Ramp	2U	18,000	21,572	**1.20**	**F**	23,758	**1.32**	**F**	D
34		Between I-215 SB Off-Ramp and I-215 NB Ramps	2U	18,000	21,964	**1.22**	**F**	23,672	**1.32**	**F**	D
35		South of I-215 NB Ramps	2D	18,000	24,025	**1.33**	**F**	24,585	**1.37**	**F**	D
36		North of W. Main St.	2U	18,000	25,159	**1.40**	**F**	25,719	**1.43**	**F**	D
37	West Main Street	East of S. Iowa Av.	2U	18,000	7,879	0.44	A	8,139	0.45	A	D
38		West of Michigan Av.	2D	18,000	11,448	0.64	B	11,684	0.65	B	D

[1] These maximum roadway capacities have been extracted from the City of Colton General Plan Circulation Element, City of Grand Terrace General Plan Circulation Element, City of Riverside General Plan Circulation Element, County of Riverside General Plan Circulation Element, and County of San Bernardino Article III Designation of Streets. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

[2] V/C = Volume-to-Capacity ratio

[3] LOS = Level of Service

Source: (Urban Crossroads, 2016, Table 7-2)

Table 4.14-11 Intersection Analysis for E+P Conditions with Improvements

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
3	Main St. / Strong St.																	
	- Without Project	TS	1	2	d	1	2	0	**1**	**1**	**0**	0	1	1	11.9	13.3	B	B
	- With Project	TS	1	2	d	1	2	0	**1**	**1**	**0**	0	1	1	12.3	13.9	B	B
21	S. La Cadena Dr. / W. Maryknoll Dr.																	
	- Without Project		No Improvements Necessary															
	- With Project	**TS**	**1**	1	0	0	2	1	**1**	1	**0**	0	1	0	14.4	11.0	B	B
23	La Cadena Dr. W. / Stephens Av. / I-215 SB Ramps																	
	- Without Project	**TS**	0	1	1	0	1	0	0	1	0	0	1	1	17.3	15.6	B	B
	- With Project	**TS**	0	1	1	0	1	0	0	1	0	0	1	1	17.3	15.6	B	B
27	S. Iowa Av. / S. La Cadena Dr. / I-215 SB Off-Ramp																	
	- Without Project	**TS**	0	1	0	0	1	0	1	0	1	0	1	0	22.7	28.0	C	C
	- With Project	**TS**	0	1	0	0	1	0	1	0	1	0	1	0	23.7	28.4	C	C
29	S. Iowa Av. / I-215 NB Ramps																	
	- Without Project	TS	0	0	0	1	0	**1**	1	1	0	0	0	0	27.8	25.4	C	C
	- With Project	TS	0	0	0	1	0	**1**	1	1	0	0	0	0	31.9	35.7	C	D
36	Michigan Av. / W. Main St.																	
	- Without Project	TS	1	1	0	1	1	**1**	1	1	1	1	1	0	49.6	24.6	D	C
	- With Project	TS	1	1	0	1	1	**1**	1	1	1	1	1	0	52.2	24.7	D	C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

[2] Per the 2010 Highway Capacity Manual, 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] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal

Source: (Urban Crossroads, 2016, Table 5-6)

Table 4.14-12 Intersection Analysis for Opening Year Cumulative (2020) Conditions with Improvements

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	S. Riverside Av. / Main St. / Placentia Ln.																	
	- Without Project	**TS**	1	2	d	1	2	d	0	1	0	0	1	0	10.8	5.7	B	A
	- With Project	**TS**	1	2	d	1	2	d	0	1	0	0	1	0	13.3	11.2	B	B
3	Main St. / Strong St.																	
	- Without Project	TS	1	2	d	1	2	0	**1**	**1**	**0**	0	1	1	12.3	13.6	B	B
	- With Project	TS	1	2	d	1	2	0	**1**	**1**	**0**	0	1	1	12.7	14.2	B	B
5	Orange St. / W. Center St.																	
	- Without Project		No Improvements Necessary															
	- With Project	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	15.7	18.1	B	B
14	Stephens Av. / W. Center St.																	
	- Without Project	TS	0	1	0	0	1	0	0	1	1	**1**	1	d	33.1	33.9	C	C
	- With Project	TS	0	1	0	0	1	0	0	1	1	**1**	1	d	33.1	34.0	C	C
20	S. La Cadena Dr. / S. Iowa Av.																	
	- Without Project	CSS	No Improvements Necessary															
	- With Project	CSS	1	**2**	0	0	**2**	2>>	1	0	1	0	0	0	12.1	15.3	B	C
21	S. La Cadena Dr. / W. Maryknoll Dr.																	
	- Without Project		No Improvements Necessary															
	- With Project	**TS**	**1**	1	0	0	2	1	**1**	1	**0**	0	1	0	16.7	12.4	B	B
23	La Cadena Dr. W. / Stephens Av. / I-215 SB Ramps																	
	- Without Project	**TS**	0	1	1	0	1	0	0	1	0	0	1	1	21.7	25.5	C	C
	- With Project	**TS**	0	1	1	0	1	0	0	1	0	0	1	1	36.8	43.4	D	D
27	S. Iowa Av. / S. La Cadena Dr. / I-215 SB Off-Ramp																	
	- Without Project	**TS**	0	1	0	0	1	0	1	0	1	0	0	0	36.3	54.6	D	D
	- With Project	**TS**	0	1	0	0	1	0	1	0	1	0	0	0	37.0	54.6	D	D
29	S. Iowa Av. / I-215 NB Ramps																	
	- Without Project	TS	0	0	0	1	0	**1**	**2**	1	0	0	1	0	43.8	38.5	D	D
	- With Project	TS	0	0	0	1	0	**1**	**2**	1	0	0	1	0	44.3	45.2	D	D
36	Michigan Av. / W. Main St.																	
	- Without Project	TS	1	1	0	1	1	**1**	1	1	1	1	1	0	50.6	25.8	D	C
	- With Project	TS	1	1	0	1	1	**1**	1	1	1	1	1	0	53.8	25.9	D	C
38	Mt. Vernon Av. / Main St.																	
	- Without Project	**TS**	0	1	1	0	2	0	0	1	d	0	1	0	36.2	9.4	D	A
	- With Project	**TS**	0	1	1	0	2	0	0	1	d	0	1	0	39.7	9.5	D	A

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

[2] Per the 2010 Highway Capacity Manual, 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] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal

Source: (Urban Crossroads, 2016, Table 6-6)

Table 4.14-13 Roadway Segment Volume/Capacity Analysis for Opening Year Cumulative (2020) Conditions with Improvements

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	2020 NP	V/C	LOS	2020 WP	V/C	LOS	Acceptable LOS
33	South Iowa Avenue	Between La Cadena Dr. and I-215 SB Off-Ramp	4U	36,000	13,759	0.38	A	15,945	0.44	A	D

2U = Improvement

[1] These maximum roadway capacities have been extracted from the City of Colton General Plan Circulation Element, City of Grand Terrace General Plan Circulation Element, City of Riverside General Plan Circulation Element, County of Riverside General Plan Circulation Element, and County of San Bernardino Article III Designation of Streets. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

(Urban Crossroads, 2016, Table 6-7)

Table 4.14-14 Intersection Analysis for Horizon Year (2040) Conditions with Improvements

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	S. Riverside Av. / Main St. / Placentia Ln.																	
	- Without Project	TS	1	2	d	1	2	d	0	1	0	0	1	0	30.5	29.5	C	C
	- With Project	TS	1	2	d	1	2	d	0	1	0	0	1	0	31.3	37.4	C	D
2	Main St. / Columbia Av.																	
	- Without Project	TS	1	2	1>	2	2	d	1	1	0	**2**	1	1	36.9	46.7	D	D
	- With Project	TS	1	2	1>	2	2	d	1	1	0	**2**	1	1	37.8	48.5	D	D
3	Main St. / Strong St.																	
	- Without Project	TS	1	2	d	1	2	0	**1**	**1**	**0**	0	1	1	13.7	15.2	B	B
	- With Project	TS	1	2	d	1	2	0	**1**	**1**	**0**	0	1	1	14.0	15.8	B	B
5	Orange St. / W. Center St.																	
	- Without Project		No Improvements Necessary															
	- With Project	TS	**1**	1	0	**1**	1	0	**1**	1	0	**1**	1	0	15.2	16.7	B	B
14	Stephens Av. / W. Center St.																	
	- Without Project	TS	**1**	1	0	0	1	0	0	1	1	**1**	**2**	d	38.6	49.4	D	D
	- With Project	TS	**1**	1	0	0	1	0	0	1	1	**1**	**2**	d	39.3	50.1	D	D
17	S. La Cadena Dr. / S. Rancho Av.																	
	- Without Project	TS	1	2	0	0	2	0	1	0	**1>**	0	0	0	25.4	22.0	C	C
	- With Project	TS	1	2	0	0	2	0	1	0	**1>**	0	0	0	25.8	24.2	C	C
18	S. La Cadena Dr. / W. Litton Av.																	
	- Without Project	TS	1	2	0	0	2	0	0	1	0	0	0	0	6.3	5.3	A	A
	- With Project	TS	1	2	0	0	2	0	0	1	0	0	0	0	6.5	6.0	A	A
20	S. La Cadena Dr. / S. Iowa Av.																	
	- Without Project	TS	1	**2**	0	0	**2**	2>>	1	0	1	0	0	0	9.2	27.7	A	C
	- With Project	TS	1	**2**	0	0	**2**	2>>	1	0	1	0	0	0	19.4	46.2	B	D
21	S. La Cadena Dr. / W. Maryknoll Dr.																	
	- Without Project	TS	**1**	1	0	0	2	1	**1**	1	**0**	0	1	0	6.0	4.7	A	A
	- With Project	TS	**1**	1	0	0	2	1	**1**	1	**0**	0	1	0	17.8	12.0	B	B
22	La Cadena Dr. S. / Pellissier Rd. / I-215 SB On-Ramp																	
	- Without Project	TS	1	2	0	1	1	0	0	1	0	0	0	0	27.5	32.3	C	C
	- With Project	TS	1	2	0	1	1	0	0	1	0	0	0	0	28.0	35.2	C	C
23	La Cadena Dr. W. / Stephens Av. / I-215 SB Ramps																	
	- Without Project	TS	0	1	1	0	1	0	**1**	1	0	**1**	1	**0**	36.8	43.4	D	D
	- With Project	TS	0	1	1	0	1	0	**1**	1	0	**1**	1	**0**	38.8	46.7	D	D
27	S. Iowa Av. / S. La Cadena Dr. / I-215 SB Off-Ramp																	
	- Without Project	TS	0	**2**	0	0	**2**	0	**2**	0	1	0	0	0	43.2	47.0	D	D
	- With Project	TS	0	**2**	0	0	**2**	0	**2**	0	1	0	0	0	41.1	46.3	D	D
29	S. Iowa Av. / I-215 NB Ramps																	
	- Without Project	TS	0	0	0	1	0	**1**	**2**	1	0	0	1	0	41.6	40.0	D	D
	- With Project	TS	0	0	0	1	0	**1**	**2**	1	0	0	1	0	43.6	51.9	D	D
31	Iowa Av. / E. La Cadena Dr.																	
	- Without Project	TS	1	2	0	0	2	1>>	0	1	0	0	0	0	12.1	20.4	B	C
	- With Project	TS	1	2	0	0	2	1>>	0	1	0	0	0	0	12.1	23.5	B	C
32	Iowa Av. / Center St.																	
	- Without Project[4]	TS	1	2	d	1	2	0	1	2	0	1	1	1	51.3	53.7	D	D
	- With Project[4]	TS	1	2	d	1	2	0	1	2	0	1	1	1	51.9	54.7	D	D
36	Michigan Av. / W. Main St.																	
	- Without Project	TS	1	1	0	1	1	**1**	1	1	1	1	1	0	50.0	35.6	D	D
	- With Project	TS	1	1	0	1	1	**1**	1	1	1	1	1	0	52.9	35.7	D	D
38	Mt. Vernon Av. / Main St.																	
	- Without Project	TS	0	1	1	0	2	0	**1**	1	0	0	1	0	24.3	12.0	C	B
	- With Project	TS	0	1	1	0	2	0	**1**	1	0	0	1	0	27.2	12.2	C	B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane; **1** = Improvement

[2] Per the 2010 Highway Capacity Manual, 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] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal

Source: (Urban Crossroads, 2016, Table 7-6)

Table 4.14-15 Roadway Segment Volume/Capacity Analysis for Horizon Year (2040) Conditions with Improvements

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	2035 NP	V/C	LOS	2035 WP	V/C	LOS	Acceptable LOS
33	South Iowa Avenue	Between La Cadena Dr. and I-215 SB Off-Ramp	4U	36,000	21,572	0.60	A	23,758	0.66	B	D
34		Between I-215 SB Off-Ramp and I-215 NB Ramps	4U	36,000	21,000	0.58	A	23,028	0.64	B	D

4U = Improvement

[1]These maximum roadway capacities have been extracted from the City of Colton General Plan Circulation Element, City of Grand Terrace General Plan Circulation Element, City of Riverside General Plan Circulation Element, County of Riverside General Plan Circulation Element, and County of San Bernardino Article III Designation of Streets. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

Source: (Urban Crossroads, 2016, Table 7-7)

4.15 UTILITIES AND SERVICE SYSTEMS

This Subsection addresses the topics of water service and supply, wastewater collection and treatment, storm water drainage management, and solid waste collection/disposal. Technical reports used in the analysis of this Subsection include the following: the *Roquet Ranch Project City of Colton Water Supply Assessment* prepared by Carollo Engineers, Inc. (Carollo, 2016a), included as *Technical Appendix M* to this EIR*;* the *Preliminary Water Quality Management Plan for Roquet Ranch – TTM 19983* prepared by K&A Engineering, Inc. (K&A, 2016c), included as *Technical Appendix J* to this EIR; the *Drainage Report for Roquet Ranch – TTM 19983* prepared by K&A Engineering, Inc., (K&A, 2016a), included as *Technical Appendix I1* to this EIR; and *Drainage Memo for Roquet Ranch – TTM 19983* prepared by K&A Engineering, Inc., (K&A Engineering, Inc., 2016b), included as *Technical Appendix I2* to this EIR. Information was also retrieved from the *2010 Regional Urban Water Management Plan for the San Bernardino Valley*, prepared by Kennedy/Jenks Consultants (KJC, 2012), and the City of Colton General Plan Update EIR (City of Colton, 2013c). A complete list of references used in this Subsection are contained in EIR Section 7.0, *References*.

4.15.1 EXISTING CONDITIONS

A. *Water Service and Supply*

The City of Colton provides domestic water service to the Project site and surrounding area. Under existing conditions, the Project site is predominantly vacant (with the exception of the Roquet Paving Inc. facility) and demands a nominal quantity of water associated only with the paving facility.

The City currently acquires 100 percent of its potable water supply from groundwater in three different basins: (1) the San Bernardino Basin, (2) the Rialto-Colton Basin, and (3) the Riverside North Basin. As shown in Table 1 of the Project's Water Supply Assessment (*Technical Appendix M*), it is estimated that the City of Colton would be able to provide up to 14,853 acre feet per year (AFY) of domestic water from groundwater sources in the Year 2035 (Carollo, 2016a, p. 5).

Section 10620(a) of the California Urban Water Management Planning Act requires every urban water supplier to prepare and adopt an urban water management plan and conduct updates every five years. In addition to meeting the requirements of this Act, urban water management plans are used to support water supply assessments and verifications required by Senate Bills 610 and 221 of 2001. These bills require that water supply information be provided to counties and cities prior to the approval of development projects.

The *2010 Regional Urban Water Management Plan for the San Bernardino Valley* (UWMP) acts as the State mandated Urban Water Management Plan for the City of Colton. The UWMP includes descriptions of the water system, current and future water supply resources, water supply strategy/opportunities, as well as water demand management measures and a water shortage contingency analysis. As stated in the UWMP, the City of Colton would have sufficient groundwater supply to meet the service area demand through 2035, assuming the availability of groundwater remains the same as indicated in the UWMP (KJC, 2012, p. 13-28).

B. *Wastewater Service and Treatment*

The City of Colton Wastewater Department provides wastewater treatment and disposal services to the Project site and surrounding areas within the jurisdiction of the City of Colton. The City of Colton owns and operates the Colton Wastewater Reclamation Facility (CWRF) (a secondary wastewater treatment plant) and trunk sewers throughout the City. The CWRF is designed with a maximum treatment capacity of 10.4 million gallons of wastewater per day (MGD) and serves communities within the City of Colton, City of Grand Terrace, and unincorporated San Bernardino County. Secondary treated wastewater from the CWRF is directed to the jointly owned Colton/San Bernardino rapid infiltration-extraction (RIX) facility for tertiary treatment prior to being discharged to the Santa Ana River. (City of Colton, 2013c, p. 4.17-3)

C. *Storm Water Conveyance Facilities*

The Project site is predominantly vacant and undeveloped (with the exception of the Roquet Paving Inc. facility), and does not contain storm water conveyance facilities. According to the Drainage Report for the Project (*Technical Appendix I1*) and the supplemental Drainage Memo for Roquet Ranch – Tentative Tract Map 19983 (*Technical Appendix I2)*, under existing conditions, there are three (3) watershed drainage subareas, as follows:

- North Subarea: Encompasses approximately 157.2 acres of the northern portion of the Project site and is tributary to the Santa Ana River;
- West Subarea: Encompasses approximately 110.8 acres of the central portion of the Project site and drains westerly across low-lying property towards the Santa Ana River; and
- South Subarea: Encompasses approximately 79.3 acres of the southern portion of the Project site and drains southerly and westerly toward Cadena Creek and the Highgrove Channel. (K&A Engineering, Inc., 2016b, p. 1)

The Colton Engineering Department is responsible for the maintenance and operation of most of the storm drains within the boundaries of the City. The San Bernardino County Flood Control District (SBCFCD) is responsible for the maintenance of regional facilities designed to control urban storm water runoff and natural drainage flows from Lytle Creek, Cajon Creek, Warm Creek, and the Santa Ana River. The Project site is located in the Southwest Portion Area of Flood Control District (FCD) Zone 2. The SBCFCD has developed master drainage plans (MDPs) known as Comprehensive Storm Drain Plans (CSDPs); CSDP No. 7 encompasses the portions of the City that surround the Santa Ana River. (City of Colton, 2013c, p. 4.17-4)

The City of Colton lies within the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB). The SARWQCB uses planning, permitting and enforcement authorities to meet this responsibility, and has adopted a Water Quality Control Plan for the Santa Ana Region Basin Plan to implement plans, policies, and provisions for water quality management. Water quality objectives are intended to protect the public health and welfare, and to maintain or enhance water quality in relation to the existing and/or potential beneficial uses of the water.

D. Solid Waste Collection and Disposal

Colton Disposal (a division of Republic Services) provides solid waste collection and disposal services for residential and commercial land uses within the City of Colton. Commercial solid waste is sorted by Colton Disposal at its processing facility where recyclables are removed from the waste stream prior to being transferred to a landfill. Solid waste collected within the City of Colton is disposed of at several landfills throughout San Bernardino County, as shown on Table 4.17-3 of the City's General Plan Update EIR (City of Colton, 2013c, Table 4.17-3). According to CalRecycle, the nearest active landfill is the California Street Landfill, which is located approximately 3.3 miles southeast of the Project site (CalRecycle, 2016b; Google Earth Pro, 2016).

4.15.2 APPLICABLE ENVIRONMENTAL REGULATIONS

A. Water Supply and Water Quality Regulations

1. California Senate Bill 610

The California Water Code (Water Code) Sections 10910 through 10915 were amended by the enactment of Senate Bill 610 (SB 610) in 2002. SB 610 requires an assessment of whether available water supplies are sufficient to serve the demand generated by a proposed project, as well as the reasonably foreseeable cumulative demand in the region over the next 20 years under average normal year, single dry year and multiple dry year conditions. Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to CEQA. For the purposes of SB 610, a residential "project" means a proposed residential development of more than 500 dwelling units, or a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

2. California Senate Bill 221

Signed into law on October 8, 2001, Senate Bill 221 established a process whereby sufficient water supply must be identified and available for new development for any residential development of 500 homes or more, or, in the case wherein a water supplier has fewer than 5,000 service connections or the proposed development would increase the number of connections by at least 10 percent, unless there is proof of adequate water over at least the next 20 years, including long periods of drought.

3. California Assembly Bill 1881 (Water Conservation in Landscaping Act)

The Water Conservation in Landscaping Act was established to ensure adequate water supplies are available for future uses. To promote the conservation and efficient use of water, the Act requires local agencies to adopt a water efficient landscape ordinance. When such an ordinance had not been adopted, a finding as to why (based on the climatic, geologic, or topographical conditions) such an ordinance is not necessary, must be adopted. In the absence of such an ordinance or findings, the policies and requirements contained in the "model" ordinance drafted by the State of California shall apply within the affected jurisdiction.

4. California Senate Bill 2095 (Water Recycling in Landscaping Act)

This Act requires that a water producer capable of providing recycled water that meets all of the conditions described in the State Water Code, § 13550 et. seq. to notify local agencies of the area(s) eligible to receive the recycled water, and the necessary infrastructure that the recycled water producer or retail water supplier will provide to support the delivery of recycled water. Within 180 days of receipt of such a notification from a recycled water producer, a local agency shall adopt and enforce a recycled water ordinance pursuant to this Act. Additionally, it requires local, regional, or State agencies to not use water from any source of quality for non-potable uses if suitable recycled water is available as provided in Water Code § 13550.

5. Urban Water Management Planning Act

Since 1984, the Urban Water Management Planning Act, has required "urban water suppliers" to develop written "urban water management plans." While generally aimed at encouraging water suppliers to implement water conservation measures, it also created long-term planning obligations. In preparing urban water management plans, urban water suppliers must describe the following:

- Existing and planned water supply and demand;
- Water conservation measures and a schedule for implementing and evaluating such measures; and
- Water shortage contingency measures.

The Urban Water Management Planning Act requires urban water suppliers to use a 20-year planning horizon and to update the data in the urban water plans every 5 years. Urban Water Management Plans are exempt from CEQA, and thus do not generate any EIRs of use for future land use or water planning. In preparing their 20-year management plans, water suppliers must directly address the subject of future population growth. The suppliers must also identify sources of supply to meet demand. The plan must "identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier." In identifying these future water sources, though, the suppliers need not conduct environmental review.

6. California Senate Bill 901

Signed into law on October 16, 1995, Senate Bill (SB) 901 required every urban water supplier to identify as part of its urban water management plan, the existing and planned sources of water available to the supplier over a prescribed 5-year period. The code requires the water service purveyor to assess the projected water demand associated with a proposed project under environmental review. Later provisions of SB 901 required compliance in the event that the proposed Project involved the adoption of a specific plan, amendment to, or revision of the land use element of a general plan or specific plan that would result in a net increase in the state population density. Upon completion of the water assessment, cities and counties may agree or disagree with the conclusions of the water service purveyors, but cannot approve projects in the face of documented water shortfalls without first making certain findings.

7. *Safe Drinking Water Act of 1974*

The Safe Drinking Water Act (SDWA) authorizes the United States Environmental Protection Agency (EPA) to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. The EPA, states, and water systems work in collaboration to ensure the standards are met.

8. *California Water Code § 10910*

This portion of the California Water Code applies to any project proposing more than 500 residential dwelling units, 500 hotel rooms, 500,000 s.f. of commercial space, 650,000 s.f. of industrial or manufacturing space, or any project employing more than 1,000 persons or having a mix of uses equivalent in water usage to more than 500 residential dwelling units. If the project is subject to CEQA, the Lead Agency is required to request that the water agency determine whether the projected water demand associated with the proposed project was included as part of the most recently adopted urban water management plan (UWMP) of the water agency. If the projected water demand associated was not accounted for in the most recently adopted UWMP, or the public water system has no UWMP, a water supply assessment is required to be prepared to determine if the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.

9. *California Water Conservation Act of 2009*

The Water Conservation Act of 2009 (SBx7-7) requires all California urban water agencies to set and meet certain demand reduction targets in order to assist the State in reducing urban water use by 20 percent by 2020. The Act also requires each agency to monitor its progress toward its targets. This was implemented for the purpose of meeting the mandate to reduce per capita urban water consumption by 20 percent statewide.

10. *Executive Order B-29-15*

On April 1, 2015, California Governor Jerry Brown issued Executive Order B-29-15 which orders the State Water Resources Control Board (SWRCB) to impose mandatory water use restrictions to achieve a 25 percent reduction in potable urban water usage through February 18, 2016. It addresses facilitating funding for projects designed to increase local water supplies and improve water supply reliability. It also orders more frequent reporting and modifications to the State's Model Water Efficient Landscape Ordinance; mandates Agricultural water suppliers to prepare their Agricultural Water Management Plans by specific dates; and orders the State to coordinate their water conservation related goals with other State departments like the California Department of Fish and Wildlife, Forestry and Fire Protection, and the Energy Commission. In addition, Executive Order B-29-15 requires that the SWRCB impose restrictions that require commercial, industrial, and institutional properties to

implement water efficiency measures to reduce potable water usage to meet this mandated water usage reduction target.

In response to Executive Order B-29-15, the City of Colton authorized implementation of Stage III of the City's Water Conservation Plan on June 16, 2015. Stage III of the City's Water Conservation Plan entails supplemental restrictions that apply to the use of water supplied by the City in addition to the measures enacted during Stage I (implemented under "Normal Conditions" when the City is able to meet all of the water demands of its customers) and Stage II (implemented during a "Water Alert" period when the City is not able to meet all of the water demand of its customers). Implementation of Stage III of the Water Conservation Plan includes additional restrictions on landscape irrigation; water usage for pools, artificial lakes, and fountains; and washing of vehicles and hardscapes. (City of Colton, 2016d)

11. Federal Water Pollution Control Act (Clean Water Act)

The Federal Water Pollution Control Act (also known as the Clean Water Act (CWA)) is the principal federal statute that addresses water resources. The statute employs a variety of regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. The broad goal is to restore and maintain the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

Section 402 of the CWA authorizes the National Pollutant Discharge Elimination System (NPDES) permit program that covers point sources of pollution discharging to a water body. The NPDES program also requires operators of construction sites one acre or larger to prepare a Storm Water Pollution Prevention Plan (SWPPP) for construction activities and obtain authorization to discharge storm water under an NPDES construction storm water permit. The NDPES program also requires certain land uses (e.g., industrial uses) to prepare a SWPPP for operational activities and to implement a long-term water quality sampling and monitoring program, unless an exemption has been granted.

12. City of Colton Municipal Code Chapter 13.28 (Water Conservation Plan)

The purpose of Chapter 13.28 of the Colton Municipal Code is to adopt a Water Conservation Plan that establishes mandatory water conservation measures aimed at conserving City water supplies for the greatest public benefit and reducing the quantity of water used by the City's water customers. Chapter 13.28 contains criteria for determining water supply conditions in the City that require implementation or termination of each water conservation stage (i.e., Stage I, Stage II, and Stage III). Stage I is in effect at all times unless the Colton City Council otherwise declares that another water conservation stage is in effect. As described above in Subsection 4.1.1A.10, Stage III ("Water Warning") was added to the City's Water Conservation Plan in response to the issuance of Executive Order B-29-15 in April 2015, and identifies mandatory measures to be implemented during drought periods when the City is not able to meet all of the water demands of its customers. (City of Colton , 2016a, Chapter 13.28)

B. Solid Waste Regulations

1. California Solid Waste Integrated Waste Management Act (AB 939)

Signed into law in 1989, the California Integrated Waste Management Act (Assembly Bill 939) established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. In addition, the bill established a 50% waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted.

2. California Solid Waste Reuse and Recycling Act (AB 1327)

Signed into law in 1991, the California Solid Waste Reuse and Recycling Access Act (AB 1327) added Chapter 18 to Part 3 of Division 30 of the Public Resources Code. Chapter 18 required the California Integrated Waste Management Board (CIWMB) to develop a model ordinance for adoption of recyclable materials in development projects (It should be noted that the CIWMB no longer exists and its duties have been assumed by CalRecycle). Local agencies were then required to adopt the model, or an ordinance of their own, in order to govern adequate areas for collection and loading of recyclable materials in development projects. This Act requires all development projects that are commercial, industrial, institutional, or marina in nature and where solid waste is collected and loaded, to provide an adequate area for collecting and loading recyclable materials over the lifetime of the project. The area is required to be provided before building permits are issued.

4.15.3 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to utilities and service systems if the Project or any Project-related component would:

a. *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;*

b. *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;*

c. *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;*

d. *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? In making this determination, the Lead Agency shall consider whether the project is subject to the water supply assessment requirements of Water Code Section 10910, et. seq. (SB 610), and the requirements of Government Code Section 664737 (SB 221);*

e. 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;

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs;

g. Comply with federal, state, and local statutes and regulations related to solid waste

4.15.4 IMPACT ANALYSIS

Threshold a) Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The operation of the proposed Project as a master-planned residential community would generate wastewater, which would be collected by a proposed on-site sewer infrastructure system and conveyed off-site to the Colton Wastewater Reclamation Facility. Wastewater treatment, disposal, and reuse are regulated by local, State, and federal requirements primarily to protect public health, safety, and general welfare. The Project site lies within the jurisdiction of the SARWQCB, which applies requirements to the wastewater treatment facilities owned and operated by treatment providers, such as the Colton Wastewater Reclamation Facility. Pursuant to Section 402 of the Clean Water Act (CWA), the treatment plant is subject to the National Pollutant Discharge Elimination System (NPDES) permit program and requires a waste discharge permit. Implementation of the Project would result in the development of residences, commercial retail uses, an elementary school, a fire station, 3.0-acre RV Parking Area, and park and open spaces uses, wastewater generated by the Project would be consistent with municipal wastewater generation typical of a master-planned community projects. No components of the Project would generate excessive amounts of wastewater, nor would any components of the Project generate wastewater with excessive pollutants that would require additional wastewater treatment in order to meet the applicable RWQCB treatment requirements. As such, the Project would not contribute wastewater to the Colton Wastewater Reclamation Facility that would have the potential to exceed wastewater treatment requirements of the SARWQCB and no impact would occur.

Threshold b) Would the Project require or result in construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

A. Water Conveyance Facilities

Potable water service would be provided to the Project site through the construction of a private water pipeline conveyance system, with two points of connection to public water lines. As shown in Figure 3-6, *Proposed Conceptual On-Site Water Plan*, the community's domestic water system would be composed of a backbone system within four major internal roadways, which would connect proposed domestic water lines throughout the various Planning Areas. Additional off-site water lines are proposed in La Cadena and Orange Street.

Specifically, implementation of the Project would construct a 12-inch water line in the northern portion of Roquet Ranch Road, Street "A," and Street "B" and an 18-inch water line in the southern portion of Roquet Ranch Road, as well as Pellissier Road, and Orange Street. Within the Project site, 8-inch water lines would be provided along the internal access roadways within each Planning Area. A 1.8 million-gallon potable water reservoir is proposed in Planning Area 20A, which would connect to the 18-inch water line in Roquet Ranch Road. As shown in Figure 3-6, two off-site points of connection are proposed: 1) to an existing 16-inch water line in Center Street, south of the Project site, via the proposed 18-inch line in Orange Street; and 2) at the intersection of La Cadena Drive and Tropicana Rancho Road, northeast of the Project site, via a proposed 18-inch line extending northward from the intersection of La Cadena Road and Pellissier Road. Additionally, the existing on-site groundwater extraction well may be utilized at its current extraction rate for landscape irrigation.

With the addition of the proposed improvements, the existing water conveyance infrastructure is adequate to accommodate water service to the Project site. Construction-related activities associated with trenching for and installing the water lines and water tank would result in physical impacts to the environment; these impacts are inherent in the Project's construction phase and are evaluated throughout this EIR accordingly. In instances where significant impacts have been identified for the Project's construction phase for which feasible mitigation is available, mitigation measures are recommended in each applicable subsection of this EIR. The installation of water lines and a water tank to serve future development on the Project site would not result in any significant physical effects on the environment that are specific to the utilities and service systems issue area and not already identified and disclosed as part of this EIR. The Project would not result in the construction of any new water treatment facilities. Accordingly, additional mitigation measures beyond those identified throughout this EIR for construction-related effects would not be required.

B. Wastewater Conveyance Facilities

To serve future residential development on the Project site, a private wastewater collection system would be installed on-site, with four points of connection to public sewer facilities. As shown on Figure 3-7, *Proposed Conceptual On-Site Sewer Plan*, implementation of the Project would construct an 8-inch gravity feed sewer line along portions of Roquet Ranch Road, Street "A," Pellissier Road, and internal streets and an 8-inch force main sewer line in the northwest portion of the site along portions of Roquet Ranch Road and Street "B." Both the 8-inch gravity feed line and the 8-inch force main would connect to a proposed sewer lift station in the northwestern portion of the Project site within Planning Area 14B. A 12-inch force main sewer line is proposed within La Cadena Drive, Pellissier Road, and Orange Street, which would connect to an existing 12-inch force main sewer line within Center Street. An additional 12-inch gravity feed sewer line is proposed within Planning Area 3 which would connect to an off-site, existing 10-inch gravity feed sewer line located in the La Cadena Mobile Home Park southeast of the Project site. A 15-inch gravity feed sewer line is proposed to extend from the residential neighborhood to the southeast, along the emergency access road between Planning Areas 10 and 20E, extend south along Orange Street, and connect to a 12-inch gravity feed sewer line within Center Street. A 12-inch gravity feed sewer line is proposed to extend south from Pellissier Road through Planning Area 9 to the point of connection with an existing 10-inch gravity

feed sewer line that occurs on the southeast portion of the Project site (proposed to be realigned) and extends southwesterly through the mobile home park. All on-site sewer lines would be maintained by the City of Colton.

Installation of the on-site sewer conveyance facilities would result in physical impacts to the environment; however, these impacts are considered to be an inherent part of the Project's construction phase and are evaluated throughout this EIR accordingly. There would be no significant environmental effects specifically related to the installation of wastewater facilities during the Project's construction. In instances where significant impacts have been identified for the Project's construction phase for which feasible mitigation is available, mitigation measures are recommended in each applicable subsection of this EIR. The installation of sewer lines to serve the future development on the Project site would not result in any significant physical effects on the environment that are specific to the utilities and service systems issue area and not already identified and disclosed as part of this EIR.

C. *Wastewater Treatment Facilities*

Wastewater generated by the Project would first flow through the City's CWRF wastewater collection system (designed with an ultimate treatment capacity of 10.4 MGD) and then to trunk sewer pipelines owned, operated and maintained by the City of Colton. These trunk sewer pipelines would then convey wastewater flows to the jointly owned Colton/San Bernardino rapid infiltration-extraction (RIX) facility (designed to treat 40 MGD of influent) for tertiary treatment prior to being discharged to the Santa Ana River. (City of Colton, 2013c, p. 4.17-3) The City of Colton has not adopted a wastewater demand generation rate for residential, or commercial land uses. However, the City of Colton's 2016 Sewer Master Plan identifies a 75-gallons per capita per day wastewater generation rate, which is used in this EIR to estimate residential wastewater generation for purposes of this analysis (Carollo, 2016b, pp. ES-4, p. ES-4). Accordingly, the development of the residential uses on the Project site (maximum of 1,050 dwelling units with estimated population of 3,633 residents [1,050 units x 3.46 persons/unit]) would generate 0.27 MGD of wastewater that would require treatment by the City's CWRF (3,633 persons x 75 GPCD= 272,475 gallons per day [GPD]). The estimated amount of wastewater generated by the proposed 1.2 acres of retail land uses was estimated based on the Design Guidelines for Water and Sewer Facilities prepared by Water Agencies' Standards, which indicates a wastewater treatment demand factor of 1,500 GPD per gross acre for commercial sewer generation (WAS, 2014). This equates to an estimated wastewater generation rate of 1,800 GPD for the retail land uses proposed. Thus, the proposed Project is estimated to generate a total of 0.2738 MGD of wastewater. The City's CWRF has a current operating capacity of 8 MGD and an ultimate design capacity of 10.4 MGD (Carollo, 2016b, p. 4-1)According to the most recent data, average daily flows are 5.6 MGD (City of Colton, 2016c); therefore, existing wastewater treatment capacity of the City's CWRF would more than suffice in treating Project-generated wastewater.

Based on the foregoing information, the Project would not require or result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities; therefore, the Project would have a less than significant impact.

Threshold c) Would the Project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

As previously described in Section 3.0, *Project Description*, and Subsection 4.8, *Hydrology and Water Quality*, an integrated system of underground storm drain pipes, catch basins, drainage swales, water quality basins, and water quality/detention basins would be installed in association with future development on the Project site to capture on-site storm water runoff flows and convey the runoff across the site. As shown on Figure 4.8-3, *Conceptual Drainage Plan*, implementation of the proposed Project would require the construction of a total of four (4) water quality basins on-site and a total of two (2) water quality/detention basins in the southern portion of the Project site. Proposed storm drains are located within Roquet Ranch Road, Pellissier Road, Orange Street, and local roads which would convey storm water into proposed water quality basins and water quality/detention basins. Additionally, an open drainage channel is proposed in the southern portion of the Project site within Planning Area 20E.

Storm water that would be collected from the hillsides north of Planning Area 14B would be discharged to a proposed storm drain system that would convey storm water to the water quality basin located north of Planning Area 4. Storm water that collects from the Planning Areas within the central, southern, and western portions of the Project site would discharge to a system of interceptor drains and storm drains that would convey storm water to proposed water quality basins and water quality/detention basins on the southern portion of the Project site. Additionally, storm water collected on the southeast portion of the Project site would also be discharged to the existing off-site storm drain in La Cadena Drive to the east of the Project site and the existing Cadena Creek channel to the south of the Project site. The two (2) water quality detention basins on the southern portion of the Project site would receive and treat storm water flows from the southern portions of the Project site prior to being discharged to Cadena Creek and the Highgrove Channel.

The Project site's future storm drainage system is required to be designed to ensure that Project-related flows would not exceed the capacities of any existing or planned storm water drainage facilities. Specifically, peak flows from the site would be attenuated to a level at or below the capacity of the storm drain systems shown in the *2010 Regional Urban Water Management Plan for the San Bernardino Valley*. As such, the Project has no potential to result in the need for new or expanded storm water drainage facilities, beyond those facilities that are described herein and evaluated throughout this EIR. A more detailed analysis of Project impacts to storm water drainage facilities is included in EIR Subsection 4.8, *Hydrology and Water Quality*.

The installation of drainage infrastructure to serve the proposed Project would not result in any significant physical effects that are specific to the utilities and service systems issue area and not already identified and disclosed as part of this EIR, and Project-related drainage would not exceed the capacity of any existing or planned storm water drainage facilities. Accordingly, impacts would be less than significant and additional mitigation measures would not be required.

Threshold d) Would the Project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The City of Colton provides domestic water service to the Project site and surrounding area. Under existing conditions, the Project site is predominantly vacant (with the exception of the Roquet Paving Inc. facility) and demands a nominal quantity of water.

As discussed in the *2010 Regional Urban Water Management Plan for the San Bernardino Valley*, which applies to and was adopted by the City of Colton, adequate water supplies are projected to be available to meet the City's estimated water demand in all types of climate conditions, including normal, dry, and multiple-dry weather years (KJC, 2012, Table 13-16 - Table 13-31). The City's forecasts for projected water demand are based on the population projections of the Southern California Associations of Governments (SCAG), which rely on the adopted land use designations contained within the general plan(s) that cover the geographic area within the City's service area (i.e., City of Colton General Plan). As shown on Figure 3-1, *Existing and Proposed General Plan Land Use Designations*, under existing conditions, the City of Colton General Plan applies residential land use designations (i.e., Very Low Density Residential, Low Density Residential, and Medium Density Residential) to the majority of the Project site), with a small area on the southern portion of the Project site designated as "Light Industrial." Since the Project proposes to construct and operate a master-planned residential community at the site, it would generally be consistent with the General Plan land use assumptions used in the *2010 Regional Urban Water Management Plan for the San Bernardino Valley* to calculate projected water demand in the City.

Water demand and future usage assumptions within the Project's Water Supply Assessment were based on the calculated gallons per capita per day (GPCD) from the *2010 Regional Urban Water Management Plan for the San Bernardino Valley* and an assumed average population density of 4.2 persons/d.u. (which is greater than the generation factor 3.46 persons/d.u. utilized throughout this EIR that is based on the average household size of 3.46 cited in the City of Colton General Plan). Based on the Project's Water Supply Assessment, build-out of the Project would result in a maximum demand for approximately 1.3 million-gallons per day of water resources (or 1,456.2 AFY) (Carollo, 2016a, p. 2). The Project design includes a drought-tolerant plant palette and efficient irrigation system in order to reduce demand for water associated with landscape maintenance (T&B Planning, Inc., 2016, p. IV-3). The City currently has sufficient groundwater to meet existing and future demands, even during dry year conditions (Carollo, 2016a, pp. 19-20). Accordingly, the Project's potential to result in the need for new or expanded water entitlements or treatment capacity would be unlikely and impacts would be less than significant.

Threshold e) 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?

As of 2016, the CWRF has an excess treatment capacity of approximately 2.4 MGD based on the average daily flow of 5.6 MGD (City of Colton, 2016c) and a current operating capacity of 8 MGD

(Carollo, 2016b, p. 4-1). As detailed in Thresholds b) and d) above, the Project is estimated to generate approximately 0.27 MGD of wastewater from dwelling units and 0.002 (i.e. 1,800 GPD) for the retail land uses proposed. Implementation of the proposed Project would utilize approximately 11.4% (0.27 MGD/2.4 MGD) of the available, excess treatment capacity at the CWRF. Accordingly, the CWRF has sufficient capacity to treat wastewater generated by Project-related development in addition to existing commitments. With the exception of new off-site and on-site sewer lines, and the proposed sewer lift station in the northwestern portion of the Project site within Planning Area 14B that are evaluated throughout this EIR, the Project would not create the need for any new or expanded wastewater facilities (such as other conveyance lines, treatment facilities, or lift stations). Because there is adequate capacity at the CWRF to serve the Project's projected sewer demand, impacts would be less than significant.

Threshold f) Would the Project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Construction and operation of the proposed Project would result in the generation of solid waste, requiring disposal at a landfill. During construction of the proposed Project, solid waste in the form of demolition material and remnants of unused construction materials would require disposal at a landfill. Waste also would be generated by the construction process, primarily consisting of discarded materials and packaging. Section 5.408 of the 2016 California Green Building Standards Code (CALGreen; Part 11 of Title 24, California Code of Regulations) requires that 65 percent of construction/demolition waste be diverted from landfills, and 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting from land clearing be reused or recycled. According to CalRecycle, the nearest active landfill is the California Street Landfill, which is located approximately 3.3 miles southeast of the Project site (CalRecycle, 2016b; Google Earth Pro, 2016).

Given the California Street Landfill's maximum permitted throughput of 829 tons per day with a remaining capacity of 6,800,000 cubic yards as of March 2005 (most recent data available), this landfill could accommodate all construction debris that would be generated by the Project during the demolition and construction phases, resulting in a less-than-significant impact to landfill capacity. (CalRecycle, 2016a)

CalRecycle estimates that 12.23 pounds of waste is generated per household per day for residential waste generation sources (CalRecycle, 2013). To ensure a conservative analysis, this generation rate was used because it is the highest generation rate provided by CalRecycle for residential developments. Using this waste generation rate, the long-term operation of the proposed 1,050 residences would generate approximately 12,841.5 pounds of waste per day (equivalent to approximately 6.4 tons of waste per day). It is estimated that the elementary school would generate approximately 0.3 tons of waste per day. Additionally, it is estimated that the proposed 1.2-acre neighborhood commercial retail center would generate 0.3 tons of waste per day, which is based on a solid waste generation rate of 0.046 pounds per square foot per day estimated by CalRecycle (0.3 tons [552 pounds] per day was calculated by multiplying 0.046 pounds per square foot per day by 12,000 square feet of retail floor

area) (CalRecycle, 2013). The proposed 0.8-acre fire station is estimated to generate 1.2 tons of solid waste per day based on a solid waste generation rate of 0.046 pounds per square foot per day (1.2 tons [2,404.5 pounds] per day was calculated by multiplying 0.046 pounds per square foot per day by 52,272 square feet [1.2 acres]). The estimated 8.2 tons of waste per day represents a nominal fraction (approximately 1.0 percent) of the California Street Landfill's daily maximum permitted throughput (829 tons per day). The amount of solid waste generated by the Project would not cause either the California Street Landfill to exceed its respective maximum permitted daily use volumes. Therefore, impacts to landfill capacity associated with the Project's operational activities would be less than significant.

Threshold g) Would the Project comply with federal, state, and local statues and regulations related to solid waste?

The California Integrated Waste Management Act (Assembly Bill (AB) 939), signed into law in 1989, established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. In addition, the bill established a 50% waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted.

In order to assist the City of Colton and the County of San Bernardino in achieving the mandated goals of the Integrated Waste Management Act, and pursuant to City of Colton Municipal Code § 15.58.030, which requires that trash and recycling containers shall be shown on development plans at to allow residents to separate recyclable materials from refuse. Additionally, in accordance with the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code § 42911), adequate areas for collecting and loading recyclable materials is required where solid waste is collected. The collection areas are required to be shown on construction drawings and be in place before occupancy permits are issued. The implementation of these mandatory requirements would reduce the amount of solid waste generated by the Project and diverted to landfills, which in turn will aid in the extension of the life of affected disposal sites. Future residential development on the Project site would be required to comply with all applicable solid waste statutes and regulations; as such, impacts would be less than significant.

4.15.5 CUMULATIVE IMPACT ANALYSIS

The analysis of potential cumulative impacts to utilities and service systems is divided into four general topics of discussion by combining the Thresholds of Significance (listed above in Subsection 4.15.3) into groupings of like topics, as follows: 1) water facilities and availability; 2) wastewater treatment facilities and capacity; 3) storm water drainage facilities; and 4) solid waste collection and disposal.

A. Water Facilities (Thresholds b and d)

To serve future residential development on the Project site, the Project would require the construction of on- and off-site facilities to provide water service to the site. Construction-related activities associated with trenching for and installing water lines on- and off-site would result in physical impacts

to the environment; however, these impacts are inherent in the Project's construction phase and are evaluated throughout this EIR accordingly on both a direct and cumulative basis. There would be no significant environmental effects specifically related to the installation of on- or off-site water facilities. In instances where cumulatively significant impacts have been identified for the Project's construction phase for which feasible mitigation is available, mitigation measures are recommended in each applicable subsection of this EIR.

The cumulative study area for water supply and water service-related issues is the City of Colton's service area. Existing and future development within the City's service area would create a demand for additional water supplies. The San Bernardino Valley 2010 UWMP projects that population within the City's service area will increase to 64,692 persons by the Year 2035 (KJC, 2012, p. 13-1). Increases in population and development intensity would contribute to increases in the overall City-wide water demand.

Based on the Project's Water Supply Assessment (*Technical Appendix M*), build-out of the Project would result in a maximum demand for approximately 1.3 million-gallons per day of water resources (or 1,456.2 AFY) (Carollo, 2016a, p. 2). The Project's Water Supply Assessment also concluded that the City currently has sufficient groundwater to meet existing and future demands, even during dry year conditions (Carollo, 2016a, pp. 19-20). According to the information provided in the San Bernardino Valley 2010 UWMP, the City would not experience any supply deficiencies during normal or dry year conditions with the implementation of the proposed Project and cumulative development within the service area. The water supply programs the San Bernardino Valley 2010 UWMP has in place are expected to offset any supply shortfalls and ensure that adequate water is available to meet the City's demands. Because the City is projected to have adequate water supply for projected growth - including Project-related development and cumulative growth - through at least 2035 in normal, dry, and multiple-dry years, cumulative effects would be less than significant.

B. Wastewater Treatment Facilities (Thresholds a, b, and e)

The proposed Project, as well as other cumulative development projects within the City of Colton would contribute wastewater to the City of Colton wastewater treatment services. The CWRF has an excess treatment capacity of approximately 2.4 MGD based on the average daily flow of 5.6 MGD (City of Colton, 2016c) and a current operating capacity of 8 MGD (Carollo, 2016b, p. 4-1). The Project is estimated to generate approximately 0.27 MGD of wastewater from dwelling units and 0.002 (i.e. 1,800 GPD) for the retail land uses proposed. Implementation of the proposed Project would utilize approximately 11.4% (0.27 MGD/2.4 MGD) of the available, excess treatment capacity at the CWRF. Accordingly, the CWRF has sufficient capacity to treat wastewater generated by the Project. Additionally, after accounting for the excess capacity of the CWRF that would be utilized by the Project (0.27 MGD), sufficient capacity remains at the CWRF (2.13 MGD [calculated by subtracting 0.27 MGD from 2.4 MGD]) to accommodate foreseeable future development and increases in population within the CWRF service area. Furthermore, all new development projects within the City of Colton including the proposed Project, as well as other cumulative development projects, would be required to pay all applicable sewage connection fees and development impact fees, which would fund

new or incremental wastewater conveyance and/or treatment facility expansion, if warranted. Moreover, similar to the proposed Project, other cumulative development projects, such as the Roquet Ranch Project and other cumulative projects (listed in Table 4-1 of this EIR) would be required to prepare sewer studies that would evaluate their individual and cumulative potential to excess the capacity of sewer systems to ensure that sufficient capacity is available to accommodate each project. Compliance with mandatory fees and sewer study requirements would ensure that cumulative development projects, including the proposed Project would not result in wastewater flows that would exceed the capacity of the existing wastewater system, including wastewater treatment facilities. Therefore, the proposed Project would result in a less-than-significant cumulative impact to wastewater facilities.

C. *Storm Water Drainage Facilities (Threshold c)*

The proposed Project's storm drain system is designed to provide sufficient on-site storm water drainage facilities to accommodate on-site storm water runoff. Proposed storm water drainage facilities would be adequately sized to ensure that future peak storm water flows can be adequately captured and conveyed to regional storm water drainage facilities. The Project's Drainage Report (*Technical Appendix I1*) and Drainage Memo (*Technical Appendix I2*) conclude that with existing and planned improvements to the regional storm water drainage facilities, these facilities (Cadena Creek and the Highgrove Channel, both tributary to the Santa Ana River) could sufficiently accommodate storm water flows from the Project site and surrounding areas in the post-development condition. Moreover, other cumulative projects in the vicinity of the proposed Project, such as the Roquet Ranch Project could result in a cumulatively considerable impact regarding storm water drainage facilities. However, the proposed Project as well as other cumulative projects (listed in Table 4-1 of this EIR) would be required to implement mitigation measures to reduce potential impacts to storm water drainage facilities. Accordingly, the Project would result in a less-than-cumulatively considerable impact associated with storm water facilities.

D. *Solid Waste Collection and Disposal (Thresholds f and g)*

The solid waste generated from the Project site would likely be disposed at the California Street Landfill. The California Street Landfill has the capacity to accept the Project's waste, in addition to other solid waste generated in the landfill service areas. As of March 2005 (most recent data available), the California Street Landfill has a maximum permitted throughput of 829 tons per day with a remaining capacity of 6,800,000 cubic yards. The Project is projected to produce 8.2 tons of waste per day, which represents a nominal fraction (approximately 1.0 percent) of the California Street Landfill's daily maximum permitted throughput (829 tons per day). Based on the excess remaining capacity of the California Street Landfill after considering the capacity that would be utilized by the Project, capacity remains at the landfill to sufficiently accommodate reasonably foreseeable future development within the landfill service area. Furthermore, all projects are required to comply with mandated waste reduction programs, which reduce the need for landfill capacity. Additionally, the proposed Project as well as other cumulative projects (listed in Table 4-1 of this EIR) would be required to implement mitigation measures to reduce potential impacts to solid waste collection and disposal.

Accordingly, implementation of the Project would result in a less-than-significant cumulative impact on landfill capacity and solid waste collection and disposal.

4.15.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a): No Impact. There is no potential for the Project to exceed wastewater treatment requirements of the SARWQCB. Wastewater generated at the Project site would be conveyed to and treated by the Colton Wastewater Reclamation Plant, which is under the jurisdiction of the SARWQCB, which ensures that all regulatory requirements regarding wastewater treatment are met.

Threshold b): Less-than-Significant Impact. With the exception of water and sewer facilities that would be installed during the Project's construction period and which are evaluated throughout this EIR. The Project would not require the construction of any new water or wastewater systems that have the potential to cause significant environmental effects. No other new or expanded facilities would be required, and the impact would be less than significant.

Threshold c): Less-than-Significant Impact. Storm water would be collected on the Project site by an on-site drainage system and proposed on-site water quality/detention basins that would be installed during the Project's construction phase and which are evaluated throughout this EIR. The Project would not require the construction of any other new storm water drainage facilities that have the potential to cause significant environmental effects, and the impact would be less than significant.

Threshold d): Less-than-Significant Impact. Supported by information in the San Bernardino Valley 2010 UWMP and the 2016 WSA prepared for this Project (*EIR Technical Appendix M*), there are sufficient water supplies available to service the residential development on the Project site. The Project's proposed residential uses would not exceed available supplies of water, even during dry year conditions, and the impact would be less than significant.

Threshold e): Less-than-Significant Impact. The Project would generate approximately 274,275 gallons (0.45 MGD) of wastewater per day which could be adequately accommodated by the excess capacity of 2.4 MGD of the CWRF. Accordingly, the CWRF has sufficient capacity to treat wastewater generated by Project-related development in addition to existing commitments, and the Project would not result in the need for any new or expanded off-site wastewater facilities (such as conveyance lines, treatment facilities, or lift stations). Because there is adequate capacity at the CWRF to serve the Project's projected sewer demand, impacts would be less than significant.

Threshold f): Less-than-Significant Impact. There is adequate capacity at the California Street Landfill to accept the Project's solid waste. Landfill capacity would not be exceeded as a result of the proposed Project, and the impact would therefore be less than significant.

Threshold g): Less-than-Significant Impact. The Project would comply with all applicable federal, state, and local statutes and regulations related to solid waste disposal, reduction, and recycling, and the impact would therefore be less than significant.

4.15.7 MITIGATION

Impacts would be less than significant; therefore, mitigation is not required.

5.0 OTHER CEQA CONSIDERATIONS

5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

The CEQA Guidelines require that an EIR disclose the significant environmental effects of a project which cannot be avoided if the proposed project is implemented (CEQA Guidelines § 15126(b)). As described in detail in Section 4.0, *Environmental Analysis*, of this EIR, the proposed Project is anticipated to result in impacts to the environment that cannot be reduced to below a level of significance after implementation of relevant standard conditions of approval, compliance with applicable regulations, and application of feasible mitigation measures. The significant impacts that cannot be mitigated to a level below significant consist of the following:

- Aesthetics Threshold c): Significant and Unavoidable Direct Impact. The Project would develop the site in compliance with the site planning, architecture, and landscaping themes presented in Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan, which would ensure compatibility and continuity of development within the Roquet Ranch community and with the surrounding environs. However, the existing hillside setting that characterizes the visual character of the Project site would be permanently altered by the Project during its operation through its proposed grading of some of certain on-site hillsides. Accordingly, the proposed Project would have direct significant impact on the visual character of the Project site. Because the Project's effects to visual character are Project-specific, they would not be cumulatively considerable. The Project's design has been developed to minimize Project-specific effects to visual character in a number of ways. It will place residential neighborhoods and community amenities in clusters design to preserve the vast majority of steep slopes and major ridgelines on the Project site. Proposed residences will not block the sightline of the ridge and their development will be concentrated on the flatter portions of the site to avoid, as much as possible, grading of steep hillsides. Proposed local streets will climb within the graded pads of residences to minimize hillside disturbance, with development "stair-stepped' into existing grades to reflect the existing topography. Further, where feasible, and particularly along the edge of the grading that would be visible from off-site, the Project will use contour grading to blend the natural topography with the manufactures slopes in an effort to create a natural looking hillside. The City has determined that there are no further feasible mitigation measures for the City to impose that would reduce the Project's impacts to the visual quality of the site to levels that are less than significant. As such, the Project would result in significant and unavoidable direct impacts associated with its permanent alteration of the existing visual character or quality of the site.

- Air Quality Thresholds b) and c): Significant Direct and Unavoidable Cumulatively Considerable Impact. Operation of the Project would result in emissions of NO_x that exceed the SCAQMD regional threshold. NO_x is a precursor for ozone (O_3), a pollutant for which the SCAB is in nonattainment under both federal and State criteria. Therefore, emissions of NO_x

associated with long-term operation of the Project would be a significant and unavoidable impact, and is cumulatively considerable. In the event that short-term construction activity and long-term operational activities overlap, impacts would be significant and unavoidable direct and cumulatively considerable for emissions of VOCs, NO_x, and CO. This EIR recommends all feasible mitigation to reduce VOCs, NO_x, and CO emissions and no additional feasible mitigation is available to reduce emissions to below a level of significance. No other mitigation measures are available that are feasible for the Project Applicant to implement and for the City of Colton to enforce that have a proportional nexus to the Project's level of impact. A majority of the overlapping air emissions are from mobile sources (vehicle tailpipe exhaust) that are regulated by federal and State agencies and beyond the control of local governments. As such, when the Project's short-term construction and long-term operational activities overlap, VOCs, NO_x, and CO emissions would violate the SCAQMD air quality standards.

- Traffic Threshold a): Significant Unavoidable Direct and Cumulatively Considerable Impact. Although the Project Applicant would be required to make a fair share fee payment to the City of Colton for roadway improvements, the intersection improvements are not part of an established City of Colton fee program, so there is no assurance that the improvements will be implemented at their time of need. Additionally, some intersections are 1) located outside the geographic limits of the City of Colton; 2) funded by existing mitigation funding programs, for which a timetable for construction is not yet available; and/or 3) not included in any established mitigation funding program (meaning there is no mechanism available for development projects to contribute toward the construction of needed improvements). For this reason, the Project would retain significant and unavoidable direct and cumulatively considerable impacts to various intersections within the Project's study area during both Opening Year Cumulative (2020) and Horizon Year (2040) conditions (see Subsection 4.14, *Transportation / Traffic*, for additional detail).

- Traffic Threshold b): Significant Unavoidable Cumulatively Considerable Impact. Under the Existing Plus Project scenario, the Project would have a significant cumulatively considerable impact on two freeway segments. Although the Project Applicant would be required to make a fair share contribution payment to Caltrans in order to undertake improvements to I-215 (if Caltrans prepares a valid study), the City of Colton cannot assure the recommended improvements would be implemented and/or in place at the time of need. Accordingly, the Project would have a significant unavoidable direct impact to these two freeway segments under the Existing Plus Project scenario. Under the Opening Year Cumulative (2020) scenario and the Horizon Year (2040) scenario, the Project would result in cumulatively considerable impacts to I-215 freeway ramps and mainline segments. Caltrans does not have a funding mechanism in place to allow development projects to contribute fair-share payments to future improvements in order to off-set cumulatively considerable traffic impacts. Accordingly, the Project's contribution of traffic to previously identified, congested freeway facilities under the Opening Year Cumulative (2020) scenario and Horizon Year (2040) conditions would be

considered unavoidable cumulatively considerable impacts. See Subsection 4.14, *Transportation / Traffic* for additional detail.

5.2 SIGNIFICANT IRREVERSIBLE CHANGES WHICH COULD BE CAUSED BY THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

Determining whether the Project and/or future Project-related development actions may result in significant irreversible environmental changes requires a determination of whether key non-renewable resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. Natural resources in the form of construction materials and energy resources would be used in the construction of single-family dwelling units on the Project site. The consumption of these natural resources would represent an irreversible change to the environment. However, due to the relatively small scale of Project-related development, implementation of the Project would have no measurable adverse effect on the local, state-wide, or national availability of such resources, including resources that may be non-renewable (e.g., fossil fuels). Additionally, Project-related development would be required by law to comply with the California Building Standards Code (CALGreen), which would minimize the demand for energy, including energy produced from non-renewable sources. A more detailed discussion of energy consumption is provided below in Subsection 5.4, *Energy Conservation*.

Implementation of the Project would commit future generations to a master-planned residential community with up to 1,050 dwelling units on the Project site. As demonstrated in the analysis presented throughout EIR Section 4.0, the land uses proposed by the Project would be compatible with existing and planned future land uses that surround the Project site and would not result in significant physical environmental effects to nearby properties. Although implementation of the Project would cause significant and unavoidable direct and cumulatively considerable impacts to the environment associated with air quality and traffic, as summarized above in Subsection 5.1, these effects would not commit surrounding properties to land uses other than those that are present under existing conditions or planned by the General Plans for the City of Colton and nearby jurisdictions including the City of Grand Terrace, City of Riverside, and unincorporated Riverside County. For this reason, the Project would not result in a significant, irreversible change to nearby, off-site properties.

Residential, school, commercial, and fire station land uses are not normally associated with hazardous conditions that could cause or contribute to accidents that result in irreversible environmental damage. There is the potential that hazardous materials could be used and/or stored on the Project site during future development activities; however, as concluded in EIR Subsection 4.7, *Hazards and Hazardous Materials*, mandatory compliance with federal, state, and local regulations related to hazardous materials would be required of all contractors working on the Project site during construction, which would ensure the appropriate use, handling, storage, and transport of hazardous and potentially hazardous materials and preclude substantial adverse effects from potential accident conditions. Based on the foregoing information, construction and long-term operation of the Project's land uses would

not have the potential to cause significant irreversible damage to the environment, including damage that may result from upset or accident conditions.

As discussed under Subsection 5.4, neither the Project nor any Project-related component would result in a wasteful consumption of energy. Accordingly, the Project would not result in a significant, irreversible change to the environment related to energy use.

5.3 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

CEQA requires a discussion of the ways in which a proposed project could be growth inducing. The CEQA Guidelines identify a project as growth inducing if it would, either directly or indirectly, foster population growth, result in the construction of additional housing, or remove obstacles to population growth (CEQA Guidelines § 15126.2(d)).

The Project would allow the Project site to be developed with new housing units, which would pull new residents to the Project site. Under CEQA, direct population growth is not considered necessarily detrimental, beneficial, or of little significance to the environment. Typically, population growth would be considered a significant impact under CEQA if it affects the ability of agencies to provide needed public services within their service areas, requires the expansion or construction of new public facilities, or if it can be documented that the potential growth results in substantial, adverse environmental effect. As discussed in detail in EIR Subsection 4.12, *Public Services*, the Project site's future population would not directly or indirectly prevent public agencies from meeting their service obligations and would not result in significant impacts associated with a need for expansion or construction of new public facilities.

Additionally, as discussed in EIR Subsection 4.11, *Population and Housing*, there are no components of the Project that would remove obstacles to development in the local area because the majority of the surrounding area is developed or planned to be developed with residential and commercial uses. Future Project-related development would install new/expanded infrastructure within La Cadena Drive and Center Street; however, this infrastructure would either be master-planned facilities (meaning they would be installed with or without the Project-related development) or they would support the private utility systems on the Project site and would not be available for general public use (meaning they would not indirectly induce off-site growth).

Based on the foregoing analysis, neither the Project nor any Project-related component would result in substantial, adverse growth inducing impacts.

5.4 ENERGY CONSERVATION

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation (DOT), the United States Department of Energy (DOE), and the United States Environmental Protection Agency (EPA) are three federal agencies with substantial influence over energy policies and programs. On the state level, the

Public Utilities Commission (PUC) and the California Energy Commissions (CEC) are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below. Project consistency with applicable federal and state regulations is presented below each regulation.

5.4.1 ENERGY CONSUMPTION ANALYSIS

A. *Federal Regulations*

1. *Intermodal Surface Transportation Efficiency*

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions. The applicable MPO for the City of Colton is the Southern California Association of Governments (SCAG). SCAG's *Regional Transportation Plan/Sustainable Communities Strategy* (*RTP/SCS*) is the applicable planning document for the area.

Project Consistency: Transportation and access to the Project site is provided primarily by the local and regional roadway systems. The Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTEA because no intermodal facilities are planned on or through the Project site. Also, as discussed in EIR Subsection 4.9*, Land Use and Planning*, the Project would not conflict with the SCAG's *RTP/SCS*.

2. *Transportation Equity Act for the 21st Century (TEA-21)*

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of wise transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

Project Consistency: The Project site is located near major transportation corridors with proximate access to the interstate freeway system. The Project would represent infill development that makes efficient use of the established transportation system.

B. California Regulations

1. Integrated Energy Policy Report

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (Public Resources Code § 25301a). The CEC prepares these assessments and associated policy recommendations every two years, with updates on alternate years, as part of the Integrated Energy Policy Report.

The 2014 Integrated Energy Policy Report Update (2014 IEPR Update), focuses on next steps for transforming transportation energy use in California. The 2014 IEPR Update addresses the role of transportation in meeting state climate, air quality, and energy goals; the Alternative and Renewable Fuel and Vehicle Technology Program; current and potential funding mechanisms to advance transportation policy; the status of statewide plug-in electric vehicle infrastructure; challenges and opportunities for electric vehicle infrastructure deployment; measuring success and defining metrics within the Alternative and Renewable Fuel and Vehicle Technology Program; market transformation benefits resulting from Alternative and Renewable Fuel and Vehicle Technology Program investments; the state of hydrogen, zero-emission vehicle, biofuels, and natural gas technologies over the next ten years; transportation linkages with natural gas infrastructure; evaluation of methane emissions from the natural gas system and implications for the transportation system; changing trends in California's sources of crude oil; the increasing use of crude-by-rail in California; the integration of environmental information in renewable energy planning processes; an update on electricity reliability planning for Southern California energy infrastructure; and an update to the electricity demand forecast.

Project Consistency: The 2014 IEPR Update is a State Policy report. An individual development proposal such as the Project has no ability to comply with or conflict with this report.

2. State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access.

Project Consistency: The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The Project would facilitate access to and take advantage of existing infrastructure systems, promote walking and biking as alternative forms of transportation to reduce vehicle miles traveled by automobile, and promote land use compatibility through the

development of residential uses adjacent to by similarly planned uses. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan.

3. California Code Title 24, Part 6, Energy Efficiency Standards

California Code Title 24, Part 6 (also referred to as the California Energy Code), was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. California's building efficiency standards are updated on an approximately three-year cycle. The 2013 Standards for building construction, which went into effect on July 1, 2014, improved upon the former 2008 Standards for residential and nonresidential buildings.

Project Consistency: The Project is required by State law to be designed, constructed, and operated to meet or exceed Title 24 Energy Efficiency Standards. On this basis, the Project is determined to be consistent with, and would not interfere with, nor otherwise obstruct implementation of Title 24 Energy Efficiency Standards.

4. Pavley Fuel Efficiency Standards (AB 1493)

In California, AB 1493 establishes fuel efficiency ratings for model year 2009-2016 passenger cars and light trucks.

Project Consistency: AB 1493 is applicable to the Project because model year 2009-2016 passenger cars and light duty truck vehicles traveling to and from the Project site are required by law to comply with the legislation's fuel efficiency requirements. On this basis, the Project would not interfere with, nor otherwise obstruct implementation of AB 1493.

5. California Renewable Portfolio Standards (SB 1078)

SB 1078 requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20 percent by 2010 and 33 percent by 2020.

Project Consistency: Energy directly or indirectly supplied to the Project by electric corporations is required by law to comply with SB 1078.

5.4.2 ENERGY CONSUMPTION ANALYSIS

In compliance with CEQA Guidelines Appendix F, below is an analysis of the proposed Project's anticipated energy use to determine if the Project would result in the wasteful, inefficient or unnecessary consumption of energy, or result in a substantial increase in demand or transmission

service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure.

In addition, CEQA Guidelines Appendix F states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- Increasing reliance on renewable energy sources.

A. Energy and Fuel Use for Project Construction

The Project's construction process would consume electrical energy and fuel. Project-related construction would represent a "single-event" electric energy and fuel demand and would not require on-going or permanent commitment of energy or diesel fuel resources for this purpose. Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project-related construction. The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower hours per gallon (hp-hr-gal.), obtained from CARB 2013 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines. Construction workers would also consume fuel traveling to and from the site. As generated by EMFAC 2014, an aggregated fuel economy of light duty automobiles (vehicle class within the California sub-area for a 2019 calendar year) are calculated to have a fuel efficiency of 28.17 miles per gallon (MPG).

Indirectly, construction energy efficiencies and energy conservation would be achieved through the use of bulk purchases, transport, and use of construction materials. The 2014 IEPR published by the CEC shows that fuel efficiencies are improving for on and off-road vehicle engines due to more stringent government requirements. The amount of energy and fuel use anticipated by the Project's construction activities would be typical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies. CCR Title 13, Title 13, Motor Vehicles, Section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints. As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

B. Energy Use for Project Operation

1. Transportation Energy Demands

Energy that would be consumed by Project-generated traffic is a function of total vehicle miles traveled (VMT) and estimated vehicle fuel economies of vehicles accessing the Project site. Fuel would be

provided by commercial vendors, which are required to comply with state and federal requirements regarding energy efficiency. Trip generation and VMT generated by up to 1,050 residential units on the Project site would be consistent with other residential uses similar scale and configuration as reflected in the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Ed., 2012); and CalEEMod v2013.2.2. That is, the Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of LDVs and HDVs to alternative energy sources (e.g., electricity, natural gas, bio fuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. Project-related development also would install sidewalks that would facilitate and encourage pedestrian and bicycle access and subsequently reduce VMT and associated energy consumption. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

2. Facility Energy Demands

Project residential units and associated maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by SoCal Gas and electricity would be supplied to the Project by Southern California Edison (SCE). In Appendix 3.1 of the Project's greenhouse gas report (*Technical Appendix E*), Urban Crossroads, Inc. calculated the Project's mitigated operational energy demands to be 27,329,754 kBTU/year of natural gas and 7,415,619 kWh/year of electricity (Urban Crossroads, Inc., 2016c, Appendix 3.1).

Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use, or "plug-in" energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.).

3. Energy Consumption Summary

For new development such as that proposed by the Project, compliance with California Building Standards Code Title 24 energy efficiency requirements (CALGreen) are considered demonstrable evidence of efficient use of energy. Residential development on the Project site would be required to promote and provide for energy efficiencies beyond those required under other applicable federal or State of California standards and regulations, and in so doing would meet all California Building Standards Code 24 standards. Moreover, energy consumed by the Project's is expected be comparable to, or less than, energy consumed by other residential uses of similar scale and intensity that are constructed and operating in California. On this basis, the Project would not result in the inefficient,

wasteful, or unnecessary consumption of energy. Furthermore, the Project would not cause or result in the need for additional energy facilities or energy delivery systems.

5.5 EFFECTS FOUND NOT TO BE SIGNIFICANT AS PART OF THE INITIAL STUDY PROCESS

CEQA Guidelines § 15128 requires that an EIR:

> *"…contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR."*

An Initial Study was prepared for the proposed Project, which is included as *Technical Appendix A* to this EIR. As concluded by the Project's Initial Study, two (2) environmental subjects were determined by the City of Colton to have no potential to be significantly impacted by the Project or any Project-related component. A brief summary of the two (2) issues found not to be significant is presented below, with a more detailed analysis provided in the Project's Initial Study contained in *Technical Appendix A*.

A. *Agricultural Resources and Forestry Resources*

According to the State of California Department of Conservation Farmland Mapping and Monitoring Program (FMMP), the entire Project site contains land classified as "Grazing Land" and does not contain any soils mapped by the Department of Conservation as "Prime Farmland," "Unique Farmland," or "Farmland of State Importance" (CDC, 2014). Accordingly, implementation of the Project would not convert Prime Farmland, Unique Farmland or Farmland of State Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use. Thus, no impact would occur.

The land within the boundary of the Project site or immediately surrounding the Project site are not used for agricultural production and include vacant undeveloped land, and lands used for single-family residential, light industrial, and commercial uses. The Project site and the immediate surrounding properties are zoned for residential, light industrial, and commercial uses. According to the State of California Department of Conservation Williamson Act Maps for the County of San Bernardino, the Project site is not encumbered by a Williamson Act contract (CDC, 2016). Based on the foregoing, there is no potential for development on the Project site to conflict with existing zoning for an agricultural use or a Williamson Act Contract. No impact would occur.

The Project site also does not contain forest land or lands zoned for forest land, timberland, or timberland zoned Timberland Production and no such zoned forest lands are located adjacent to or within the vicinity of the Project site. Accordingly, implementation of the Project would not result in the loss of forest land or conversion of forest land to non-forest use or conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220 (g),

timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 511104 (g). No impacts would occur.

For the reasons stated above, implementation of the Project would result in no impact to Agriculture and Forestry Resources.

B. Mineral Resources

The proposed Project site is not located in any mineral resource zones (MRZs) identified by the City, with the exception of a small portion of MRZ-2 that occurs on the southern portion of the Project site. The area designated by the City as MRZ-2 corresponds to areas where geologic data indicates that significant Portland cement concrete (PCC)-grade aggregate resources are present. The presence of MRZ-2 on the site is associated with the Santa Ana River due to the presence of alluvial sediments that are considered PCC-grade aggregate. (City of Colton, 2013c, Exhibit 4.11-1) The Project site is not currently utilized for mineral resource extraction activities, nor have such activities previously been known to occur within the Project site.

The Colton General Plan designates the Santa Ana River corridor as Open Space-Resource (OS-RS), with the remaining areas of MRZ-2 that occur on-site zoned for either residential or light industrial (M-1) land uses. According to the Colton Municipal Code, resource mining activities are only permitted in the Heavy Industrial zone (M-2); therefore, none of the zoning designations that currently apply to the Project site permit mining activities (City of Colton, 2016a, § 18.28.010). As such, future aggregate mining within the Project site is considered improbable. Moreover, the majority of MRZ-2 occurs within the Santa Ana River corridor, within which the Project would have a negligible footprint, and thus would not preclude or limit future mineral resource extraction elsewhere within the Santa Ana River corridor. Accordingly, implementation of the Project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State of California and a less-than-significant impact to Mineral Resources would occur.

6.0 ALTERNATIVES TO THE PROPOSED PROJECT

CEQA Guidelines § 15126.6(a) describes the scope of analysis that is required when evaluating alternatives to proposed projects, as follows:

> *"An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable 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 selection of 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."*

As discussed in Section 4.0, *Environmental Analysis*, the proposed Project would result in significant adverse environmental effects that cannot be mitigated to below levels of significance after the implementation of Project design features, mandatory regulatory requirements, and feasible mitigation measures. The unavoidable significant impacts are:

- Aesthetics (Significant and Unavoidable Direct Impact). The Project would develop the site in compliance with the site planning, architecture, and landscaping themes presented in Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan, which would ensure compatibility and continuity of development within the Roquet Ranch community and with the surrounding environs. However, the existing hillside setting that characterizes the visual character of the Project site would be permanently altered by the Project during its operation through its proposed grading of some of certain on-site hillsides. Accordingly, the proposed Project would have direct significant impact on the visual character of the Project site. Because the Project's effects to visual character are Project-specific, they would not be cumulatively considerable. The Project's design has been developed to minimize Project-specific effects to visual character in a number of ways. It will place residential neighborhoods and community amenities in clusters design to preserve the vast majority of steep slopes and major ridgelines on the Project site. Proposed residences will not block the sightline of the ridge and their development will be concentrated on the flatter portions of the site to avoid, as much as possible, grading of steep hillsides. Proposed local streets will climb within the graded pads of residences to minimize hillside disturbance, with development "stair-stepped' into existing grades to reflect the existing topography. Further, where feasible, and particularly along the edge of the grading that would be visible from off-site, the Project will use contour grading to blend the natural topography with the manufactures slopes in an effort to create a natural looking hillside. The City has determined that there are no further feasible mitigation measures for the City to impose that would reduce the Project's impacts to the visual quality of the site

to levels that are less than significant. As such, the Project would result in significant and unavoidable direct impacts associated with its permanent alteration of the existing visual character or quality of the site.

- Air Quality (Significant and Unavoidable Direct and Cumulatively Considerable Impact). Even with incorporation of Project design features and mitigation measures, operation of the Project would still result in emissions of nitrogen oxides (NO_x) that exceed the South Coast Air Quality Management District (SCAQMD) regional threshold. NO_x is a precursor for ozone (O_3), a pollutant for which the South Coast Air Basin (SCAB) is in nonattainment under both federal and State criteria. Therefore, emissions of NO_x associated with long-term operation of the Project would be a significant and unavoidable impact, and is cumulatively considerable. Additionally, in the event that short-term construction activity and long-term operational activities overlap, the Project would result in significant and unavoidable direct and cumulatively considerable impacts due associated with emissions of volatile organic compounds (VOCs), NO_x, and carbon monoxide (CO).

- Transportation and Traffic (Local Roadway System) - Significant and Unavoidable Direct and Cumulatively Considerable Impact. Although mitigation measures adequately address the Project's cumulatively considerable impacts to City of Colton roadway facilities through mitigation fee payments, there is no absolute assurance that all of the needed physical improvements will be in place before their levels of service drops to a deficient level. In addition, some impacted facilities are located in other jurisdictions and fee programs do not exist that accept fees from projects in the City of Colton. Because the timing of physical improvements to impacted facilities is not assured, the Project's direct and cumulatively considerable impacts are regarded as significant and unavoidable.

- Transportation and Traffic (Congestion Management Plan [CMP] facilities) – Significant and Unavoidable Direct and Cumulatively Considerable Impact. All CMP facilities in the Project's study area, including the I-215 mainline segments, associated ramp merge/diverge areas, and ramps, are under the jurisdiction of Caltrans. As such, the City of Colton cannot assure the construction of improvements to CMP facilities that may be needed to improve traffic flow. Furthermore, Caltrans does not have any funding mechanism in place to allow development projects to contribute a fair-share payment to contribute to future improvements and off-set cumulatively considerable traffic impacts. Thus, the Project's direct and cumulatively considerable impacts to CMP facilities would be significant and unavoidable.

6.1 ALTERNATIVES UNDER CONSIDERATION

CEQA Guidelines § 15126.6(e) requires that an EIR include an alternative that describes what would reasonably be expected to occur on the property in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services (i.e., "no project" alternative). For development projects that include a revision to an existing land use

plan, the "no project" alternative is considered to be the continuation of the existing land use plan into the future. The proposed Project does not include a revision to an existing land use plan. For projects other than a land use plan (for example, a development project on an identifiable property), the "no project" alternative is considered to be a circumstance under which the project does not proceed (CEQA Guidelines § 5126(e)(3)(A-B). For the alternatives analysis in this EIR, the potential scenario where the Project does not proceed is considered to be the "No Project/No Development Alternative."

The following scenarios are identified by the City of Colton as potential alternatives to implementation of the proposed Project. The Reduced Density Alternative is considered the Environmentally Superior Alternative pursuant to CEQA Guidelines § 15126.6.

6.1.1 NO PROJECT/ NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative considers no development/disturbance on the Project site beyond that which occurs under existing conditions. As such, the approximately 336.2-acre Project site would remain undeveloped (with the exception of the Roquet Paving Company facility that operates on the eastern portion of the Project site) and vacant (with no habitable structures) largely undeveloped hillside terrain containing natural vegetation with scattered dirt trails. As with under existing conditions, an SCE easement containing an overhead electric power transmission line generally bisects the Project site, trending southeast in the northern portion of the Project site, while an additional transmission line occurs along the southern boundary of the Project site and exits the site at the eastern boundary. Under this Alternative, no improvements would be made to the Project site and none of the Project's roadway, utility, and other infrastructure improvements would occur. This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project site in its existing condition.

6.1.2 OFF-SITE LOCATION ALTERNATIVE

CEQA does not require that an EIR always include an analysis of alternative sites. However, if the surrounding circumstances make it reasonable to consider an alternative site then this alternative should be considered and analyzed in the EIR. In making the decision to include or exclude analysis of an alternative site, the "key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR" (CEQA Guidelines § 15126.6(f) (2)).

Based on the City of Colton's review of aerial photography and properties known to the City as being available for development within the City of Colton, the only other available undeveloped property of similar size (approximately 336.2 acres), that the Project Applicant has the reasonable possibility of controlling is the property that abuts the Project site to the west (hereinafter referred to as the "Off-site Location"). As shown in Figure 6-1, *Off-Site Location Alternative*, the Off-site Location is bound to the north by undeveloped/vacant land, to the east by undeveloped/vacant land (the Project site), to the south by Old Pellissier Road, and to the west by the Santa Ana River. The Off-Site Location comprises

approximately 227.6 acres (108.6 acres less than the Project site), and is currently owned by the City of Riverside. The Off-site Location Alternative (OLA) would develop the off-site location consistent with the land use types and acreages proposed in the Roquet Ranch Specific Plan, except for a reduction in the acreage of land designated as Open Space-Resource by 108.6 acres (the difference between the acreage of the Project site [336.2 acres] and the acreage of the Off-site Location [227.6 acres]). This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would avoid physical environmental impacts to the Project site through developing the Project at an alternate location.

6.1.3 REDUCED FOOTPRINT ALTERNATIVE

As depicted on Figure 6-2, *Reduced Footprint Alternative*, the Reduced Footprint Alternative (RFA) considers a reduction in the overall development footprint of the proposed Project. The RFA avoids development of the areas of the Project site located to the north of Planning Area 2 and Planning Area 12, converting Planning Areas 1, 4, 5, and 14A, 14B, 15, and 17 to the Open Space-Resource designation (resulting in an increase in the acreage of land designated as Open Space-Resource by 51.5 acres [from 199.7 acres to 251.2 acres]), and combining them into Planning Areas 13A and 13C. The RFA would increase the densities of Planning Areas 2, 3, and 7 (shown as Planning Areas 1, 2, and 4 [respectively] on Figure 6-2) from Low Density Residential to Medium Density Residential, which would result in an identical maximum number of dwelling units compared to the proposed Project. Under the RFA, development within Planning Area 3 would avoid locating development on the portions of Planning Area 3 that are located at higher elevations, and would instead cluster higher density development within the portions of Planning Area 3 that are located at lower elevations. The RFA would result in the reduction of residential development acreage by 25.9 acres (from 85.4 acres to 59.5 acres) and an increase in the overall net residential target density from 10.2 du/ac to 14.7 du/ac. Additionally, the RFA would reduce the acreage of Open Space-Recreation within the Project by 20.4 acres (from 19.3 acres to 1.9 acres), and reduce the acreage dedicated to roadways by 5.2 acres (from 16.5 acres to 11.3 acres).

The RFA also precludes development of roadways to the north of Planning Areas 2 and 12. Under the RFA, only the segment of Roquet Ranch Road located between Pellissier Road and Street "A" would be constructed. A dirt maintenance/access road would be provided between the intersection of Street "A" and Roquet Ranch Road that would extend northward to the proposed water tank in Planning Area 20A. All other components of the RFA would be the same as described for the proposed Project in EIR Section 3.0, *Project Description.* The RFA was selected by the Lead Agency to consider an alternative that would reduce the Project's impacts to biological resources, air quality, and greenhouse gas emissions.

6.1.4 REDUCED DENSITY ALTERNATIVE

The Reduced Density Alternative (RDA) contemplates the development of a residential community that would be similar to the proposed Project, but would have a reduced overall residential density when compared to the proposed Project. As depicted on Figure 6-3, *Reduced Density Alternative,*

Figure 6-1

OFF-SITE LOCATION ALTERNATIVE

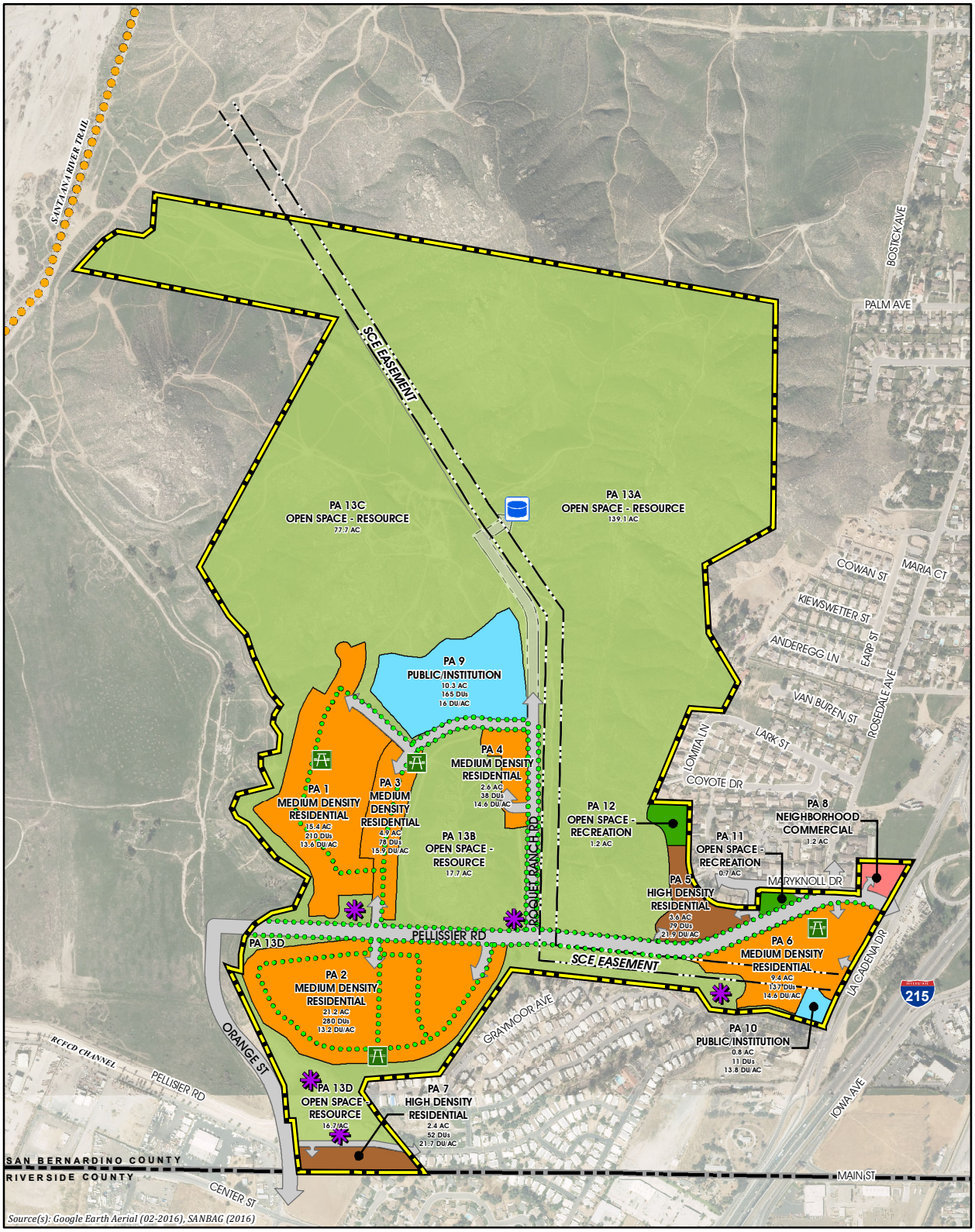


Figure 6-2

0 225 450 900 Feet

REDUCED FOOTPRINT ALTERNATIVE

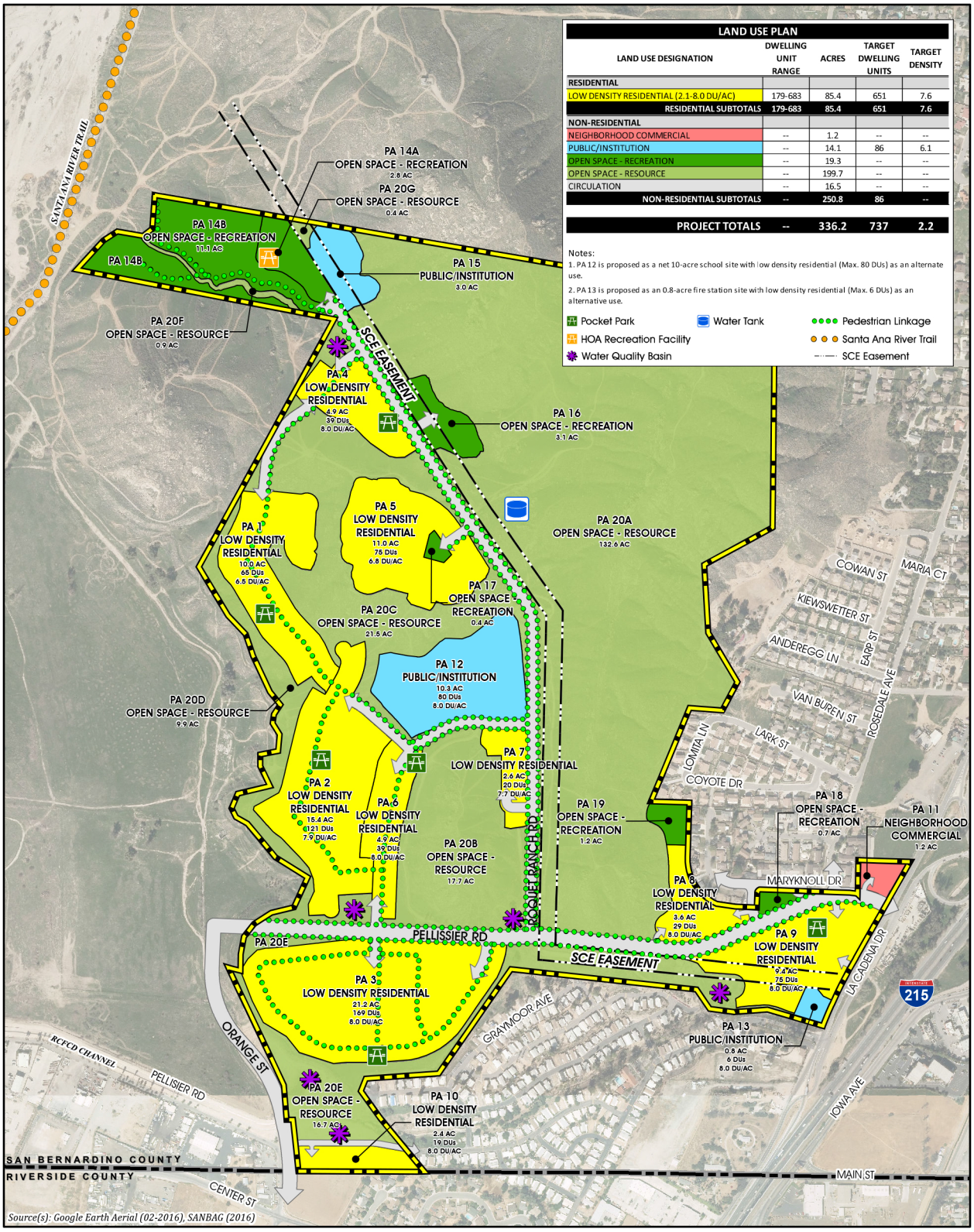


Figure 6-3

REDUCED DENSITY ALTERNATIVE

under the RDA, the development of the residential uses would occur within the same development footprint within the Project site as identified for the proposed Project. However, the RDA would convert Planning Areas 4, 6, and 9 from a Medium Density Residential land use designation to a Low Density Residential designation (8.0 du/ac), and would convert Planning Areas 8 and 10 from a High Density Residential land use designation to a Low Density Residential designation (8.0 du/ac). The RDA would result in the development of up to 737 dwelling units within the Project site. The RDA would not modify the densities of the five Planning Areas designated by the proposed Project as Low Density Residential. Under the RDA, should the school district or the fire department elect not to construct facilities within Planning Areas 12 and 13 (respectively), the Low Density Residential (8.0 du/ac) land use designation would be the alternate use for these Planning Areas rather than the Medium Density Residential land use designation. Accordingly, the RDA would reduce the total number of dwelling units that would be constructed at the Project site by 313 residential units, which equates to an approximate 30% decrease in dwelling units. All other components of the Specific Plan under the RDA would remain unchanged compared to the proposed Project, including the neighborhood commercial retail, roadways, parks, open space, and utility facilities. Pursuant to CEQA Guidelines § 15126.6, the RDA has been identified as the Environmentally Superior Alternative.

6.2 ALTERNATIVES CONSIDERED AND REJECTED

An EIR is required to identify any alternatives that were considered by the Lead Agency but were rejected as infeasible. Among the factors described by CEQA Guidelines § 15126.6 in determining whether to exclude alternatives from detailed consideration in the EIR are: a) failure to meet most of the basic project objectives, b) infeasibility, or c) inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to the proposed Project, CEQA Guidelines § 15126.6(f) (1) notes:

> *"Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site…"*

Alternatives can be dismissed from analysis because either: 1) they could not accomplish the basic objectives of the Project, 2) they would not have resulted in a reduction of significant adverse environmental impacts, or 3) they were considered infeasible to construct or operate. A summary of the alternatives that were considered but rejected from further evaluation are described below.

6.2.1 GENERAL PLAN CONSISTENCY ALTERNATIVE

The General Plan Consistency Alternative (GPCA) considers development of the site with land uses that are consistent with the existing applicable Colton General Plan land use designations. As shown on Figure 2-4, *Existing General Plan Land Use Designations*, the Colton General Plan designates 243.3 acres of the Project site as "Very Low Density Residential" (0.1-2 d.u./ac), 17.6 acres as "Low Density Residential" (2.1-8 d.u./ac), 49.2 acres as "Medium Density Residential" (8.1-16 d.u./ac), 14.0

acres as "High Density Residential" (16.1-22 d.u./ac), 1.0 acre as "Neighborhood Commercial," and 9.7 acres as "Light Industrial." Development of the Project site consistent with the existing Colton General Plan land use designations would result in the development of up to 1,721 dwelling units on 324.1 acres, 211,266 square feet of Light Industrial buildings on 9.7 acres (211,266 square feet calculated by multiplying 9.7 acres by 0.5 maximum FAR), and 21,780 square feet of Neighborhood Commercial buildings on 1.0 acre (21,780 square feet calculated by multiplying 1.0 acre by 0.5 maximum FAR).

The current General Plan land use designations are applicable to the entire Project site, including the hilly portions of the site where development would likely be infeasible due to the amount of grading that would be required for development in these areas. In comparison to the proposed Project, this Alternative would allow for the development of up to 1,721 dwelling units (compared to up to 1,050 dwelling units proposed by the Project), 211,266 square feet of Light Industrial (compared to no light industrial development proposed by the Project), and 21,780 square feet of Neighborhood Commercial buildings (compared to 26,136 square feet of Neighborhood Commercial development proposed by the Project). Additionally, the Project proposes 19.3 acres of recreational open space (parks) as well as 199.7 acres of natural open space (Open Space-Resource), whereas the GPCA does not designate any areas within the Project site as open space/parkland. Thus, because this Alternative would allow development within a substantially larger footprint, the development intensity that would result from implementation of the GPCA would be much greater than the development intensity proposed by the Project, and would result in increased vehicular trips, with corresponding increases in the potential for impacts to traffic, air quality, noise, and greenhouse gas emissions, as compared to the proposed Project. Furthermore, the GPCA would result in increased physical impacts as compared to the proposed Project which would have a greater impact on biological resources due to the larger development footprint.

Because the GPCA would be likely to substantially increase several of the potential environmental impacts of the proposed Project without avoiding any of the environmental impacts of the proposed Project, the GPCA was considered but rejected.

6.2.2 ALTERNATIVE USE ALTERNATIVE

The Lead Agency considered a non-residential alternative that would take advantage of the natural topography and existing trail amenities at the Project site. The Alternative Use Alternative (AUA) considers the development of the entirety of the Project site with a regional park. The AUA would result in the construction of a main roadway that would traverse the site in a north-south orientation (similar to the configuration of Roquet Ranch Road under the proposed Project) that would feature a variety of active and passive recreational amenities throughout the Project site, as well as parking lots to accommodate the parking needs of visitors. Under the AUA, vehicular access to the site would be similar to that which is proposed by the Project, with access from the south provided via Orange Street, and access from the east provided via Pellissier Road.

The AUA would fail to achieve all of the Project objectives. Furthermore, no entity has been identified that could purchase the property for use as a regional park. The AUA would not provide high-quality housing opportunities and neighborhood-oriented retail services, and would also be inconsistent with the General Plan land use designations which envision the development of the Project site with residential, commercial, and light industrial land uses. Accordingly, the AUA was considered but rejected.

6.3 ALTERNATIVE ANALYSIS

The following discussion compares the impacts of each alternative considered by the Lead Agency with the impacts of the proposed Project, as detailed in Section 4.0, *Environmental Analysis*, of this EIR. A conclusion is provided to indicate if selection of the alternative would result in one of the following: (1) reduction or elimination (avoidance) of the proposed Project's impact, (2) a greater impact than would occur under the proposed Project, (3) the same impact as the proposed Project, or (4) a new impact in addition to the proposed Project's impacts. Table 6-1, *Alternatives to the Proposed Project - Comparison of Environmental Impacts*, at the end of this Section compares the environmental impacts of the alternatives with those of the proposed Project and identifies the ability of each alternative to meet the basic objectives of the Project.

The intent of the proposed Project is to develop an active master-planned mixed-use community that offers a range of housing options and preserves the existing natural hillside setting. The Project would achieve this primary intent through the following basic objectives.

A. To develop a master-planned community that is compatible with the surrounding areas.

B. To provide high-quality housing opportunities that are marketable and accessible within the City of Colton.

C. To preserve natural hillsides, natural habitats, and natural drainage courses within open space where feasible.

D. To provide a range of housing types and styles that appeal to a diversified range of households and income levels.

E. To cluster development areas in order to provide neighborhood parks with active and passive recreational amenities for residents of the Roquet Ranch community and the City of Colton as a whole.

F. To provide neighborhood-oriented retail services which generate sales tax revenue for the City of Colton.

G. To provide sites available to the Colton Unified School District (CUSD) and Colton Fire Department (CFD) for their potential use as an elementary school site and fire station site, respectively.

6.3.1 NO PROJECT / NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative considers no development/disturbance on the Project site beyond that which occurs under existing conditions. As such, the approximately 336.2-acre Project site would remain undeveloped hillside terrain containing natural vegetation and vacant (with no habitable structures) with the exception of the following: a) scattered dirt trails, b) overhead electric power transmission lines bisecting the Project site (trending southeast in the northern portion of the Project site) and occurring along the southern boundary of the Project site, and c) several small office/storage mobile trailers, asphalt parking lot, and equipment storage yard associated with the Roquet Paving Company which occur on the southeast portion of the Project site. Under the No Project/No Development Alternative, no improvements would be made to the Project site and none of the Project's roadway, utility, or other infrastructure improvements would be constructed. This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the subject property in its existing condition.

A. Aesthetics

The Project site contains visual resources including hills, a prominent ridgeline, and uninterrupted open spaces, which may be visible from scenic vistas located in the City of Colton. The Project site is not visible from a State-designated scenic highway corridor. Under existing conditions, the site contains mostly hilly terrain containing natural vegetation that is undeveloped and vacant (with no habitable structures), with the exception of the Roquet Paving Inc. facility that occurs on the southeast portion of the Project site. Under the No Project/No Development Alternative, the visual character and quality of the site would be maintained in its existing condition. No homes, parks, school, fire station, commercial retail, or associated infrastructure would be introduced on the site and the site would not be developed pursuant to the standards and guidelines of the Roquet Ranch Specific Plan. The No Project/No Development Alternative would result in no impacts to scenic resources or scenic vistas, and would preserve the existing visual character or quality of the site in its existing condition.

While the proposed Project's impacts to create a new source of light or glare that would adversely affect day or nighttime views in the area would be less than significant pursuant to compliance with City of Colton Municipal Code § 18.42.090 and § 18.42.100, the No Development/No Project Alternative would avoid any potential to create a new source of light or glare that would adversely affect day or nighttime views in the area.

Accordingly, any potential impacts associated with aesthetics would be avoided under the No Development/No Project Alternative.

B. Air Quality

Under the No Project/No Development Alternative, no development would occur on the Project site; therefore, there would be no potential sources of short-term (construction), long-term (operational) air pollution emissions, or potential sources of construction-related odors associated with the proposed Project. Under this Alternative, because no construction would occur on the Project site, there would be no Project-related operational emissions that would exceed the daily criteria pollutant threshold established by the SCAQMD for emissions of NO_x. Therefore, the proposed Project's significant direct and cumulatively considerable impacts associated with operational emissions of NO_x would be avoided through implementation of the No Project/No Development Alternative. Under this Alternative, because the site would not be developed with the Project and would not generate vehicular trips beyond those that are generated by the Roquet Paving Company facility, there would be no Project-related operational emissions that would exceed the criteria pollutant thresholds established by the SCAQMD for daily emissions of NO_x; therefore, the proposed Project's significant and direct cumulatively considerable impact would be avoided. Additionally, since no overlap of construction or operational activities associated with the Project would occur at the site under the No Project/No Development Alternative, there would be no Project-related emissions of VOCs, NOx, or CO, and therefore the Project's significant direct and cumulatively considerable impacts associated with emissions of VOCs, NO_x, and CO would be avoided. Accordingly, any potential impacts associated with air quality would be avoided under this Alternative.

C. Biological Resources

The No Project/No Development Alternative would leave the Project site in its existing condition and no development would occur on the site; therefore, there would be no potential impact to southwestern willow flycatcher or its critical habitat, least Bell's vireo, coastal California gnatcatcher critical habitat, or burrowing owl. Therefore, the proposed Project's significant direct and cumulatively considerable impacts to these species and their habitat would be avoided under this Alternative. This Alternative would also avoid impacts to 0.8 acre of black willow thicket (considered to be high priority habitat for inventory by CDFW) and 0.5 acre of non-wetland streambeds and riparian vegetation (under CDFW jurisdiction) that the proposed Project would impact. In addition, because the No Project/No Development Alternative would leave the Project site in its existing condition and no development would occur on the site; there is no potential to impact nesting birds protected by the MBTA and the California Fish and Game Code; therefore, under this Alternative, there would be no potential to interfere substantially with the movement of any migratory bird protected by the MBTA. This Alternative also avoid the potential to conflict with the City of Colton Street Tree Ordinance (Municipal Code Chapter 12.20 Trees and Shrubs), whereas the proposed Project would result in significant direct and cumulatively considerable impacts with respect to this ordinance. Accordingly, any potential impacts associated with biological resources would be avoided under the No Project/No Development Alternative.

D. Cultural Resources

No significant historic resources were identified at the Project site as part of the Project's Cultural Resources Assessment prepared by BFSA (*Technical Appendix F1*). BFSA identified two significant archaeological sites at the site which would not be directly impacted by the Project (not located within the development footprint), but may incur indirect adverse impacts during grading and construction activities. The No Project/No Development Alternative would not entail any construction activities, and thus would avoid any impacts to significant archaeological sites. No known or unique paleontological resources exist at the site; however, due to the presence of Quaternary older alluvial valley and alluvial fan sediments at the property, there is the potential that significant nonrenewable paleontological resources could be encountered during ground-disturbing construction activities associated with Project construction. Because the No Project/No Development Alternative would not entail any ground-disturbing construction activities, it would avoid impacts to significant paleontological resources. No cemetery or human remains are known to be present on the Project site. Because no ground-disturbing activities would occur under this Alternative, there is no potential to uncover any previously unknown human remains. This Alternative would avoid all of the ground-disturbing activities of the proposed Project; therefore, this Alternative would avoid all of the proposed Project's impacts (considered less-than-significant with mitigation) to cultural resources. Accordingly, any potential impacts associated with cultural resources would be avoided under this Alternative.

E. Geology and Soils

Under the No Project/No Development Alternative, no grading and/or earthmoving activities would occur and no habitable structures would be constructed on the Project site. Therefore, there would be no potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure (including liquefaction) and landslides. Under this Alternative, on-or off-site landslide, lateral spreading, subsidence, liquefaction, collapse, or expansive soils could occur as a result of natural forces; however, because no development would occur, there would be no structures located on a geologic unit or soil that is unstable.

Under this Alternative, because no development would occur, soil erosion and the loss of topsoil due to natural forces (wind and rain) would continue in the absence of regulations such as a NPDES, a SWPPP, and SCAQMD Rule 403, Fugitive Dust, which would regulate the proposed Project so that potential impacts associated with soil erosion and the loss of topsoil would be mitigated. Accordingly, any potential impacts associated with geology and soils, with the exception of soil erosion and the loss of topsoil, would be avoided under this Alternative.

F. Greenhouse Gas Emissions

As noted in EIR Subsection 4.6, *Greenhouse Gas Emissions*, an individual project such as the proposed Project does not have the potential to result in direct and significant GCC-related effects in the absence of cumulative sources of GHGs. Under the No Project/No Development Alternative, no development would occur on the Project site; therefore, there would be no potential sources of cumulative near-term

or long-term GHG emissions. Accordingly, because no development would occur under this Alternative, the proposed Project's less-than-significant impacts associated with the generation of GHG emissions would be avoided under this Alternative. In addition, because no development would occur under this Alternative, the proposed Project's potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, would be avoided under this Alternative.

G. *Hazards and Hazardous Materials*

Based on the findings of a site-specific Phase I ESA, there is the potential for soil contamination to exist in connection with historical operation of the existing Roquet Paving Inc. facility on the southeast portion of the Project site. Additionally, existing on-site structures at the Roquet Paving Inc. facility may include asbestos containing materials (ACMs) and lead based paint (LBP). As such, implementation of the proposed Project would result in significant impacts due to disturbance and removal of these materials, although mitigation measures were identified to reduce these impacts to less than significant. Because no development would occur under the No Project/No Development Alternative, no potential impacts associated with the routine transport, use, or disposal of hazardous materials or foreseeable upset or accident conditions involving the release of hazardous materials into the environment, would occur. Under this Alternative, the potentially contaminated soil and ACMs and LBPs existing at the Roquet Paving Inc. facility would not be disturbed; therefore, there is no potential to expose construction workers or residents to ACMs, LBPs, or PCBs.

The nearest schools to the Project site are Grand Terrace High School, (located approximately 0.4-mile east of the Project site), Terrace Mills Middle School (located approximately 1.6 miles east of the Project site), and Patricia Beatty Elementary School (located approximately 1.8 miles southwest of the Project site). The Project proposes a 10.3-acre school site within Planning Area 12. Because no development would occur under this Alternative, there is no potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

The Project site is not listed on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The Project does not lie within an airport land use plan, or within two miles of a public airport or public use airport. Therefore, neither the proposed Project nor the No Project/No Development Alternative have the potential to result in impacts associated with hazardous materials sites or airport land use plans.

The Project site is located within a "Very High Fire Hazard Severity Zone" susceptible to wildland fires. The proposed Project would be subject to mandatory compliance with the fuel modification requirements and building design requirements of the City of Colton Fire Department, as well as compliance with Section 701A of the California Building Code, which would reduce impacts to less than significant with respect to wildland fire hazards. Under the No Project/No Development Alternative, no additional wildfire abatement components would be implemented, and the site would remain mostly vacant (with the exception of the Roquet Paving Company facility) and retain its status

as a "Very High Fire Hazard Severity Zone." Therefore, in the absence of the conversion of the majority of the Project site to a developed community with wildfire abatement components, the severity of wild fire hazards at the site would be higher under the No Project/No Development Alternative.

Accordingly, the proposed Project's potential impacts associated with hazards and hazardous materials would be avoided under this Alternative.

H. Hydrology and Water Quality

Because no grading or development of the Project site would occur under the No Project/No Development Alternative, no changes to existing hydrology and drainage conditions would occur. No storm water improvements would be constructed and rainfall would continue to exit the site as sheet flow, as occurs under existing conditions. Because this Alternative would not implement mandatory SWPPP and NPDES measures to reduce erosion and sedimentation, erosion and sedimentation would be greater under this Alternative. Accordingly, the proposed Project's potential impacts associated with hydrology and water quality, with the exception of uncontrolled erosion and sedimentation and its potential impacts on water quality, would be avoided under this Alternative.

A groundwater extraction well is present at the Project site; the proposed Project would continue to extract groundwater from at current rates and use it for landscape irrigation. Additionally, the proposed Project has a reliable source of domestic water and would have no potential to substantially deplete groundwater supplies, and therefore would have no potential to have a cumulatively considerable adverse impact to groundwater supplies. The No Project/No Development Alternative would entail the continuation of groundwater extraction from the on-site well at existing extraction rates, and would therefore result in similar less than significant impacts to the Project with respect to groundwater extraction. The No Project/No Development Alternative would allow for greater on-site groundwater recharge compared to the proposed Project due to the avoidance of an increase in impermeable surfaces at the site that would occur as a result of Project implementation.

The proposed Project would install a comprehensive system of storm drain improvements that would convey storm water runoff off-site in a manner that would not cause substantial flooding on- or off-site. The No Project/No Development Alternative would reduce the amount of surface runoff as compared to the proposed Project due to the reduction in impermeable surfaces resulting from no development occurring at the site. Similarly, when compared to the proposed Project, the No Project/No Development Alternative would also reduce impacts to the capacity of existing or planned storm water drainage systems as well as polluted runoff due to the reduction in impermeable surfaces that would occur as well as the reduction in the flow rates for runoff that would exit the Project site during storm events.

Under existing conditions, the southerly and easterly portions of the Project site are located within a 100-year flood hazard zone, and the proposed Project would place structures (including housing) within an area that is currently designated as a 100-year flood hazard area. The proposed Project would

be required to secure the issuance of a Letter of Map Revision (CLOMR) and Final Letter of Map Revision (LOMR) by FEMA for the Project prior to development of residences within these areas which would ensure that the Project's impacts would be less than significant with respect to locating structures within a 100-year flood hazard area. The No Project/No Development Alternative does not entail any development, and thus would not place structures or housing within the areas within the Project site that are designated as being within the 100-year flood hazard area. Therefore, this Alternative would avoid impacts associated with locating structures (including housing) within a 100-year flood hazard area. The Project site is not located near any large water bodies, including reservoirs that could result in potential indirect impacts associated with a seiche.

I. Land Use and Planning

The proposed Project would not conflict with any of the General Plan policies or standards. However, it would also not implement the City's General Plan. The No Project/No Development Alternative would not result in development of the site and would therefore would also not conflict with any General Plan policies or standards. Under this Alternative, the Project site would remain mostly undeveloped (with the exception of the existing Roquet Paving Company facility); therefore, the Project site would not be developed in accordance with the City of Colton General Plan Land Use Map designation as "Very Low Density Residential," "Low Density Residential," "Medium Density Residential," "High Density Residential," and "Light Industrial." Accordingly, this Alternative would not implement the land uses that were envisioned in the City of Colton General Plan for the Project site.

Although this Alternative would not result in the development of the Project site in accordance with the land uses envisioned in the General Plan, it would not result in any potentially significant impacts associated with Land Use and Planning. Therefore, the No Project/No Development Alternative would result in slightly increased less-than-significant impacts associated with Land Use and Planning as compared to the proposed Project.

J. Noise

The Project site is not located within an airport land use plan, or within two miles of a public airport or public use airport, or within the vicinity of a private airstrip or heliport, therefore, no noise impacts associated with airport operations would occur under either the proposed Project or the No Development/No Project Alternative.

Because no new development would occur on the site under the No Project/No Development Alternative, there is no potential for any construction noise, groundborne noise or groundborne vibration, or transportation-related noise impacts to occur.

Under the No Project/No Development Alternative, all impacts associated with noise, including the proposed Project's off-site transportation-related noise (less-than-significant with mitigation) would be avoided.

K. Population and Housing

The Project site is vacant and undeveloped; therefore, the proposed Project would not result in the displacement of a substantial amount of existing housing or result in the need for construction of replacement housing elsewhere or displace any persons nor result in the need for construction of replacement housing elsewhere. The Project's anticipated approximately 3,633 residents are anticipated by the City's General Plan; therefore, the proposed Project's impacts to induce substantial population growth in an area, either directly or indirectly would be less than significant.

Because no homes would be constructed under the No Project/No Development Alternative there is no potential for this Alternative to induce substantial population growth in an area, either directly or indirectly. Because the No Project/No Development Alternative would not result in any population growth within the Project site, this Alternative would avoid the proposed Project's less-than-significant impacts associated with inducing a substantial population growth in an area, either directly or indirectly.

L. Public Services

The proposed Project's impacts to public services would be less than significant. The No Project/No Development Alternative would not result in any new development within the Project site, which would result in a corresponding reduction in the demand for public services when compared to the proposed Project. Accordingly, the proposed Project's less-than-significant impacts associated with public services would be avoided under this Alternative.

M. Recreation

Although the proposed Project's impacts associated with parks and recreation facilities would be less than significant, because no development would occur under the No Project/No Development Alternative, no potential impacts to parks and recreation facilities would occur under this Alternative. Accordingly, the proposed Project's potential less-than-significant impacts associated with recreation facilities would be avoided under this Alternative.

N. Transportation and Traffic

Under the No Project/No Development Alternative, no new development would occur; therefore, no traffic would be generated by the undeveloped, mostly vacant site beyond the existing traffic generated by the Roquet Paving Inc. facility. Because no traffic would be generated under this Alternative, the proposed Project's significant direct and cumulatively considerable impacts to the local roadway system and CMP facilities would be avoided under this Alternative.

O. Utilities and Service Systems

The proposed Project's impacts associated with utilities and service systems would be less than significant. Because no development would occur under the No Project/No Development Alternative, no potential impacts would occur associated with utilities and service systems. Accordingly, this

Alternative would avoid the proposed Project's less-than-significant impacts to utilities and service systems.

P. Conclusion

The No Project/No Development Alternative would avoid or reduce all of the impacts of the proposed Project, with the exception of the issue area of Land Use and Planning. Under the No Project/No Development Alternative, impacts associated with Hazards and Hazardous Materials would only be slightly reduced as compared to the proposed Project. Whereas the proposed Project would be subject to mandatory compliance with the fuel modification requirements and building design requirements of the City of Colton Fire Department, as well as compliance with Section 701A of the California Building Code, which would reduce impacts to less than significant with respect to wildland fire hazards the No Project/No Development Alternative would not entail additional wildfire abatement activities than are presently undertaken. Therefore, the majority of the undeveloped portions of the site would retain the current classification as a "Very High Fire Hazard Severity Zone." Therefore, the severity of wildfire hazards at the site would likely be higher under the No Project/No Development Alternative when compared to the proposed Project. Additionally, the No Project/No Development Alternative would result in similar to slightly increased impacts in the area of Land Use and Planning as compared to the Project, because it would not develop the Project site in accordance with the land uses envisioned in the General Plan. The only Project objective that the No Project/No Development Alternative would successfully meet would be Objective C, which is intended to preserve natural hillsides, natural habitats, and natural drainage courses within open space, where feasible. None of the other Project objectives would be met under the No Project/No Development Alternative.

6.3.2 OFF-SITE LOCATION ALTERNATIVE

Based on the City of Colton's review of aerial photography and properties known to the City as being available for development within the City of Colton, the only other available undeveloped property of similar size (approximately 336.2 acres), that the Project Applicant has the reasonable possibility of controlling is the property that abuts the Project site to the west (hereinafter referred to as the "Off-site Location"). As shown in Figure 6-1, *Off-Site Location Alternative*, the Off-site Location is bound to the north by undeveloped/vacant land, to the east by undeveloped/vacant land (the Project site), to the south by Old Pellissier Road, and to the west by the Santa Ana River. The Off-site Location consists of approximately 227.6 acres (108.6 acres less than the Project site), and is currently owned by the City of Riverside. The OLA would develop the Off-site Location consistent with the land use types and development acreages proposed in the Roquet Ranch Specific Plan, with the exception of a reduction in the acreage of land designated as Open Space-Resource by 108.6 acres (the difference between the acreage of the Project site [336.2 acres] and the acreage of the Off-site Location [227.6 acres]). This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would avoid impacts to the Project site through developing the Project at an off-site location.

A. *Aesthetics*

The Project would result in less-than-significant impacts to scenic vistas. By concentrating development in the flatter portions of the Project site, the Project preserves potential scenic vistas afforded by the site, which include the prominent ridgeline, natural hillsides, and rock outcroppings. The Off-site Location potentially provides scenic vistas in the form of views of the Santa Ana River and the uninterrupted open spaces along the Santa Ana River. The OLA may be able to avoid significant impacts to scenic vistas to a similar extent achieved by the Project. Accordingly, the Project and the OLA would result in similar less-than-significant impacts related to scenic vistas.

The nearest State Designated Scenic Highway is Highway 38, located approximately 12 miles to northeast of the Project site (Caltrans, 2011; Google Earth Pro, 2016). Therefore, the Project site is not located within or adjacent to a scenic highway corridor, nor is it prominently visible from any state-designated scenic highway corridor, and would have no impact with respect to damaging scenic resources within a state scenic highway. Highway 38 is also the nearest State Designated Scenic Highway to the Off-site Location (greater than 12 miles northeast of the Off-Site location); therefore, the Off-site Location is not visible from any State-designated scenic highways. As such, the OLA's impacts to resources visible from a designated scenic highway corridor would be similar to the Project's less-than-significant impacts.

Through its proposed grading of the on-site hillsides, the proposed Project would substantially degrade the existing visual character of the Project site and therefore result in a significant and unavoidable direct impact. The OLA would not substantially degrade the existing visual character or quality of the Off-site Location or its surrounding areas during construction or operation. Both the proposed Project and the OLA would be developed in compliance with the site planning, architecture, and landscaping themes presented in Section IV, *Design Guidelines*, of the Roquet Ranch Specific Plan, which would ensure compatibility and continuity of development within the community and with the surrounding environs. Additionally, the OLA would avoid hillside grading (as compared to the proposed Project). Accordingly, the OLA would have less-than-significant impacts on the existing visual character of the Off-site Location and its surroundings, and therefore impacts to visual character of the site and surroundings would be reduced as compared to the proposed Project.

Neither the Project nor the OLA would create substantial amounts of light or glare. Because the proposed Project and the OLA would comply with the City of Colton Municipal Code § 18.42.090 and § 18.42.100 and the outdoor lighting standards defined in Section IV of the Roquet Ranch Specific Plan, each development scenario would result in similar less-than-significant impacts associated with light and glare affecting day or nighttime views in the area.

B. *Air Quality*

Emissions of PM_{10} during the construction phase of the Project would exceed the applicable SCAQMD LST for PM_{10}; therefore, the Project would conflict with Consistency Criterion No. 1 of the SCAQMD's AQMP, which is the air quality plan applicable to the South Coast Air Basin within which

the Project site is located. With mitigation, impacts related to the Project's PM_{10} emissions would be reduced to less than significant. The OLA would have slightly reduced construction emissions compared to the Project, as less intensive grading would be required due to the flatter nature of the Off-site Location. However, under the OLA, construction emissions of PM_{10} would still likely exceed the applicable SCAQMD LST for PM_{10}, and would result in similar less-than-significant impacts after mitigation.

Under the proposed Project, the implementation of mitigation measures would reduce construction-related emissions of NO_x and VOCs to a level below significance. However, long-term operation of the Project would result in significant and unavoidable direct and cumulatively considerable impacts associated with emissions of NO_x. Additionally, as discussed in EIR Section 4.2, *Air Quality*, when the Project's short-term construction and long-term operational activities overlap, emissions of VOCs, NO_x, and CO would violate the SCAQMD air quality standards and result in significant and unavoidable direct and cumulatively considerable impacts. The Project and the OLA would result in similar significant and cumulatively considerable impacts with respect to operation-related emissions of NO_x based on the similar quantity of vehicle trips generated. Additionally, if construction and long-term operational activities were to overlap, OLA would also result in significant emissions of VOCs, NO_x, and CO emissions during the overlap.

Project-related construction emissions would exceed the SCAQMD LST for emissions of PM_{10}, which has the potential to expose sensitive receptors to a substantial pollutant concentration. The Off-site Location abuts the Project site to the west, and would result in similar to identical significant emissions of PM_{10}. Neither the proposed Project nor the OLA would produce the volume of traffic required to generate a CO "hot spot."

Neither the proposed Project nor the OLA would produce unusual or substantial construction-related odors that would be objectionable and affect a substantial number of people. The OLA and the proposed Project would result in similar less-than-significant impacts with respect to odors.

C. *Biological Resources*

The proposed Project would result in potentially significant impacts to southwestern willow flycatcher and its critical habitat, least Bell's vireo, coastal California gnatcatcher critical habitat, and burrowing owl, which would be reduced to less than significant with mitigation. A biological survey was not performed at the Off-site Location as part of the scope of this EIR; therefore, the presence of candidate, sensitive, or special status species (or suitable habitat for such species) at the Off-site Location is unknown. However, the City's General Plan EIR indicates that coastal California gnatcatcher habitat is likely to be present at the Off-site Location (City of Colton, 2013c, Figure 4.4.2). Based on the limited information available, and the fact that the Off-site Location is vacant and nearer to the Santa Ana River, it is likely that the OLA would result in similar or greater impacts to sensitive species (i.e., the coastal California gnatcatcher) and their habitat in comparison to the proposed Project.

With mitigation, the proposed Project would result in less-than-significant impacts to black willow thicket (considered habitats that are high priority for inventory by CDFW) and non-wetland streambeds and riparian vegetation under CDFW jurisdiction. Based on the Biological Resources Assessment (*Technical Appendix D*) prepared for the proposed Project, it appears that the jurisdictional features identified at the Project site extend westward and are also likely to occur on the Off-site Location. Additionally, the Off-site Location is closer to the Santa Ana River floodplain, and therefore more likely to contain riparian habitat that would be impacted under implementation of OLA. As such, OLA would likely result in greater impacts to riparian habitat and other sensitive natural communities than the proposed Project.

The Project would not impact any federally protected wetlands as defined by the Section 404 of the Clean Water Act (CWA). Although no surveys for wetlands were conducted at the Off-site Location as part of this EIR, it is likely that implementation of the OLA would directly or indirectly impact federally protected wetlands that occur along the Santa Ana River, which abuts the Off-site Location to the west. Accordingly, it is anticipated that the OLA would have a greater impact on wetlands than would the proposed Project.

With mitigation, the proposed Project's impacts to nesting migratory birds would be reduced to less-than-significant levels. No biological surveys for nesting migratory birds were performed at the Off-site Location as part of this EIR, therefore the presence of such species at the Off-site Location is unknown. It is anticipated that the OLA would result in similar less-than-significant impacts to nesting migratory birds when compared to the proposed Project because both sites include vegetation that could support nesting birds.

With mitigation (including the performance of a tree inventory), the Project would not conflict with the City of Colton Street Tree Ordinance, and Project-related impacts would be less than significant. Given its similar vacant condition when compared to the Project site, it is likely that the OLA would result in similar less-than-significant impacts (with mitigation incorporated) with respect to conflict with the City of Colton Street Tree Ordinance or other local policies or ordinances protecting biological resources.

Neither the Project site nor the Off-site Location are located within a Significant Ecological Area (SEA) or an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan. Therefore, neither the proposed Project nor the OLA would result in any impacts with respect to such plans.

D. Cultural Resources

The Cultural Resources Assessment (*Technical Appendix F1*) performed at the Project site determined that no significant historic resources occur within the Project site. Therefore, the proposed Project would not cause a substantial adverse change in the significance of an historic resource as defined in California Code of Regulations § 15064.5 and impacts would be less than significant. No cultural resources assessment was performed for the Off-site Location as part of this EIR; therefore, it is

unknown what (if any) historic resources occur on the Off-site Location. However, because the Off-site Location is located adjacent to the Project site, the OLA would likely result in similar less-than-significant impacts to historic resources.

The proposed Project site includes two potentially significant archeological resources. With mitigation, the proposed Project would have less-than-significant impacts on archaeological resources. No cultural resources assessment was performed for the Off-site Location as part of this EIR; therefore, it is unknown what (if any) archaeological resources occur on the Off-site Location. However, because the Off-site Location is located adjacent to the Project site, the OLA would likely result in similar less-than-significant (with mitigation) impacts to archaeological resources.

Due to the presence of quaternary older alluvial valley and alluvial fan sediments at the Project site, the site is considered to have a high potential to contain significant paleontological resources. With mitigation, the Project's impacts to paleontological resources would be less than significant. According to the Paleontological Resource and Mitigation Monitoring Assessment (*Technical Appendix F2*) performed for the proposed Project, the sediment that underlies the Off-site Location are from the middle or late Holocene ("modern") age, and include late Holocene map units Qw, Qw_1, Qw_2, and Qw_3 (quaternary wash deposits), and Qa (Quaternary alluvial valley deposits) and Qyf_5 (Quaternary young alluvial fan deposits). Middle Holocene map units include Quaternary young alluvial valley deposits (map unit Qya_3) (BFSA, 2017b, p. 2). Late Quaternary (late Holocene, or "modern") alluvial valley and alluvial fan deposits are generally considered to be too young geologically to contain significant nonrenewable paleontological resources (i.e., fossils) and are thus typically assigned a low paleontological sensitivity (BFSA, 2017b, p. 2). Due to the low paleontological sensitivity of the Off-site Location, implementation of the OLA would be likely to have slightly lower less-than-significant impacts to paleontological resources when compared to the proposed Project.

Neither the Project site nor the Off-site Location contain a known formal or informal cemetery. Both the proposed Project and the OLA would be required to comply with the applicable provisions of California Health and Safety Code § 7050.5 and California Resources Code § 5097 et. seq. in the unlikely event that human remains are discovered during ground-disturbing activities. Mandatory compliance with State law would ensure that human remains, if encountered, including those which may be of Native American decent, are appropriately treated and would preclude the potential for significant impacts. Both the proposed Project and the OLA would have similar less-than-significant impacts with respect to disturbance of human remains.

E. Geology and Soils

The proposed Project would result in less than significant impacts associated with geology and soils with the implementation of mitigation. A site-specific geotechnical evaluation has not been performed for the Off-site Location as part of this EIR; therefore, site-specific information on geologic hazards is limited to information provided in the City of Colton General Plan EIR. Figure 4.6-4 (Geologic Hazards) of the City's General Plan EIR does not identify any geologic hazards at the Off-site Location

including the potential for impacts associated with faulting, subsidence, or liquefaction (City of Colton, 2013c, Figure 4.6-4).

The proposed Project would be required to comply with mandatory regulations associated with water quality, which include obtaining an NPDES permit, and implementing SWPPP and WQMP requirements which would ensure that water and wind erosion associated with the proposed Project would be less than significant. The OLA would be subject to these same mandatory requirements, and therefore would result in similar less-than-significant impacts with respect to water and wind erosion.

Implementation of mitigation would ensure that the proposed Project's potential hazards associated with landslides and collapsible soils would be less than significant. The Off-site Location is located in a predominantly flat area with a lesser degree of topographic relief compared to the Project; therefore, landslide hazards would be reduced under the OLA. Accordingly, the OLA would result in lower impacts (less than significant) with respect to soil instability when compared to the proposed Project.

With mitigation, Project-related impacts associated with expansive soils would be less than significant. Figure 4.6-4 of the City's General Plan does not indicate that the Off-site Location is susceptible to hazards associated with expansive soils (City of Colton, 2013c, Figure 4.6-4). Accordingly, the OLA would result in no impacts associated with expansive soil, whereas the proposed Project would result in potentially significant impacts that require mitigation to reduce to a level below significant. Therefore, the OLA would result in a reduction in impacts associated with expansive soils.

Neither the proposed Project nor the OLA include septic tanks or alternative waste water disposal systems; accordingly, neither the proposed Project nor the OLA would result in impacts associated with inadequacy of soils to support septic tanks or alternative waste water disposal systems.

F. Greenhouse Gas Emissions

As indicated in EIR Subsection 4.6, *Greenhouse Gas Emissions*, the Project's annual GHG emissions are estimated to be approximately 16,481.15 total CO_2e, or 25.96-percent less than 2008 BAU conditions, which meet the minimum GHG emissions reduction (25 percent) required by the City's CAP. Accordingly, the Project would not result in a significant environmental impact with respect to GHG emissions. Because daily and annual operational characteristics of the OLA would be identical to the proposed Project, the OLA also would result in similar less-than-significant GHG impacts.

The Project would meet the City's goal of reducing GHG emissions to a level that is 15 percent below BAU as established by their CAP via a 25.96 percent reduction in the Project's GHG emissions compared to 2008 BAU emissions. Therefore, the Project would be consistent with the City's CAP and all other applicable plans, policies, and regulations related to the reduction of GHGs, and would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. The OLA would slightly reduce quantities of GHG emissions as compared to the proposed Project during construction activities because less extensive grading would

be required to construct the OLA based on the comparatively flatter topography of the Off-site Location. GHG emissions from operation of the OLA would be similar to that of the Project due to its generation of similar vehicular trips and energy consumption. The OLA would also not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Accordingly, impacts due to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be similar under both the proposed Project and the OLA, and impacts would be less than significant.

G. *Hazards and Hazardous Materials*

With implementation of mitigation, impacts associated with the Project's exposure of the public or the environment to hazardous materials would be reduced to a less-than-significant level. A Phase I Environmental Site Assessment or other environmental assessment was not prepared for the Off-site Location. The Off-site Location is vacant and undeveloped; therefore, it is unlikely that there the site contains contamination related to previous land uses at the site. Accordingly, it would be less likely that the OLA would expose people or the environment to hazardous materials through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions when compared to the proposed Project.

Neither the Project site nor the Off-site Location are located within one-quarter mile of any existing or planned school. Accordingly, neither the Project nor the Off-site Location would expose any nearby school to potential impacts related to hazardous materials. No impact would occur under either development scenario.

Neither the Project site nor the Off-site Location are located within two miles of an airport, nor are they located within an airport land use compatibility plan. No impact would occur under either development scenario.

There are no private airstrips located within the vicinity of the Project site or the Off-site Location; therefore, no impacts would occur under the proposed Project or the OLA.

Neither the Project site nor the Off-site Location serve as an emergency evacuation route. Therefore, the construction and operation of the proposed Project or the OLA would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The Project site is located within a "Very High Fire Hazard Severity Zone" as identified in the City of Colton General Plan. Mandatory compliance with the fuel modification requirements and building design requirements of the City of Colton, as well as compliance with Section 701A of the California Building Code, would ensure that the proposed Project's impacts would be less than significant. Figure 4.8-2 of the City's General Plan does not depict the Off-site Location as being located within an area subject to wildfire hazards (City of Colton, 2013c, Figure 4.8-2). Accordingly, while both the proposed Project and the OLA would result in less-than-significant impacts associated with fire hazard, the OLA would avoid the potential for impacts associated with wildfire risks.

H. Hydrology and Water Quality

The proposed Project is required to prepare a Storm Water Pollutant Prevention Plan (SWPPP) to address construction-related water quality issues and proposes design features including detention/water quality basins to address long-term water quality in accordance with NPDES requirements. As such, the Project would not violate any water quality standards or waste discharge requirements on a direct or cumulatively considerable basis. The OLA would also be required to prepare a mandatory SWPPP and incorporate applicable design features to address water quality during construction and operation. As such, the OLA would result in similar less-than-significant impacts with respect to complying with water quality standards and/or waste discharge requirements.

The proposed Project would have a reliable source of domestic water would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. As the OLA would allow for an identical number of dwelling units, it would generate a similar demand for domestic water compared to the proposed Project that would also be accommodated by the same source of domestic water supply. Additionally, the OLA would result in the development of a similar number of acres, which would convert a correspondingly similar amount of land to impermeable surfaces when compared to the proposed Project. Therefore, with respect to depletion of groundwater supplies and to groundwater recharge, the OLA would result in less-than-significant impacts that are similar to the proposed Project.

The proposed Project would result in less-than-significant impacts with respect to substantial erosion or siltation on- or off-site through major alteration to the existing drainage pattern of the site, as the Project proposes a comprehensive on-site storm drain system that has been designed to convey off-site storm water flows generated within the Project site in quantities that are similar or reduced when compared to existing conditions. The OLA would be developed with a similar comprehensive storm drain system that also convey flows off-site in a manner that would not substantially alter the existing drainage pattern at the Off-site Location which would preclude the occurrence of flooding, substantial erosion, or siltation on- or off-site.

The proposed Project would install a comprehensive on-site storm water drainage system that includes a series of detention/water quality basins, which would prevent storm water runoff from exceeding the capacity of existing or planned storm water drainage systems or contributing additional sources of polluted runoff. The OLA would also include the construction of a similar storm water drainage system that would effectively manage storm water runoff to prevent exceedance of storm drain system capacities and prevent additional polluted runoff. Accordingly, the OLA would have similar less-than-significant impacts with regard to its contribution of additional quantities of polluted storm water runoff.

Under existing conditions, the portions of the southerly and easterly areas of the Project site are located within a 100-year flood hazard zone, and the proposed Project would locate housing within a 100-year flood zone. Accordingly, mitigation in the form of a Conditional Letter of Map Revision (CLOMR)

and Letter of Map Revision (LOMR) would be required as mitigation in order to reduce impacts associated with the 100-year flood zone to less than significant. As shown on Figure 4.8-2, *FEMA Flood Insurance Rate Map*, approximately 201.6 acres of the Off-site Location are located within "Zone X (Shaded)," which corresponds with areas subject to moderate flooding, and approximately 26 acres of the Off-site Location are located within "Zone X (unshaded)," which corresponds with areas of determined to be outside the 0.2% annual chance floodplain. Accordingly, under OLA, impacts to the 100-year flood zone would be substantially increased compared to the proposed Project due to the fact that the OLA would place housing within areas subject to more severe flood hazards than the Project site. Additionally, the OLA would substantially increase the likeliness that structures built within the 100-year flood hazard zone would impede or redirect flood flows when compared to the proposed Project.

Similar to the Project site, the Off-site Location is located too far away from large enclosed water bodies and the ocean to be subjected to hazards associated with seiches or tsunamis. Additionally, implementation of the BMPs from the WQMP and SWPPP during construction activities would reduce impacts associated with mudflow events below levels of significance. In the post development condition, the potential for the occurrence of mudflow events is low due to the presence of engineered slopes and flood control features. Accordingly, impacts associated with mudflow would be similarly less than significant under both the proposed Project and the OLA.

I. Land Use and Planning

Similar to the proposed Project, the OLA site is predominantly surrounded by undeveloped land. Roadway and pedestrian improvements would accommodate vehicular and pedestrian access through the Off-site Location, and the OLA would not physically divide an established community as no established communities are located adjacent to the Off-site Location.

The proposed Project and the OLA would include identical land uses and would result in similar intensities of use throughout each of the respective sites. Accordingly, neither the proposed Project nor the OLA would result in a conflict with the City of Colton General Plan's policies and standards. Additionally, neither the Project site nor the Off-site Location are located within an adopted HCP, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan, and therefore neither would conflict with any such plans.

J. Noise

The proposed Project would result in less than significant on-site exterior and interior noise level impacts associated with exposing residents to transportation-related noise with the incorporation of mitigation. In comparison to the proposed Project, the OLA would reduce the potential for impacts associated with on-site exterior noise related to transportation, due to the Off-site Location being located farther from the existing transportation corridors.

Construction and operation of the proposed Project would produce vibration levels below the County of San Bernardino vibration standards, and would be less than significant. Since the OLA would have very similar construction and operation characteristics and would not be located directly adjacent to any noise-sensitive uses, its vibration levels would likely be concomitantly similar and impacts would be less than significant.

Similar to the Project, the OLA would not expose people residing or working in the area to excessive noise levels associated with public airports, because no public airports are located within the vicinity of the Off-site Location.

Similar to the Project, the OLA would not expose people residing or working in the area to excessive noise levels associated with private airstrips, because no private airstrips are located within the vicinity of the Off-site Location.

K. Population and Housing

The proposed Project would generate a population increase of approximately 3,633 residents. The Colton General Plan designates the Project site as residential; therefore, this population increase is anticipated by the City's General Plan growth forecasts. The Colton General Plan designates the Off-site Location as Light Industrial (LI). Therefore, the Colton General Plan growth forecasts do not anticipate a population increase of 3,633 residents at the Off-site Location. Accordingly, the OLA would induce substantial population growth in an area of the City that the Colton General Plan does not anticipate to experience substantial population growth. Therefore, the OLA would result in an increase in impacts associated with population growth.

As with the proposed Project, the OLA would be developed on a site that is predominantly vacant and undeveloped and contains no housing under existing conditions. Therefore, neither the proposed Project nor the OLA would result in the displacement of a substantial amount of existing housing and would not result in the need for construction of replacement housing elsewhere. There would be no impact under the proposed Project or OLA scenarios.

Both the Project site and the Off-site Location are predominantly vacant and undeveloped and contain no housing under existing conditions. Therefore, neither the proposed Project nor the OLA would displace any persons nor result in the need for construction of replacement housing elsewhere. There would be no impact under the proposed Project or OLA scenarios.

L. Public Services

The proposed Project would result in a less-than-significant impact as a result of Project-related demand for fire protection services. Given the similar generation of demand for fire services, the OLA would also result in less-than-significant impacts to fire protection services. The OLA would also avoid cumulatively considerable impacts to fire protection services through payment of development

impact fees. A similar less-than-significant impact would occur under both the proposed Project and the OLA.

Because the Colton Police Department has adequate physical capacity to service the proposed Project, no new or expanded police protection facilities are needed, and a less-than-significant impact would occur. Cumulatively considerable impacts to police protection services would also be avoided through the Project's payment of development impact fees in compliance with City requirements. Given the identical generation of demand for police protection services, the OLA would also result in less-than-significant impacts to police protection services. The OLA would also avoid cumulatively considerable impacts to police protection services through payment of development impact fees. A similar less-than-significant impact would occur under both the proposed Project and the OLA.

As with the proposed Project, the OLA would result in the development of an on-site school facility. Development of this proposed on-site facility would not result in additional physical impacts to the environment that are not already addressed throughout this EIR. Under both the proposed Project and the OLA development scenarios, the Applicant would be required to pay development impact fees under both SB 50 and Colton Municipal Code Chapter 16.92. A similar less-than-significant impact would occur under both the proposed Project and the OLA.

Implementation of the Project would meet the City's parkland dedication standard on-site, and a less-than-significant impact would result. The OLA would result in the development of a greater quantity of parkland acreage (22.3 acres), compared to the Project's 19.3 acres; therefore, the OLA would also result in less-than-significant impacts with respect to park services.

The proposed Project and the OLA would result in an identical demand for library services. Future development of a new or expanded library facility would require subsequent discretionary actions by the City of Colton, which would require review under CEQA. Accordingly, a less-than-significant physical impact would occur as a result of demand for library services generated under both the proposed Project and OLA scenarios.

M. Recreation

As with the proposed Project, the OLA would be required to comply with Colton Municipal Code, *Chapter 16.58*, which requires that residential development proposals provide on-site parkland and recreational amenities and/or pay fees to the City of Colton. The OLA would more than exceed the City's parkland dedication requirement through the provision of the same amount of parkland on-site as would occur under the proposed Project, and a less-than-significant impacts to recreational facilities would occur.

N. Transportation and Traffic

Because the land use acreages and residential dwelling unit count proposed by the OLA would be identical to the proposed Project, it is anticipated the OLA would generate the same amount of traffic

as the proposed Project. Because the traffic generation and trip distribution patterns would be similar, none of the Project's significant direct and cumulatively considerable impacts to intersections, roadway segments, and CMP facilities would be avoided or substantially reduced under the OLA.

O. *Utilities and Service Systems*

As with the proposed Project, there is no potential for the OLA to exceed wastewater treatment requirements of the Santa Ana RWQCB. Wastewater generated at the Off-site Location would be conveyed to and treated by the Colton Wastewater Reclamation Plant, which is under the jurisdiction of the RWQCB, which ensures that all requirements regarding wastewater treatment are met. As such, no impact would occur under the OLA.

The OLA would generate an identical demand for wastewater collection and disposal when compared to the Project (due to the identical number of dwelling units and similar land uses that would be implemented), and would not require the construction of any new water or wastewater systems that have the potential to cause significant environmental effects. As such, a less-than-significant impact would occur under the OLA.

As with the Project, storm water would be collected via an on-site drainage system and on-site detention basins to be constructed by the OLA. The OLA would not require the construction of any new storm water drainage facilities (beyond those proposed to be constructed on-site) that would have the potential to cause significant environmental effects. Under the OLA, a less-than-significant impact would occur.

The OLA would generate an identical demand for water supplies as compared to the proposed Project. As was determined in EIR Subsection 4.15, there are sufficient water supplies available to service the development of 1,050 residential units. The OLA's proposed residential uses would not exceed available supplies of water, even during dry year conditions.

The OLA would result in an identical demand for solid waste disposal as compared to the proposed Project. There is adequate capacity at the California Street Landfill to accept the OLA's solid waste. Landfill capacity would not be exceeded as a result of the OLA, and a less-than-significant impact would result.

As with the proposed Project, the OLA would comply with all applicable federal, state, and local statutes and regulations related to solid waste disposal, reduction, and recycling. A less-than-significant impact would occur under the OLA.

P. *Conclusion*

Implementation of the OLA would not avoid any of the Project's significant impacts to the environment, including impacts that would be significant and unavoidable. However, whereas the proposed Project which would result in significant and unavoidable direct impacts to aesthetics due to

grading of the on-site hillsides, the OLA would result in a reduction of these impacts associated with degradation of the existing visual character because it would avoid hillside grading. All potentially significant impacts would be mitigated to below a level of significance with the exception of the significant direct and cumulatively considerable impacts associated with air quality and transportation/traffic. Because the construction and operation of the OLA would largely be identical to that of the proposed Project, it would not avoid or substantially reduce the potential for significant impacts associated with air quality and transportation/traffic. In the case of hazards related to flooding, the OLA would increase impacts due to the greater susceptibility of the Off-site Location to flooding as compared to the Project site. The OLA may also result in greater impacts to biological resources (particularly riparian species and habitat) due to its closer proximity to the Santa Ana River floodplain.

In general, the OLA would meet each of the Project's objectives. However, the OLA would not meet Project Objective C (preserve natural hillsides, natural habitats, and natural drainage courses within open space, where feasible) as effectively as the proposed Project. Although the OLA would include the preservation of open space, the OLA does not directly preserve any natural hillsides, would not preserve as much natural habitat as the proposed Project, and would likely impact drainage courses to a greater extent than would the proposed Project through its development of a site that is closer in proximity to the Santa Ana River floodplain.

6.3.3 REDUCED FOOTPRINT ALTERNATIVE

As depicted on Figure 6-2, *Reduced Footprint Alternative*, the RFA considers a reduction in the overall development footprint of the proposed Project. The RFA avoids development of the areas of the Project site located to the north of Planning Area 2 and Planning Area 12, converting Planning Areas 1, 4, 5, and 14A, 14B, 15, and 17 to the Open Space-Resource designation (resulting in an increase in the acreage of land designated as Open Space-Resource by 51.5 acres [from 199.7 acres to 251.2 acres]), and combining them into Planning Areas 13A and 13C. In order to retain the quantity of residential dwelling units proposed by the Project (up to 1,050 dwelling units) the RFA would increase the densities of Planning Areas 2, 3, and 7 (shown as Planning Areas 1, 2, and 4 [respectively] on Figure 6-2) from Low Density Residential to Medium Density Residential. The RFA would result in the reduction of residential development acreage by 25.9 acres (from 85.4 acres to 59.5 acres) and an increase in the overall residential target density from 10.2 du/ac to 14.7 du/ac. Additionally, the RFA would reduce the acreage of Open Space-Recreation within the Project by 17.4 acres (from 19.3 acres to 1.9 acres), and would reduce the acreage dedicated to roadways by 5.2 acres (from 16.5 acres to 11.3 acres).

The RFA also precludes development of roadways to the north of Planning Areas 2 and 12. Under the RFA, only the segment of Roquet Ranch Road located between Pellissier Road and Street "A" would be constructed. A dirt maintenance/access road (closed to the public) would be provided between the intersection of Street "A" and Roquet Ranch Road that would extend northward to the proposed water tank in Planning Area 20A. All other components of the RFA would be the same as described for the proposed Project in EIR Section 3.0, *Project Description*. The RFA was selected by the Lead Agency

to consider an alternative that would reduce the Project's impacts to biological resources, air quality, and greenhouse gas emissions.

A. *Aesthetics*

Neither the Project nor the RFA would result in significant impacts to scenic vistas. Based on the reduced development in the northern portion of the site, the RFA would result in decreased impacts to the potential scenic vistas (hills, a prominent ridgeline, and uninterrupted open spaces) as it would avoid and/or reduce the development of the hillsides within the Project site.

The Project site is not visible from any State-designated scenic highways; therefore, implementation of the RFA would neither increase nor decrease impacts to scenic resources visible from a designated scenic highway corridor as compared to the proposed Project. No impacts would result from implementation of the RFA or the proposed Project.

Under the RFA, there would be a reduction in the amount of the hillsides that are developed, and a greater portion of the existing natural hillside setting would be preserved as compared to the proposed Project. Therefore, as compared to the Project which would result in significant direct impacts to visual character of the site and surroundings due to its proposed grading of on-site hillsides, the RFA would reduce impacts to the existing visual character of the site and its surroundings as it would disturb a smaller area of the on-site hillsides. Nevertheless, the RFA, like the Project, would still result in a direct significant and unavoidable impact on the visual character of the site due to the grading of certain on-site hillsides.

Although the proposed Project would result in less-than-significant impacts associated with light and glare affecting day or nighttime views in the area, the RFA would reduce such impacts to a greater extent due to less artificial light emitted into the sky from the more compact development pattern.

B. *Air Quality*

Emissions of PM_{10} during the construction phase of the Project would exceed the applicable SCAQMD LST for PM_{10}; therefore, the Project would conflict with Consistency Criterion No. 1 of the SCAQMD's AQMP, which is the air quality plan applicable to the South Coast Air Basin within which the Project site is located. With mitigation, impacts related to the Project's PM_{10} emissions would be reduced to less than significant. The RFA would likely lead to a slight reduction in PM_{10} emissions during construction, due to the likelihood that the intensity and duration of construction activities required by the RFA would be lesser when compared to the proposed Project.

Under the proposed Project, the implementation of mitigation measures would reduce construction-related emissions of NO_x and VOCs to a level below significance. However, long-term operation of the Project would result in emissions of NO_x that would be considered a significant and unavoidable direct and cumulatively considerable impact. Additionally, as discussed in EIR Section 4.2, *Air Quality*, when the Project's short-term construction and long-term operational activities overlap,

VOCs, NO_x, and CO emissions would violate the SCAQMD air quality standards, which would result in a significant direct and cumulatively considerable impact. The RFA would result in reduced emissions of these air pollutants during construction due to the reduction in the area disturbed by grading activities. Because the RFA would result in an identical number of residential units and commercial acreage when compared to the proposed Project, this Alternative would generate similar traffic compared to the proposed Project, and would therefore only result in slight reductions to impacts associated with operational emissions due to the lower energy demand of comparatively smaller buildings.

Project-related construction emissions would exceed the SCAQMD LST for emissions of PM_{10}, which has the potential to expose sensitive receptors to a substantial pollutant concentration. Compared to the proposed Project, the RFA would result in reduced construction-related emissions (including emissions of PM_{10}) due to the smaller scale of the development relative to the proposed Project; therefore, a concomitant reduction in associated impacts to sensitive receptors would be anticipated under the RFA. Neither the proposed Project nor the RFA would produce the volume of traffic required to generate a CO "hot spot."

Neither the proposed Project nor the RFA would produce unusual or substantial construction-related odors that would be objectionable and affect a substantial number of people. The RFA and the proposed Project would result in similar less-than-significant impacts with respect to odors.

C. *Biological Resources*

With mitigation, the proposed Project's impacts to southwestern willow flycatcher and its critical habitat, least Bell's vireo, coastal California gnatcatcher critical habitat, and burrowing owl would be reduced to less than significant. Based on the smaller development footprint of the RFA, a smaller portion of the habitat for these species would be impacted by the RFA relative to the proposed Project. Therefore, the RFA would result in a reduction in impacts to sensitive species, as compared to the proposed Project.

With mitigation, the proposed Project would result in less-than-significant impacts to black willow thicket (considered habitats that are high priority for inventory by CDFW) and non-wetland streambeds and riparian vegetation under CDFW jurisdiction. As shown in the Biological Resources Assessment (*Technical Appendix D*) prepared for the proposed Project, jurisdictional features occur on the northwest portion of the Project site, impacts to which would be avoided through implementation of the RFA. As such, impacts to riparian habitat would be reduced under the RFA.
Neither the proposed Project nor the RFA would impact any federally protected wetlands as defined by the Section 404 of the CWA.

With mitigation (including prohibition of vegetation removal during the nesting season and performing pre-construction surveys), the proposed Project's impacts to nesting migratory birds would be reduced to less-than-significant levels. Based on the smaller development footprint of the RFA, it is anticipated

that the RFA would result in a reduction in impacts to nesting migratory birds when compared to the proposed Project.

With mitigation (including the performance of a tree inventory), the Project would not conflict with the City of Colton Street Tree Ordinance, and Project-related impacts would be less than significant. As the reduction in the footprint of the development under the RFA would occur in the northern portions of the site away from existing roadways, the RFA would result in similar impacts to street trees when compared to the proposed Project.

The Project site is not located within a Significant Ecological Area (SEA) or an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan. Therefore, neither the proposed Project nor the RFA would result in any impacts with respect to such plans.

D. Cultural Resources

Based on the results of the Cultural Resources Assessment (*Technical Appendix F1*) performed at the Project site, it was determined that no significant historic resources would be impacted by the proposed Project. Accordingly, it is anticipated the RFA would result in similar less-than-significant impacts to historic resources when compared to the proposed Project.

With mitigation, the proposed Project would have less-than-significant impacts on archaeological resources. Since the RFA would avoid construction and operation activities in the northern portions of the Project site (which encompass the two significant archaeological resources), the RFA would reduce the proposed Project's (less-than-significant) impacts to these significant archaeological resources.

Due to the presence of quaternary older alluvial valley and alluvial fan sediments at the Project site, the site is considered to have a high potential to contain significant paleontological resources. With mitigation (full-time paleontological monitoring during grading activities), the Project's impacts to paleontological resources would be less than significant. Due to the RFA's reduction in the extent of physical disturbances (relative to the proposed Project), implementation of the RFA would have a corresponding reduction to the less-than-significant impacts to paleontological resources.

The Project site does not contain a known cemetery. Both the proposed Project and the RFA would be required to comply with the applicable provisions of California Health and Safety Code § 7050.5 and California Resources Code § 5097 et. seq. in the unlikely event that human remains are discovered during ground-disturbing activities. Mandatory compliance with these statutes would ensure that human remains, if encountered, including those which may be of Native American decent, are appropriately treated and would preclude the potential for significant impacts. Relative to the proposed Project, the RFA would physically disturb the site to a lesser extent, and would likely result in a corresponding reduction in (less-than-significant) impacts with respect to disturbance of human remains.

E. Geology and Soils

With mitigation, the proposed Project would have less-than-significant impacts regarding exposure of people or structures to potential substantial adverse effects involving geologic hazards. Given that the RFA would disturb the natural hillsides at the site to a lesser extent compared to the proposed Project, it would like result in a reduction in exposure to the geologic hazards associated with hillside development (i.e., landslides). Therefore, the RFA would result in a reduction in impacts associated with geologic hazards.

Mandatory compliance with the requirements of the Project's NPDES permit, SWPPP, WQMP, and other regulatory requirements would ensure that water and wind erosion associated with the proposed Project would be less than significant. The RFA would also be subject to the requirements of an NPDES permit, SWPPP, and WQMP, which would result in less-than-significant impacts of the RFA with respect to soil erosion and loss of topsoil. However, the extent of land that would be physically disturbed would be reduced under the RFA as compared to the proposed Project; therefore, the RFA would result in a corresponding reduction in impacts associated with soil erosion and loss of topsoil.

Implementation of mitigation would ensure that the proposed Project's potential hazards associated with landslides and collapsible soils would be less than significant. As compared to the proposed Project, the RFA would disturb a smaller extent of the hillside portions of the Project site, and therefore would result in a corresponding reduction in impacts associated with geologic hazards such as landslides, lateral spreading, subsidence, liquefaction or collapse.

With mitigation (performance of a Project-specific geotechnical investigation and implementation of its recommended remedial measures), Project-related impacts associated with expansive soils would be less than significant. The RFA would result in slightly reduced impacts associated with expansive soils, due to the reduced extent of the reduction in the amount of physical disturbances under the RFA.

Neither the proposed Project nor the RFA include septic tanks or alternative waste water disposal systems; accordingly, neither the proposed Project nor the RFA would result in impacts associated with inadequacy of soils to support septic tanks or alternative waste water disposal systems.

F. Greenhouse Gas Emissions

As indicated in EIR Subsection 4.6, *Greenhouse Gas Emissions*, the Project's annual GHG emissions are estimated to be approximately 16,481.15 total CO_2e, or 25.96-percent less than 2008 BAU conditions, which meet the minimum GHG emissions reduction (25 percent) required by the City's CAP. Accordingly, the Project would not result in a significant environmental impact with respect to GHG emissions, with the implementation of Mitigation Measure MM 4.6-1. Daily and annual operational characteristics of the RFA would be slightly reduced compared to the proposed Project as a result of the smaller development footprint and more compact development pattern, the RFA also would result in reduced (less-than-significant) GHG impacts.

The Project would meet the City's goal of reducing GHG emissions to a level that is 15 percent below BAU as established by their CAP via a 25.96 percent reduction in the Project's GHG emissions compared to 2008 BAU emissions, with the implementation of mitigation. Therefore, the Project would be consistent with the City's CAP and all other applicable plans, policies, and regulations related to the reduction of GHGs, and would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Through its reduced extent of physical disturbances and more compact development pattern, the RFA is anticipated to emit slightly reduced quantities of GHGs as compared to the proposed Project. Therefore, the RFA would also not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Accordingly, impacts due to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be reduced under the RFA relative to the proposed Project.

G. *Hazards and Hazardous Materials*

With implementation of mitigation (includes future soil sampling activities), impacts associated with the Project's exposure of the public or the environment to hazardous materials would be reduced to a less-than-significant level. The RFA does not avoid development of any of the areas of the site that are underlain by potentially contaminated soil. Therefore, it would result in similar impacts to the proposed Project.

As with the proposed Project, the RFA is not located within one-quarter mile of any existing or planned school (with the exception of the proposed school within Planning Area 9 of the RFA). Accordingly, neither the proposed Project nor the RFA would expose any nearby school to potential impacts related to acutely hazardous materials. No impact would occur under either development scenario.

The proposed Project is not located within two miles of an airport or within an airport land use compatibility plan. Accordingly, no impact would occur under either the proposed Project or the RFA related to airport hazards.

There are no private airstrips located within the vicinity of the Project site; therefore, no impacts would occur under the proposed Project or the RFA related to private airstrip hazards.
The Project site does not serve as an emergency evacuation route. Therefore, the construction and operation of the neither the proposed Project nor the RFA would impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The Project site is located within a "Very High Fire Hazard Severity Zone" of a Local Responsibility Area. Mandatory compliance with the fuel modification requirements and building design requirements of the City of Colton Fire Department, as well as compliance with Section 701A of the California Building Code, would reduce the proposed Project's impacts to less than significant. The RFA would be subject to these same requirements, and thus would also result in less-than-significant impacts with respect to hazards associated with wildfire risks. However, since the RFA would designate a larger portion of the site as Open Space-Resource and leave a larger portion of the site in

its natural state, it may result in greater wildfire risks as compared to the proposed Project. Therefore, the RFA would result in a slight increase in impacts associated with wildfire risks as compared to the proposed Project.

H. Hydrology and Water Quality

The proposed Project is required to prepare a SWPPP to address construction-related water quality issues and proposes design features including detention/water quality basins to address long-term water quality. As such, the proposed Project would not violate any water quality standards or waste discharge requirements on a direct or cumulatively considerable basis. The RFA would also be required to prepare a SWPPP and incorporate similarly appropriate design features to address water quality. As such, the RFA would result in similar less-than-significant impacts with respect to complying with water quality standards and/or waste discharge requirements.

The proposed Project has a reliable source of domestic water would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. The RFA would generate a reduced demand for domestic water due to its smaller development footprint with a higher concentration of residential density, and would also be accommodated by the same source of domestic water supply. Therefore, with respect to depletion of groundwater supplies, the RFA would result in slight corresponding reduction in the proposed Project's less-than-significant impacts. The RFA would also result in a reduced (less-than-significant) impact to interference with groundwater recharge due to a reduction in the extent of pervious surfaces that would be converted to impervious surfaces through its smaller development footprint.

The proposed Project would result in less-than-significant impacts with respect to substantial erosion or siltation on- or off-site through major alteration to the existing drainage pattern of the site, as the Project proposes a storm drain system that would sufficiently convey off-site flows through the Project site in a manner that is similar to existing conditions. The RFA would be developed with a storm drain system that would also sufficiently convey flows off-site in a manner that would not substantially alter the existing drainage pattern at the Off-site Location which would preclude the occurrence of flooding, substantial erosion, or siltation on- or off-site. Based on the smaller development footprint of the RFA, it would physically disturb the existing drainage pattern at the site to a lesser extent as compared to the proposed Project. As such, the RFA would result in a reduction in impacts with respect to siltation through major alternation of the site's existing drainage pattern.

The proposed Project would install a storm water drainage system that includes a series of detention/water quality basins, which would prevent storm water runoff from exceeding the capacity of existing or planned storm water drainage systems or contributing additional sources of polluted runoff. The RFA would also include the construction of a storm water drainage system that would effectively manage storm water runoff to prevent exceedance of storm drain system capacities and substantial pollution of storm water runoff. Since the RFA would result in a smaller development footprint compared to the proposed Project, this Alternative would likely generate less storm water

runoff compared to the proposed Project. Accordingly, the RFA would reduce impacts resulting from storm water runoff as compared to the proposed Project.

Under existing conditions, the portions of the southerly and easterly areas of the Project site are located within a 100-year flood hazard zone, and the proposed Project would locate housing within a 100-year flood zone. Accordingly, mitigation in the form of a CLOMR and LOMR would be required as mitigation to reduce impacts to less than significant. Relative to the proposed Project, the RFA would implement an identical development pattern within the areas of the site subject to flooding. Therefore, the RFA would result in similar impacts with regard to the placement of housing within areas subject to flood hazards.

Due to the portions of the southerly and easterly areas of the Project site that lie within a 100-year flood hazard zone, the proposed Project would place structures within a 100-year flood hazard area which could impede or redirect flood flows. With mitigation (CLOMR and LOMR), the Project's impacts would be reduced to below a level of significance. As discussed above, the RFA would implement an identical development pattern within the areas of the site that are subject to flooding, and would therefore result in similar impacts with respect to flood hazards.

The RFA is located too far away from enclosed water bodies and the ocean to be subjected to hazards associated with seiches or tsunamis. Additionally, implementation of the BMPs from the WQMP and SWPPP during construction activities would reduce impacts associated with mudflow events below levels of significance. In the post development condition, the potential for the occurrence of mudflow events is low due to the presence of engineered slopes and flood control features. Accordingly, impacts associated with mudflow would be similarly less than significant under both the proposed Project and the RFA.

I. Land Use and Planning

The Project site is predominantly surrounded by undeveloped land. Under both the proposed Project and RFA development scenarios, roadway and pedestrian improvements would accommodate vehicular and pedestrian access through the master-planned community, and neither the RFA nor the proposed Project would physically divide an established community.

The RFA would result in the construction of an identical number of dwelling units compared to the proposed Project, with similar overall land use types. Accordingly, the RFA, similar to the proposed Project, would not result in any inconsistencies with General Plan policies or standards, and would result in similar less-than-significant impacts associated with land use and planning when compared to the proposed Project.

The Project site is not located within an adopted HCP, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan, and no conflict with any such plans would occur under the proposed Project or the RFA.

J. Noise

The proposed Project would result in significant on-site exterior noise levels associated with exposing residents to transportation-related noise. Mitigation would be required in the form of noise barrier construction. The RFA is expected to result in similar impacts in the area of on-site exterior noise related to transportation due to the fact that is proposes the same quantity of residential units along major roadways (existing and proposed) from which transportation-related noise would be generated.

The proposed Project would result in significant on-site interior noise levels within residential neighborhoods that abut La Cadena Drive, which would require mitigation in the form of upgraded windows. Under the proposed Project and the RFA, the development proposed in the vicinity of La Cadena Drive would be identical; therefore, impacts associated within on-site interior noise levels within neighborhoods abutting La Cadena Drive would be identical under both development scenarios.

Construction and operation of the proposed Project would produce vibration levels below the County of San Bernardino vibration standards, and would be less than significant. Given the smaller development footprint, the smaller scale nature of construction and operational activities inherent to a smaller development footprint (under the RFA) may result in decreased vibration levels compared to the proposed Project. Therefore, the RFA would result in slightly reduced vibration impacts as compared to the proposed Project.

Similar to the proposed Project, the RFA would not expose people residing or working in the area to excessive noise levels associated with public airports, because no public airports are located within the vicinity of the Project site.

Similar to the proposed Project, the RFA would not expose people residing or working in the area to excessive noise levels associated with private airstrips, because no private airstrips are located within the vicinity of the Project site.

K. Population and Housing

Both the RFA and the proposed Project would accommodate a population of approximately 3,633 residents, which is anticipated by the City's General Plan growth forecasts. There would be no impacts to the environmental peculiar to population growth that are not addressed in other Subsections of this EIR. Impacts under the RFA and the proposed Project would be equivalent and less than significant.

As with the proposed Project, the RFA would be developed on a site that is predominantly vacant and undeveloped and contains no housing under existing conditions. Therefore, neither the proposed Project nor the RFA would result in the displacement of a substantial amount of existing housing and would not result in the need for construction of replacement housing elsewhere. There would be no impact under the proposed Project or RFA scenarios.

The Project site is predominantly vacant and undeveloped and contains no housing under existing conditions. Therefore, neither the proposed Project nor the RFA would displace any persons nor result in the need for construction of replacement housing elsewhere. There would be no impact under the proposed Project or RFA scenarios.

L. Public Services

The proposed Project would result in a less-than-significant impact as a result of Project-related demand for fire protection services, through payment of development impact fees. Given the similar generation of demand for fire services related to the similar number of dwelling units and commercial acreage that would be developed under this Alternative, the RFA would also result in less-than-significant impacts to fire protection services. However, the reduction in the development footprint would have a slight corresponding reduction in the development area that would generate demand for fire service. A less-than-significant impact would occur under both the proposed Project and the RFA.

Because the Colton Police Department has adequate physical capacity to service the proposed Project, no new or expanded police protection facilities are needed, and a less-than-significant impact would occur. Given the similar generation of demand for police protection services related to the identical number of dwelling units and commercial acreage proposed under this Alternative, the RFA would also result in less-than-significant impacts to police protection services. The RFA would also avoid cumulatively considerable impacts to police protection services through payment of development impact fees. A less-than-significant impact would occur under both the proposed Project and the RFA.

As with the proposed Project, the RFA would result in the option to develop an on-site elementary school facility. Development of this proposed on-site facility would not result in additional physical impacts to the environment that are not already addressed throughout this EIR. Under both the proposed Project and the RFA development scenarios, the Applicant would be required to pay development impact fees under both SB 50 and Colton Municipal Code Chapter 16.92. A less-than-significant impact would occur under both the proposed Project and the RFA.

Implementation of the Project would meet the City's parkland dedication standard on-site, and a less-than-significant impact would result. The RFA would result in a 17.4-acre reduction in the acreage of parkland provided compared to the proposed Project (1.9 acres compared to 19.3 acres). For an estimated population of 3,633 persons, the City's parkland dedication standard of 3.0 acres per 1,000 residents would require the provision of 10.9 acres of parkland. Therefore, the RFA would result in a 9.0-acre deficit of on-site parkland which would necessitate the future construction of off-site park facilities that could have a physical impact on the environment that was not addressed in this EIR. Accordingly, the RFA would result in an increase in impacts related to the construction of park facilities that could result in new potentially significant physical environmental impacts.

The proposed Project and the RFA would result in a similar demand for library services based on the identical number of dwelling units that would be constructed under either development scenario. Future development of a new or expanded library facility would require subsequent discretionary

actions by the City of Colton, which would require review under CEQA. Accordingly, a less-than-significant physical impact would occur as a result of demand for library services generated under both the proposed Project and RFA scenarios.

M. Recreation

As with the proposed Project, the RFA would be required to comply with Chapter 16.58 of the Colton Municipal Code, which requires that residential development proposals provide on-site parkland and recreational amenities and/or pay fees to the City of Colton. The RFA would result in a 17.4-acre reduction in the acreage of parkland provided compared to the proposed Project (1.9 acres compared to 19.3 acres). For an estimated population of 3,633 persons, the City's parkland dedication standard of 3.0 acres per 1,000 residents would require the provision of 10.9 acres of parkland. As such, the RFA would result in a 9.0-acre deficit of on-site parkland. Therefore, the RFA would likely result in an increase in the use of existing off-site parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated when compared to the proposed Project. Accordingly, the RFA would result in an increase in the potential for impacts with respect to physical deterioration of off-site recreational facilities.

The physical environmental impacts associated with the construction of on-site parks has been addressed throughout the analysis of the RFA. As discussed above, the RFA would result in a 17.4-acre reduction in the acreage of parkland provided compared to the proposed Project (1.9 acres compared to 19.3 acres). Therefore, due to the lower acreage of Open Space-Recreation proposed by the RFA relative to the proposed Project, the RFA would result in a reduction in physical impacts associated with the development of recreational facilities.

N. Transportation and Traffic

The RFA is anticipated to result in a slight reduction in traffic generation as compared to the proposed Project. This small reduction in traffic generation would be due to the decreased acreage of parkland proposed by the RFA (1.9 acres) as compared to the proposed Project (19.3 acres) that would translate to a reduction in trip generation, as well as the higher residential density that would occur within the Project site. The small reduction in traffic generation under the RFA would be result in a corresponding slight reduction of the Project's impacts (less than significant with mitigation as well as significant direct and cumulatively considerable impacts) to intersections, roadway segments, and CMP facilities.

O. Utilities and Service Systems

As with the proposed Project, there is no potential for the RFA to exceed wastewater treatment requirements of the Santa Ana RWQCB. Under both the proposed Project and the RFA, wastewater generated at the Project site would be conveyed to and treated by the Colton Wastewater Reclamation Plant, which is under the jurisdiction of the RWQCB, and ensures that all requirements regarding wastewater treatment are met. As such, no impact would occur under the RFA.

Since an identical quantity of residential units is proposed by the RFA and the proposed Project, both would generate a similar demand for wastewater collection and disposal. Neither development scenario would require the construction of new water or wastewater systems that have the potential to cause significant environmental effects. As such, a similar less-than-significant impact would occur under the RFA.

As with the proposed Project, storm water would be collected via an on-site drainage system and on-site detention basins to be constructed by the RFA. The RFA would not require the construction of any new storm water drainage facilities (beyond those proposed to be constructed on-site) that would have the potential to cause significant environmental effects. Under the RFA, a reduction in impacts associated with storm water facilities would occur due to the decrease in the amount of storm water anticipated to be generated by the RFA as compared to the proposed Project.

The RFA would generate a similar demand for water supplies as compared to the proposed Project. As was determined in EIR Subsection 4.15, *Utilities and Service Systems*, there are sufficient water supplies available to service the development of 1,050 residential units.

As compared to the proposed Project, the RFA would likely result in a slightly reduced demand for solid waste disposal services as compared to the proposed Project based on the smaller scale of its construction and due to the higher residential density that would be developed at the site. There is adequate capacity at the California Street Landfill to accept the RFA's solid waste, which is expected to be slightly less than the proposed Project. Therefore, the RFA would result in a slight reduction in impacts associated with the demand for solid waste disposal services.

As with the proposed Project, the RFA would comply with all applicable federal, state, and local statutes and regulations related to solid waste disposal, reduction, and recycling. A similar less-than-significant impact would occur under the RFA.

P. Conclusion

Implementation of the RFA would likely result in a reduction in the significant and unavoidable impacts associated with the proposed Project, including in the issue areas of aesthetics, air quality and transportation/traffic – though it would not reduce any of these impacts to a less-than-significant level. Indeed, given the overall smaller scale construction and operational activities and the higher residential density inherent to the RFA relative to the proposed Project, the RFA would either result in similar or reduced impacts in all of the issue areas discussed accept for the following issue areas where the RFA may result in an increase in impacts: Hazards and Hazardous Materials and Public Services.

In general, the RFA would meet each of the Project's objectives except for Objective B (to high-quality housing opportunities that are marketable and accessible within the City of Colton) and Objective D (to provide a range of housing types and styles that appeal to a diversified range of households and income levels). The RFA would fail to achieve Project Objective B as effectively as the proposed Project because it increases residential density resulting in an increase in multi-family residential uses

and thus would not provide the broad range of diverse housing types to the extent that the proposed Project would accomplish. The RFA would fail to accomplish Objective D as effectively as the proposed Project, because it proposes a 17.4-acre reduction in land dedicated to parks and recreational facilities compared to the 19.3 acres of parkland proposed by the Project and would not meet the City of Colton's parkland requirements on-site.

6.3.4 REDUCED DENSITY ALTERNATIVE

The RDA contemplates the development of a residential community that would have a development footprint identical to the proposed Project, but would have a reduced overall residential density when compared to the proposed Project. The RDA would convert Planning Areas 4, 6, and 9 from a Medium Density Residential land use designation (up to 16.0 du/ac) to a Low Density Residential designation (up to 8.0 du/ac), and would convert Planning Areas 8 and 10 from a High Density Residential land use designation (up to 22.0 du/ac) to a Low Density Residential designation (8.0 du/ac). The RDA would result in the development of up to 737 dwelling units within the Project site. The densities of the five Planning Areas designated by the proposed Project as Low Density Residential were not modified under the RDA. Under the RDA, should the school district or the fire department (respectively) elect not to construct facilities within Planning Areas 12 and 13, the Low Density Residential (8.0 du/ac) land use designation would be the alternate use for these Planning Areas rather than the Medium Density Residential land use designation (up to 16.0 du/ac). Accordingly, the RDA would reduce the number of dwelling units that would be constructed at the Project site by 313 residential units, which equates to an approximate 30% decrease in dwelling units when compared to the proposed Project. All other components of the Specific Plan under the RDA would remain unchanged compared to the proposed Project, including the neighborhood commercial retail (Planning Area 11), roadways, parks, open space, and utility facilities. Pursuant to CEQA Guidelines § 15126.6, the RDA has been identified as the Environmentally Superior Alternative.

A. Aesthetics

Neither the Project nor the RDA would result in substantial adverse effects to scenic vistas or scenic resources. No known scenic resources occur on the Project site; therefore, neither the proposed Project nor the RDA would have impacts on scenic resources. The visual character of the completed RDA project would be substantially similar to the proposed Project when viewed from offsite properties.

The Project site is not visible from any State-designated scenic highways; therefore, implementation of the RDA would neither increase nor decrease impacts to resources visible from a designated scenic highway corridor as compared to the proposed Project. No impacts would result from implementation of the RDA or the proposed Project.

A similar portion of the existing natural hillside setting would be preserved under the RDA and the proposed Project. Additionally, as with the proposed Project, the RDA would be subject to the design guidelines of the Roquet Ranch Specific Plan. Therefore, the RDA would result in similar significant direct impacts to the existing visual character or quality of the site and its surroundings as compared

to the Project. Accordingly, like the Project, the RDA would still result in a direct significant and unavoidable impact on the visual character of the site due to the grading of certain on-site hillsides.

The RDA proposes an approximate 30% reduction in total dwelling units compared to the proposed Project, and therefore may slightly reduce impacts associated with light and glare affecting day or nighttime views in the area.

B. *Air Quality*

Emissions of PM_{10} during the construction phase of the Project would exceed the applicable SCAQMD LST for PM_{10}; therefore, the Project would conflict with Consistency Criterion No. 1 of the SCAQMD's AQMP, which is the air quality plan applicable to the South Coast Air Basin within which the Project site is located. With mitigation, impacts related to the Project's PM_{10} emissions would be reduced to less than significant. The RDA would result in a reduction in the number of dwelling units developed at the Project site; however, the areas subject to grading would be similar to the proposed Project and would result in a similar emission of PM_{10} as would occur under the proposed Project.

Under the proposed Project, the implementation of mitigation measures would reduce construction-related emissions of NO_x and VOCs to a level below significance. However, long-term operation of the Project would result in emissions of NO_x that would be significant and unavoidable as well as cumulatively considerable. Additionally, as discussed in EIR Section 4.2, *Air Quality*, when the Project's short-term construction and long-term operational activities overlap, VOCs, NO_x, and CO emissions would be significant and unavoidable. The RDA would result in operational emissions of these air pollutants that would be correspondingly reduced during construction and operation when compared to the proposed Project due to RDA's reduction in the total number of dwelling units by 30%.

Neither the proposed Project nor the RDA include land uses or activities that would produce unusual or substantial construction-related odors that would be objectionable and affect a substantial number of people. The RDA and the proposed Project would result in similar less-than-significant impacts with respect to odors.

C. *Biological Resources*

With mitigation, the proposed Project's impacts to southwestern willow flycatcher and its critical habitat, least Bell's vireo, coastal California gnatcatcher critical habitat, and burrowing owl would be reduced to less than significant. Based on the similar development footprint of the proposed Project, the RDA would result in similar impacts to sensitive species, as compared to the proposed Project.

With mitigation, the proposed Project would result in less-than-significant impacts to black willow thicket (considered habitats that are high priority for inventory by CDFW) and non-wetland streambeds and riparian vegetation under CDFW jurisdiction. Due to the similar development footprint between

the proposed Project and the RDA, both would have similar impacts to jurisdictional features and riparian habitat at the site.

Neither the proposed Project nor the RDA would impact any federally protected wetlands as defined by the Section 404 of the CWA.

With mitigation, the proposed Project's impacts to nesting migratory birds would be reduced to less-than-significant levels. Based on the similar development footprint of the RDA, it is anticipated that the RDA would result in similar impacts to nesting migratory birds compared to the proposed Project.

With mitigation, the Project would not conflict with the City of Colton Street Tree Ordinance, and Project-related impacts would be less than significant. Based on the similar development footprint of the RDA, it is anticipated that the RDA would result in similar impacts with respect to conflict with the City of Colton Street Tree Ordinance or other local policies or ordinances protecting biological resources.

The Project site is not located within a Significant Ecological Area (SEA) or an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan. Therefore, neither the proposed Project nor the RDA would result in any impacts with respect to such plans.

D. Cultural Resources

Based on the results of the Cultural Resources Assessment (*Technical Appendix F1*) performed at the Project site, no significant historic resources would be impacted by the proposed Project. Accordingly, it is anticipated the RDA would result in similar less-than-significant impacts to historic resources when compared to the proposed Project.

With mitigation, the proposed Project would have less-than-significant impacts on archaeological resources. Since the RDA has a similar development footprint to the proposed Project, the RDA would result in similar less-than-significant impacts to these significant archaeological resources with the incorporation of the mitigation measures identified for the proposed Project.

Due to the presence of quaternary older alluvial valley and alluvial fan sediments at the Project site, the site is considered to have a high potential to contain significant paleontological resources. With mitigation, the Project's impacts to paleontological resources would be less than significant. Due to the RDA's similar development footprint/extent of physical disturbances, implementation of the RDA is likely to result in similar impacts to paleontological resources.

The Project site does not contain a known cemetery. Both the proposed Project and the RDA would be required to comply with the applicable provisions of California Health and Safety Code § 7050.5 and California Resources Code § 5097 et. seq. in the unlikely event that human remains are discovered during ground-disturbing activities. Mandatory compliance with State law would ensure that human

remains, if encountered, including those which may be of Native American decent, are appropriately treated and would preclude the potential for significant impacts. Relative to the proposed Project, the RDA would physically disturb the site to a similar extent, and would result in similar (less-than-significant) impacts with respect to disturbance of human remains.

F. Geology and Soils

With mitigation, the proposed Project would have less-than-significant impacts regarding exposure of people or structures to potential substantial adverse effects involving geologic hazards. Given that the RDA would disturb the natural hillsides at the site to a similar extent compared to the proposed Project, the RDA would result in a similar exposure to the geologic hazards associated with hillside development (i.e., landslides). Therefore, the RDA would result in similar impacts associated with geologic hazards.

Mandatory compliance with the requirements of the Project's NPDES permit, SWPPP, WQMP, and other regulatory requirements would ensure that water and wind erosion associated with the proposed Project is less than significant. The RDA would also be subject to the same requirements of an NPDES permit, SWPPP, and WQMP, which would also result in less-than-significant impacts of the RDA with respect to soil erosion and loss of topsoil.

Implementation of mitigation would ensure that the proposed Project's potential hazards associated with landslides and collapsible soils would be less than significant. As compared to the proposed Project, the RDA would disturb a similar extent of the hillside landscape at the Project site, and therefore would result in similar impacts associated with geologic hazards such as landslides, lateral spreading, subsidence, liquefaction or collapse.

With mitigation (performance of a Project-specific geotechnical investigation and implementation of its recommended remedial measures), Project-related impacts associated with expansive soils would be less than significant. The RDA would result in similar impacts associated with expansive soils, due to the similar extent of physical disturbances under the RDA.

Neither the proposed Project nor the RDA include septic tanks or alternative waste water disposal systems; accordingly, neither the proposed Project nor the RDA would result in impacts associated with inadequacy of soils to support septic tanks or alternative waste water disposal systems.

F. Greenhouse Gas Emissions

The proposed Project's annual GHG emissions are estimated to be approximately 16,481.15 total CO_2e, or 25.96-percent less than 2008 BAU conditions, which meet the minimum GHG emissions reduction (25 percent) required by the City's CAP. With mitigation, the Project would not result in a significant environmental impact with respect to GHG emissions. Through its 30% reduction in dwelling units, the RDA is anticipated to emit smaller quantities of GHGs as compared to the proposed

Project. The RDA would result in correspondingly reduced (less-than-significant) GHG impacts compared to the proposed Project.

G. *Hazards and Hazardous Materials*

With implementation of mitigation, impacts associated with the Project's exposure of the public or the environment to hazardous materials would be reduced to a less-than-significant level. The RDA does not avoid development of any of the areas of the site that are underlain by potentially contaminated soil, and would therefore result in similar impacts to the proposed Project with respect to exposure of the public or the environment to hazardous materials.

As with the proposed Project, the RDA is not located within one-quarter mile of any existing or planned school (with the exception of the proposed school within Planning Area 12). Accordingly, neither the proposed Project nor the RDA would expose any nearby school to potential impacts related to acutely hazardous materials. No impact would occur under either development scenario.

The proposed Project is not located within two miles of an airport or within an airport land use compatibility plan. Accordingly, no impact would occur under either the proposed Project or the RDA associated with airport hazards.

There are no private airstrips located within the vicinity of the Project site; therefore, no impacts would occur under the proposed Project or the RDA associated with private airstrip hazards.

The Project site does not serve as an emergency evacuation route. Therefore, the construction and operation of the neither the proposed Project nor the RDA would impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The Project site is located within a "Very High Fire Hazard Severity Zone" of a Local Responsibility Area. Mandatory compliance with the fuel modification requirements and building design requirements of the City of Colton Fire Department, as well as compliance with Section 701A of the California Building Code, would reduce the proposed Project's impacts to less than significant. The RDA would be subject to these same requirements, and thus would also result in less-than-significant impacts with respect to hazards associated with wildfire risks. The RDA proposes a similar development footprint and thus would result in similar wildfire risks as compared to the proposed Project. Therefore, the RDA would result in similar impacts associated with wildfire risks as compared to the proposed Project.

H. *Hydrology and Water Quality*

The proposed Project is required to prepare a SWPPP to address construction-related water quality issues and proposes design features including detention/water quality basins to address long-term water quality. As such, the proposed Project would not violate any water quality standards or waste discharge requirements on a direct or cumulatively considerable basis. The RDA would also be required to

prepare a SWPPP and incorporate appropriate design features to address water quality. As such, the RDA would result in similar less-than-significant impacts with respect to complying with water quality standards and/or waste discharge requirements.

The proposed Project has a reliable source of domestic water would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. The RDA would generate a reduced demand for domestic water due to its 30% reduction in the quantity of dwelling units proposed, and would also be accommodated by the same source of domestic water supply. Therefore, with respect to depletion of groundwater supplies, the RDA would result in a corresponding reduction in the proposed Project's less-than-significant impacts. The RDA would result in similar less-than-significant impacts to interference with groundwater recharge due to its similar development footprint (and associated extent of pervious surfaces that would be converted to impervious surfaces).

The proposed Project would result in less-than-significant impacts with respect to substantial erosion or siltation on- or off-site through major alteration to the existing drainage pattern of the site, as the Project proposes a storm drain system that would sufficiently convey off-site flows through the Project site in a manner that is similar to existing conditions. The RDA would be developed with a storm drain system that would also sufficiently convey flows off-site in a manner that would not substantially alter the existing drainage pattern at the Off-site Location which would preclude the occurrence of flooding, substantial erosion, or siltation on- or off-site. Based on the similar development footprint of the RDA, this Alternative would alter the existing drainage pattern at the site to a similar extent as compared to the proposed Project. As such, the RDA would result in similar impacts with respect to siltation through major alternation of the site's existing drainage pattern.

The proposed Project would include the installation of a storm water drainage system that would include a series of detention/water quality basins, which would prevent storm water runoff from exceeding the capacity of existing or planned storm water drainage systems or contributing additional sources of polluted runoff. The RDA would also include the construction of a storm water drainage system that would effectively manage storm water runoff to prevent exceedance of storm drain system capacities and substantial pollution of storm water runoff. Since the RDA would result in a similar development footprint compared to the proposed Project, this Alternative would generate a similar quantity of storm water runoff and contribute a similar degree of pollution to storm water runoff. Accordingly, the RDA would result in similar impacts associated with storm water runoff as compared to the proposed Project.

Under existing conditions, the portions of the southerly and easterly areas of the Project site are located within a 100-year flood hazard zone, and the proposed Project would locate housing within a 100-year flood zone. Accordingly, mitigation in the form of a CLOMR and LOMR would be required as mitigation to reduce impacts to less than significant. Relative to the proposed Project, the RDA would implement a similar development footprint within the areas of the site subject to flooding, except the RDA would result in the placement of a lesser number of dwelling units within the flood zones due to

the reduced density of Planning Areas 8, 9, and 10. Therefore, the RDA would result in slightly reduced impacts with regard to the placement of housing within areas subject to flood hazards.

Due to the portions of the southerly and easterly areas of the Project site that lie within a 100-year flood hazard zone, the proposed Project would place structures within a 100-year flood hazard area which could impede or redirect flood flows. With mitigation (CLOMR and LOMR), the Project's impacts would be reduced to below a level of significance. As discussed above, the RDA would implement an identical development footprint within the areas of the site that are subject to flooding, except it would result in the placement of a fewer dwelling units within the flood zones due to the reduced densities of Planning Areas 8, 9, and 10. Therefore the RDA would result in slightly reduced impacts with respect to flood hazards.

The Project site is located too far away from enclosed water bodies and the ocean to be subjected to hazards associated with seiches or tsunamis. Additionally, implementation of the BMPs from the WQMP and SWPPP during construction activities would reduce impacts associated with mudflow events below levels of significance. In the post development condition, the potential for the occurrence of mudflow events is low due to the presence of engineered slopes and flood control features. Accordingly, impacts associated with mudflow would be similarly less than significant under both the proposed Project and the RDA.

I. Land Use and Planning

Under both the proposed Project and RDA development scenarios, roadway and pedestrian improvements would accommodate vehicular and pedestrian access through the master-planned community, and neither the RDA nor the proposed Project would not physically divide an established community.

Both the RDA and the proposed Project would result in similar land uses developed within the Project site. The reduction in the residential density that would occur under the RDA would not result in any conflicts with General Plan policies or standards, nor would it conflict with any other local, regional or State plans.

The Project site is not located within an adopted HCP, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan, and no conflict with any such plans would occur under the proposed Project or the RDA.

J. Noise

The proposed Project would result in significant on-site exterior noise levels associated with exposing residents to transportation-related noise. Because the RDA would result in a corresponding reduction in the number of vehicular trips generated at the Project site (due to the reduction in the number of dwelling units), the RDA would result in a corresponding reduction in impacts related to on-site exterior noise. Additionally, the RDA would reduce the number of dwelling units within planning

areas located adjacent to major roadways (i.e., the I-215 freeway, La Cadena Drive, and the proposed Roquet Ranch Road) from which transportation-related noise would be generated. Accordingly, under the RDA, transportation-related noise would be reduced as a result of the reduction in traffic generation anticipated.

The proposed Project would result in significant on-site interior noise levels within residential neighborhoods that abut La Cadena Drive, which would require mitigation in the form of upgraded windows. Under the RDA, the number of dwelling units proposed in the vicinity of La Cadena Drive would be reduced, which would result in a concomitant reduction in on-site interior noise levels within neighborhoods abutting La Cadena Drive. Accordingly, the RDA would result in in a reduction of on-site interior noise impacts.

Construction and operation of the proposed Project would produce vibration levels below the County of San Bernardino vibration standards, and would be less than significant. Given the reduced number of dwelling units proposed by the RDA, construction and operational activities would be expected to result in slightly decreased vibration levels compared to the proposed Project.

Similar to the proposed Project, the RDA would not expose people residing or working in the area to excessive noise levels associated with public airports, because no public airports are located within the vicinity of the Project site. Additionally, similar to the proposed Project, the RDA would not expose people residing or working in the area to excessive noise levels associated with private airstrips, because no private airstrips are located within the vicinity of the Project site.

K. Population and Housing

Whereas the proposed Project (proposes 1,050 dwelling units) would generate a population of approximately 3,633 residents, the RDA would generate approximately 2,550 residents (737 residences x 3.46 persons per household = 2,550 residents), which is 1,083 fewer residents than would be generated by the proposed Project (City of Colton, 2013a, Table LU-1). Population growth within the City of Colton under either development scenario has been anticipated by the City's General Plan growth forecasts. There would be no impacts to the environment that would result from population growth that are not addressed in other Subsections of this EIR. However, due to the lower population growth that would be generated by the RDA (as compared to the proposed Project), the RDA would result in reduced impacts related to inducement of population growth.

As with the proposed Project, the RDA would be developed on a site that is predominantly vacant and undeveloped and contains no housing under existing conditions. Therefore, neither the proposed Project nor the RDA would result in the displacement of a substantial amount of existing housing and would not result in the need for construction of replacement housing elsewhere. There would be no impact under the proposed Project or RDA scenarios.

The Project site is predominantly vacant and undeveloped and contains no housing under existing conditions. Therefore, neither the proposed Project nor the RDA would displace any persons nor result

in the need for construction of replacement housing elsewhere. There would be no impact under the proposed Project or RDA scenarios.

L. Public Services

The proposed Project would result in a less-than-significant impact as a result of Project-related demand for fire protection services, and would avoid cumulatively considerable impacts to City fire facilities through mandatory payment of development impact fees. Given the 30% reduction in the number of dwelling units (and decreased population growth) relative to the proposed Project, the RDA would result in reduced impacts with respect to fire protection services.

Because the Colton Police Department has adequate physical capacity to service the proposed Project, no new or expanded police protection facilities are needed, and a less-than-significant impact would occur. Cumulatively considerable impacts to police protection services would also be avoided through the Project's mandatory payment of development impact fees in compliance with City requirements. Given the 30% reduction in the number of dwelling units (and decreased population growth) relative to the proposed Project, the RDA would result in a corresponding reduction in the less-than-significant impacts with respect to police services. The RDA would also avoid cumulatively considerable impacts to police protection services through payment of development impact fees.

As with the proposed Project, the RDA would result in the development of an on-site elementary school facility if the School District elects to construct the school within Planning Area 12. Development of this proposed on-site facility would not result in additional physical impacts to the environment that are not already addressed throughout this EIR. Under both the proposed Project and the RDA development scenarios, the Applicant would be required to pay development impact fees under both SB 50 and Colton Municipal Code Chapter 16.92. However, based on the reduction in dwelling units and population associated with the RDA (as compared to the proposed Project), the RDA would result in a corresponding reduction in demand for school facilities, which would reduce impacts.

Implementation of the Project would meet the City's parkland dedication standard on-site, and a less-than-significant impact would result. The RDA would construct an identical amount of parkland (19.3 acres) compared to the proposed Project. For an estimated population of 2,550 persons, the City's parkland dedication standard of 3.0 acres per 1,000 residents would require the provision of 7.7 acres of parkland. Therefore, the RDA would exceed this parkland dedication standard by 11.6 acres, and would not necessitate the future construction of off-site park facilities. Accordingly, the RDA would result in a decrease in impacts related to demand for park facilities, which would result in a reduction in impacts.

Compared to the proposed Project, the RDA would result in a reduced demand for library services due to its decreased population growth relative to the proposed Project.

M. Recreation

As with the proposed Project, the RDA would be required to comply with Chapter 16.58 of the Colton Municipal Code, which requires that residential development proposals provide on-site parkland and recreational amenities and/or pay fees to the City of Colton. The RDA would result in the construction of an identical amount of park acreage (19.3 acres) as compared to the proposed Project. For an estimated population of 2,550 persons, the City's parkland dedication standard of 3.0 acres per 1,000 residents would require the provision of 7.7 acres of parkland. Therefore, the RDA would exceed this parkland dedication standard by 11.6 acres. Therefore, the RDA would not likely result in an increase in the use of existing off-site parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Accordingly, as compared to the proposed Project, the RDA would result in a reduction in impacts with respect to physical deterioration of off-site recreational facilities.

The physical environmental impacts associated with the construction of on-site parks has been addressed throughout the analysis of the RDA. As discussed above, the RDA would result in the construction of a greater acreage of parkland provided compared to the proposed Project (19.3 acres). Therefore, the RDA would result in similar impacts associated with the development of recreational facilities.

N. Transportation and Traffic

The RDA would result in a reduction in traffic generation as compared to the proposed Project because it would result in a 30% reduction in the number of dwelling units constructed. This reduction in traffic generation under the RDA would incrementally reduce each of the Project's less-than-significant impacts with mitigation, as well as incrementally reduce the Project's significant direct and cumulatively considerable impacts to intersections, roadway segments, and CMP facilities. No impacts would be avoided.

O. Utilities and Service Systems

As with the proposed Project, there is no potential for the RDA to exceed wastewater treatment requirements of the Santa Ana RWQCB. Under either the proposed Project or the RDA, wastewater generated at the Project site would be conveyed to and treated by the Colton Wastewater Reclamation Plant, which is under the jurisdiction of the RWQCB, and ensures that all requirements regarding wastewater treatment are met. As such, no impact would occur under the RDA.

Neither the proposed Project nor the RDA would require the construction of new water or wastewater systems that have the potential to cause significant environmental effects. Since the RDA proposes an approximately 30% reduction in the number of dwelling units compared to the proposed Project, it would result in a concomitant reduction in the demand for wastewater collection and disposal that would be generated at the Project site. As such, the RDA would result in reduced impacts associated with wastewater facilities.

As with the proposed Project, storm water would be collected via an on-site drainage system and on-site detention basins to be constructed by the RDA. The RDA would not require the construction of any new storm water drainage facilities (beyond those proposed to be constructed on-site) that would have the potential to cause significant environmental effects. Given the similar development footprint between the proposed Project and the RDA, the RDA would result in similar less-than-significant impacts associated with storm water facilities.

Compared to the proposed Project, the RDA would generate a reduction in demand for water supplies. As was determined in EIR Subsection 4.15, there are sufficient water supplies available to service the development of 1,050 residential units. Therefore, the RDA's proposed development of 737 dwelling units would not exceed available supplies of water, even during dry year conditions. Accordingly, the RDA would result in a reduction in the less than significant impacts related to demand for water supplies as compared to the proposed Project.

As compared to the proposed Project, the RDA would likely result in a slightly reduced demand for solid waste disposal services as compared to the proposed Project based on the reduction in dwelling units proposed under the RDA. There is adequate capacity at the California Street Landfill to accept the RDA's solid waste, which is expected to be slightly less than the proposed Project. Therefore, the RDA would result in a slight reduction in the less-than-significant impacts associated with the demand for solid waste disposal services.

As with the proposed Project, the RDA would comply with all applicable federal, state, and local statutes and regulations related to solid waste disposal, reduction, and recycling. A similar less-than-significant impact would occur under the RDA.

P. Conclusion

Compared to the proposed Project, the RDA would result in overall smaller scale construction and operational activities (based on the approximately 30% reduction in total dwelling units). As such, the RDA would likely result in a reduction in the significant and unavoidable impacts associated with the proposed Project in the issue areas of air quality and transportation/traffic. The RDA would result in similar to slightly reduced impacts in the issue area of Aesthetics, but would not avoid the significant and unavoidable direct impacts that the Project would cause pertaining to impacts to the existing visual character of the site and surrounding areas due to the grading of certain hillsides. Additionally, the RDA would reduce impacts in all of the issue areas accept for the following issue areas where the RDA may result in similar impacts: Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, and Land Use and Planning.

The RDA would not meet Objective B, which aims to provide high-quality housing opportunities that are marketable and accessible within the City of Colton or Objective D, which aims to provide a range of housing types and styles that appeal to a diversified range of households and income levels. The RDA would fail to achieve Project Objective B as effectively as the proposed Project because it would provide 313 fewer housing units and thus would not provide as much high-quality housing

opportunities that are marketable and accessible to City of Colton residents to the extent that the proposed Project would accomplish. The RDA would fail to achieve Project Objective D as effectively as the proposed Project because it would convert Planning Areas 4, 6, and 9 from a Medium Density Residential land use designation to a Low Density Residential designation, and would convert Planning Areas 8 and 10 from a High Density Residential land use designation to a Low Density Residential designation, and thus would not provide the same range of housing types of styles that appeal to a diversified range of households and income levels to the extent that the proposed Project would accomplish.

The RDA has been identified as the environmentally superior alternative pursuant to CEQA Guidelines § 15126.6, as it would result in some degree of reduction to the potential for impacts associated with 9 of the environmental topics without resulting in any increased impacts. However, the RDA would not reduce to a less-than-significant level any of the significant and unavoidable impacts of the Project.

Table 6-1 Alternatives to the Proposed Project - Comparison of Environmental Impacts

ENVIRONMENTAL TOPIC	PROPOSED PROJECT SIGNIFICANCE OF IMPACTS AFTER MITIGATION	LEVEL OF IMPACT COMPARED TO THE PROPOSED PROJECT			
		NO PROJECT/ NO DEVELOPMENT ALTERNATIVE	OFF-SITE LOCATION ALTERNATIVE	REDUCED FOOTPRINT ALTERNATIVE	REDUCED DENSITY ALTERNATIVE
Aesthetics	Significant and Unavoidable Direct Impact	Avoided	Reduced	Reduced*	Reduced*
Air Quality	Significant and Unavoidable Direct and Cumulatively Considerable Impact	Avoided	Slightly Reduced*	Reduced*	Reduced
Biological Resources	Less-than-Significant Impacts	Avoided	Slightly Increased	Reduced	Similar
Cultural Resources	Less-than-Significant Impacts	Avoided	Similar	Reduced	Similar
Geology / Soils	Less-than-Significant Impacts	Avoided	Reduced	Reduced	Similar
Greenhouse Gas Emissions	Less-than-Significant Impacts	Avoided	Slightly Reduced	Reduced	Reduced
Hazards & Hazardous Materials	Less-than-Significant Impacts	Reduced	Slightly Reduced	Slightly Increased	Similar
Hydrology and Water Quality	Less-than-Significant Impacts	Avoided	Increased	Slightly Reduced	Slightly Reduced
Land Use and Planning	Less-than-Significant Impacts	Slightly Increased	Similar	Similar	Similar
Noise	Less-than-Significant Impacts	Avoided	Slightly Reduced	Slightly Reduced	Reduced

Table 6-1 Alternatives to the Proposed Project - Comparison of Environmental Impacts

Population and Housing	Less-than-Significant Impacts	Avoided	Increased	Similar	Reduced
Public Services	Less-than-Significant Impacts	Avoided	Similar	Increased	Reduced
Recreation	Less-than-Significant Impacts	Avoided	Similar	Similar	Reduced
Transportation and Traffic	Significant and Unavoidable Direct and Cumulatively Considerable Impacts	Avoided	Similar	Slightly Reduced*	Reduced*
Utilities and Service Systems	Less-than-Significant Impacts	Avoided	Similar	Slightly Reduced	Reduced
* Although these impacts would be reduced as compared to the Project, they would remain significant and unavoidable.					
ABILITY TO MEET THE BASIC OBJECTIVES OF THE PROJECT					
Objective A. To develop a master-planned community that is compatible with the surrounding areas.		Not Met	Met	Met	Met
Objective B. To provide high-quality housing opportunities that are marketable and accessible within the City of Colton		Not Met	Met	Not Fully Met	Not Fully Met
Objective C. To preserve natural hillsides, natural habitats, and natural drainage courses within open space where feasible.		Met	Met	Met	Met
Objective D. To provide a range of housing types and styles that appeal to a diversified range of households and income levels.		Not Met	Met	Not Fully Met	Not Fully Met
Objective E. To cluster development areas in order to provide neighborhood parks with active and passive recreational amenities for residents of the Roquet Ranch community and the City of Colton as a whole.		Not Met	Met	Met	Met
Objective F. To provide neighborhood-oriented retail services which generate sales tax revenue for the City of Colton.		Not Met	Met	Met	Met
Objective G. To provide sites available to the Colton Unified School District (CUSD) and Colton Fire Department (CFD) for their potential use as an elementary school site and fire station site, respectively.		Not Met	Met	Met	Met

7.0 REFERENCES

7.1 PERSONS INVOLVED IN PREPARATION OF THIS EIR

7.1.1 CITY OF COLTON

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7.2 DOCUMENTS APPENDED TO THIS EIR

The following reports, studies, and supporting documentation were used in preparing the Roquet Ranch Specific Plan EIR and are bound separately as Technical Appendices. A copy of the Technical Appendices is available for review at the City of Colton Planning Division, located at 650 North La Cadena Drive, Colton, California 92324.

Appendix A Initial Study for Roquet Ranch Specific Plan EIR, Notice of Preparation (NOP), and Written Comments on the NOP.

Appendix B Urban Crossroads. 2016a. *Roquet Ranch Specific Plan Air Quality Impact Analysis*. August 16, 2016.

Appendix C Urban Crossroads. 2016b. *Roquet Ranch Specific Plan Air Toxic and Criteria Pollutant Health Risk Assessment.* August 16, 2016.

Appendix D ESA PCR. 2016. *Biological Resources Assessment, Roquet Ranch Specific Plan, City of Colton, San Bernardino County, California.* December 2016.

Appendix E Urban Crossroads. 2016c. *Roquet Ranch Specific Plan Greenhouse Gas Analysis*. August 16, 2016.

Appendix F1 Brian F. Smith and Associates, Inc. (BFSA). 2017a. *Cultural Resources Assessment for the Roquet Ranch Project*. June 9, 2017.

Appendix F2 Brian F. Smith and Associates, Inc. (BFSA). 2017b. *Paleontological Resource and Mitigation Monitoring Assessment, Roquet Ranch subdivision project, city of Colton, San Bernardino County, California (TTM 19983; APNs 116-701-101, -102, 116-702-101, -105, -121,-122, -123, and 116-703-118)*. June 9, 2017.

Appendix G Leighton and Associates, Inc. (LAI). 2014. *Geological and Geotechnical Input for Environmental Impact Report, Roquet Ranch, Northwest and Southeast of 2699 Maryknoll Drive, APNs 1167-011-01, 1167-011-02, 1167-021-01, 1167-021-05, and 1167-021-21*. October 8, 2014.

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Appendix I1 K&A Engineering, Inc. 2016a. *Drainage Report for Roquet Ranch – TTM 19983 City of Colton*. February 2016.

Appendix I2 K&A Engineering, Inc. 2016b. *Drainage Memo for Roquet Ranch – TTM 19983 City of Colton*. November 2016.

Appendix J K&A Engineering, Inc. 2016c. *Preliminary Water Quality Management Plan for Roquet Ranch – TTM 19983*, *City of Colton*. February 2016.

Appendix K Urban Crossroads. 2016d. *Roquet Ranch Specific Plan Noise Impact Analysis*. August 5, 2016.

Appendix L Urban Crossroads. 2016e. *Roquet Ranch Specific Plan Traffic Impact Analysis*. March 23, 2016.

Appendix M Carollo Engineers, Inc. (Carollo). 2016a. *Roquet Ranch Project, City of Colton Water Supply Assessment*. June 2016.

Appendix N City of Colton. 2013d. *Tiering Checklist from City of Colton General Plan Update EIR*.

Appendix O Southern California Association of Governments (SCAG). 2016b. *Tiering Checklist from SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Program EIR (PEIR)*.

7.3 REFERENCES CONSULTED IN PREPARATION OF THIS EIR

7.3.1 DOCUMENTS INCORPORATED BY REFERENCE IN THIS EIR

The following reports, studies, and supporting documentation were used in the preparation of this EIR and are incorporated by reference within this EIR. A copy of the following reports, studies, and supporting documentation is a matter of public record and is generally available to the public at the location listed.

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7.3.2 DOCUMENTS AND WEBSITES CONSULTED IN PREPARATION OF THIS EIR

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