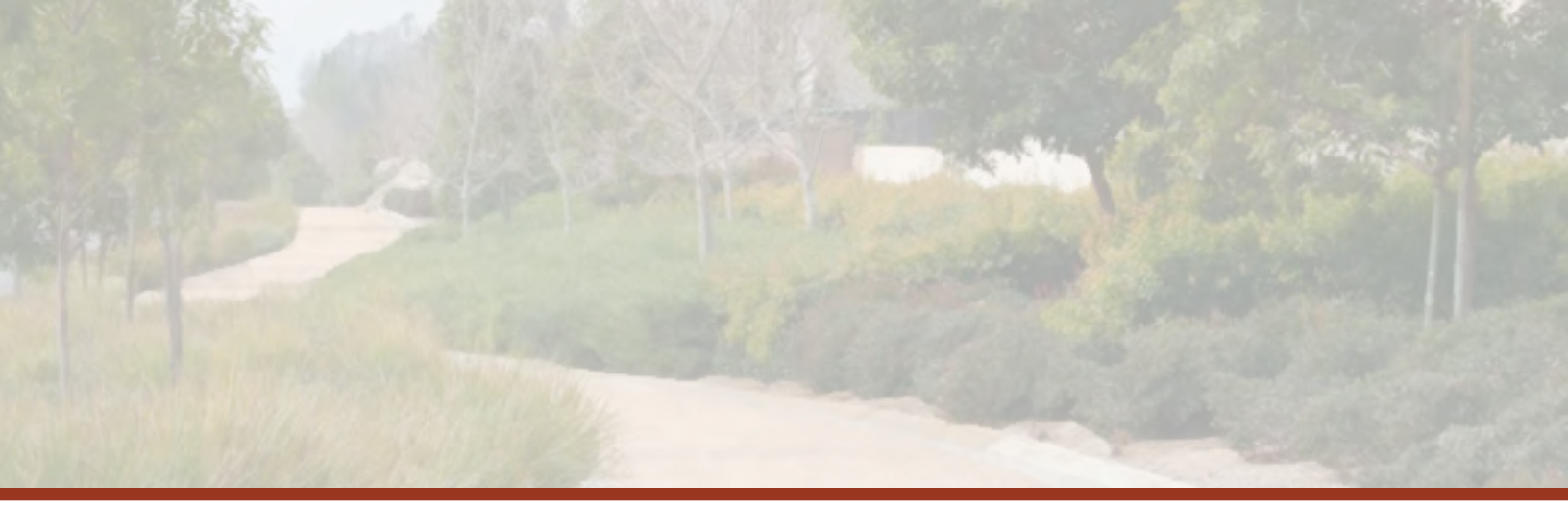


Draft Environmental Impact Report
SCH No. 2018051051
Environmental Review (ER) No. 2018-03

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Draft Final EIR | May 10, 2019

Draft Final Environmental Impact Report
SCH No. 2018051051
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General Plan Amendment (GPA No. 2018-01)
Specific Plan (SP No. 2018-01)
Specific Plan Amendment (SPA No. 2017-03)
Zone Change (ZC No. 2018-01)
Tentative Tract Map (TTM No. 37305)

Draft Final EIR
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Appendix B: Urban Crossroads, Inc., 2018a. *Nichols Ranch Air Quality Impact Analysis*. August 29, 2018.

Appendix C: VCS Environmental, Inc. 2018. *Biological Technical Report and MSHCP Consistency Analysis for the Nichols Ranch Project*. September 2018.

Appendix D: Terracon Consultants, Inc. 2018. *Geotechnical Investigation and Geologic Evaluation Report*. February 2, 2018.

Appendix E: Urban Crossroads, Inc., 2018b. *Nichols Ranch Greenhouse Gas Analysis*. August 29, 2018.

Appendix F: Terracon Consultants, Inc. 2017. *Phase I Environmental Site Assessment Tentative Tract No. 37305 South of Nichols Road and East of Interstate 15 APNs 389-200-037, 389-210-008, and 389-210-032 Lake Elsinore, Riverside County, California 92532 Terracon Project No. 60177386*. December 27, 2017.

Appendix G: FIREWISE 2000, Inc. 2018. *Fire Protection Plan Tract 37305 Nichols Ranch Specific Plan City of Lake Elsinore County of Riverside, California*. January 25, 2019.

Appendix H: Brian F. Smith and Associates, Inc. 2018a. *A Phase I and II Cultural Resources Assessment for the Nichols Ranch Specific Plan Project City of Lake Elsinore, Riverside County, California*. July 17, 2017 [revised: ~~April 27, 2018~~May 7, 2019].

Appendix I1: K&A Engineering, Inc. 2018a. *Preliminary Drainage Report for Tract 37305 Nichols South Specific Plan City of Lake Elsinore*. July 2018.

Appendix I2: K&A Engineering, Inc. 2018b. *Preliminary Specific Water Quality Management Plan, Nichols Ranch Specific Plan*. November 2018.

Appendix J: Urban Crossroads, Inc., 2018c. *Nichols Ranch Noise Impact Analysis*. January 2, 2019.

Appendix K: Brian F. Smith and Associates, Inc. 2018b. *Paleontological Resource and Monitoring Assessment, Nichols Ranch Specific Plan Project, City of Lake Elsinore, Riverside County California*. June 21, 2017 [revised: April 26, 2018].

Appendix L: Urban Crossroads, Inc., 2018d. *Nichols Ranch Traffic Impact Analysis City of Lake Elsinore*. December 18, 2018.

EIR TECHNICAL APPENDICES (BOUND SEPARATELY) – CONT'D

Appendix M: Written Correspondence. (Refer to Section 7.5 for a full list of Project correspondence).

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Appendix N2: Dexter Wilson Engineering, Inc. *Preliminary Sewer System Evaluation for Tract No. 37305 in Lake Elsinore*. July 2018.

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ACRONYMS AND ABBREVIATIONS

Acronym	Definition
§	Section
<	less than
≤	less than or equal to
>	greater than
≥	greater than or equal to
AB	Assembly Bill
ac	acre(s)
AC	Asphalt Concrete
ACM	Alternative Calculation Method
ACOE	Army Corps of Engineers
A.D.	Anno Domini
ADT	Average Daily Traffic
AEP	Association of Environmental Professionals
AIA	Airport Influence Area
AIRFA	American Indian Religious Freedom Act
AlC	Arbuckle Gravelly Loam – 2 to 9 percent slopes, dry
AlD	Arbuckle Gravelly Loam – 8 to 15 percent slopes
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
a.m.	Ante Meridiem (between the hours of midnight and noon)
AM	Ante Meridiem (between the hours of midnight and noon)
amsl	above mean sea level
ANSI	American National Standards Institute
A-P	Alquist-Priolo
APE	Area of Potential Effect
APN	Assessor Parcel Number
APS	Alternative Planning Strategy
AQIA	Air Quality Impact Analysis
AQMP	Air Quality Management Plan
AR4	4th Assessment Report
ARSP	Alberhill Ranch Specific Plan
ASTM	American Society for Testing and Materials
AWS	All Way Stop
BAAQMD	Bay Area Air Quality Management District
B.C.	Before Christ
BFSA	Brian F. Smith and Associates (Project Technical Consultant)
bgs	below ground surface

ACRONYMS AND ABBREVIATIONS (CONT'D)

Acronym	Definition
BMPs	Best Management Practices
BUOW	Burrowing Owl
C&D	Construction & Demolition
C-SP	Commercial Specific Plan (land use designation)
C_2F_6	Hexafluoroethane
C_2H_6	Ethane
CA	California
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAB	California Architects Board
CAGN	Coastal California Gnatcatcher
CalEEMod™	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CA MUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
Calveno	California Vehicle Noise
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CAPSSA	Criteria Area Plant Species Survey Area
CARB	California Air Resources Board
CASSA	Criteria Area Species Survey Area
CAT	Climate Action Team
CBC	California Building Code
CBSC	California Building Standards Code
CCAA	California Clean Air Act
CCC	California Climate Change
CCR	California Code of Regulations
CD	Consistency Determination
CDC	California Department of Conservation
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFCs	Chlorofluorocarbons
C_2F_6	Hexafluoroethane

ACRONYMS AND ABBREVIATIONS (CONT'D)

Acronym	Definition
CF_4	Tetraflouromethane
CF_3CH_2F	HFC-134a
CFGC	California Fish and Game Code
CFMH	Crime Free Multi-Housing
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGC	California Government Code
CGS	California Geologic Survey
CH_4	Methane
CH_3CHF_2	HFC-152a
CHF_3	HFC-23
CHJ	CHJ Consultants (Project Technical Consultant)
CIP	Capital Improvement Program
CIWMB	California Integrated Waste Management Board
CIWMP	California Integrated Waste Management Plan
CkF2	Cieneba Rocky Sandy Loam – 15 to 50 percent slopes, eroded
ClC	Cortina Gravelly Loamy Sand – 2 to 8 percent slopes
CLOMR	Conditional Letter of Map Revision
CMP	Congestion Management Program
CMU	Commercial Mixed Use (Zoning Designation)
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
COA	Condition(s) of Approval
COG	Council of Governments
COHb	carboxyhemoglobin
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
COHb	carboxyhemoglobin
COP	Conference of the Parties
CPVC	Chlorinated Polyvinyl Chloride
CRMDP	Cultural Resource Monitoring and Discovery Plan
CRPR	California Rare Plant Ranking
CTC	California Transportation Commission
CTR	California Toxics Rule
CWA	Clean Water Act
CWC	California Water Code
cy	Cubic Yards

ACRONYMS AND ABBREVIATIONS (CONT'D)

Acronym	Definition
dB	Decibel
dBA	A-weighted Decibels
dBA Leq	A-weighted Decibels equivalent sound level
DBESP	Determination of Biologically Equivalent or Superior Preservation
DEH	Department of Environmental Health
DEIR	Draft Environmental Impact Report
DIF	Development Impact Fee
DMR	Division of Mine Reclamation
DOE	Determination of Eligibility
DOSH	Division of Occupational Safety and Health
DOT	Department of Transportation
DTSC	Department of Toxic Substances Control
du	Dwelling Unit
du/ac	dwelling units per acre
DWR	Department of Water Resources
E+P	Existing plus Project Conditions
EA	Existing plus Ambient
EAC	Existing plus Ambient plus Cumulative
EAP	Existing plus Ambient plus Project
EAPC	Existing plus Ambient plus Project plus Cumulative
EcD2	Escondido Fine Sandy Loam – 8 to 15 percent slopes, eroded
EDR	Environmental Data Resources, Inc.
e.g.	exempli gratia, meaning "for example"
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EMFAC	Emission Factor Model
EMWD	Eastern Municipal Water District
EO	Executive Order
EPCRA	Emergency Planning and Community Right-to-Know Act
EPA	Environmental Protection Agency
EPS	Emission Performance Standard
ESA	Endangered Species Act
ESA	Environmental Site Assessment
ETo	Evapotranspiration
et seq.	et sequentia, meaning "and the following"
EVMWD	Elsinore Valley Municipal Water District

ACRONYMS AND ABBREVIATIONS (CONT'D)

Acronym	Definition
F	Fahrenheit
FAA	Federal Aviation Administration
FAR	Floor Area Ratio
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FIMA	Federal Insurance and Mitigation Administration
FIRM	Flood Insurance Rate Map (FEMA)
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FMMP	Farmland Mapping and Monitoring Program
FPP	Fire Protection Plan
ft.	foot
FTA	Federal Transit Administration
FYI	For Your Information
GBN	Ground-Based Noise
GBV	Ground-Based Vibration
GCC	Global Climate Change
GdC	Garretson Gravelly Very Fine Sandy Loam – 2 to 8 percent slopes
Gg	Gigagrams
GHG	Greenhouse Gas
GHGA	Greenhouse Gas Analysis
GIS	Geographic Information System
g/L	grams per Liter
Gov. Code	Government Code
GPA	General Plan Amendment
GPCD	Gallons per Capita per Day
gpd	gallons per day
gpd/ac	gallons per day per acre
GPLUA	No Project/General Plan Land Use Alternative
gpy	gallons per year
GSAs	Groundwater Sustainability Agencies
GSP	Groundwater Sustainability Plan
GWP	Global Warming Potential
H_2O	Water Vapor
HcC	Hanford Coarse Sandy Loam – 2 to 8 percent slopes
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan

ACRONYMS AND ABBREVIATIONS (CONT'D)

Acronym	Definition
HCS	Highway Capacity Software
HD	Heavy Duty (Vehicles)
HFCs	Hydrofluorocarbons
HI	Hazard Index
HMBEP	Hazardous Materials Business Emergency Plan
HMTA	Hazardous Materials Transportation Act
HMTUSA	Hazardous Materials Transportation Uniform Safety Act
HOA	Homeowners' Association
hp-hr-gal	Horsepower hours per gallon
HSC	Health and Safety Code
HSWA	Hazardous and Solid Waste Amendments
HWCL	Hazardous Waste Control Law
I-15	Interstate 15
I-215	Interstate 215
IA	Implementing Agreement
ICAO	International Civil Aviation Organization
i.e.	that is
IEPR	Integrated Energy Policy Report
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
ITP	Incidental Take Permit
IWMA	Integrated Waste Management Act
IWMP	Integrated Waste Management Plan
IWUIC	International Wildland-Urban Interface Code
JPA	Joint Powers Authority
K&A	K&A Engineering (Project Technical Consultant)
kg	kilogram(s)
kWh	kilowatt-hour
lbs	pounds
LCA	Life-cycle analysis
LCFS	Low Carbon Fuel Standard
LDN	Day-Night Average Noise Level

ACRONYMS AND ABBREVIATIONS (CONT'D)

Acronym	Definition
LEA	Lead Enforcement Agency
LED	Light Emitting Diode(s)
LEMC	Lake Elsinore Municipal Code
Leq	Equivalent continuous sound level
LEUSD	Lake Elsinore Unified School District
LMD	Landscape Maintenance District
LOMR	Letter of Map Revision
LOS	Level of Service
LpF2	Lodo Rocky Loam – 25 to 50 percent slopes, eroded
LRA	Local Responsibility Area
LSA	Lake and Streambed Alteration Agreement
LSTs	Localized Significance Thresholds
MBTA	Migratory Bird Treaty Act
MD	Medium Duty (Vehicles)
mgd	million gallons per day
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MMTs	million metric tons
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
MOU	Memorandum of Understanding
mph	miles per hour
MPG	Miles per gallon
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MSHCP	Multiple Species Habitat Conservation Plan
MSW	Municipal Solid Waste
$MTCO_2e$	Metric Tons of Carbon Dioxide Equivalent
MWD	Metropolitan Water District
N_2	Nitrogen
N_2O	Nitrous Oxide
N/A	Not Applicable
NACS	National Association of Convenience Stores
NAHC	Native American Heritage Commission
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act

ACRONYMS AND ABBREVIATIONS (CONT'D)

Acronym	Definition
NCCP	Natural Community Conservation Planning
n.d.	no date
NDA	No Project/No Development Alternative
NDCs	Nationally Determined Contributions
NEPSSA	Narrow Endemic Plant Species Survey Area
NFIP	National Flood Insurance Program
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NIA	Noise Impact Analysis
NIOSH	National Institute for Occupational Safety and Health
NLR	Noise Level Reduction
NMFS	National Marine Fisheries Service
No.	Number
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act of 1977
NPRM	Notice of Proposed Rule Making
NPS	Non-Point Source(s)
NPS	National Park Service
NR	Noise Reduction
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NRSP	Nichols Ranch Specific Plan
NPS	Non-point source
NTR	National Toxics Rule
NVIA	Noise and Vibration Impact Assessment
O_2	Oxygen
O_3	Ozone
OAL	Office of Administrative Law
OHP	Office of Historic Preservation
OHWM	Ordinary High Water Mark
OPR	Office of Planning and Research
Ord.	Ordinance
OSHA	Occupational Safety and Health Act
OSMRE	Office of Surface Mining Reclamation and Enforcement

ACRONYMS AND ABBREVIATIONS (CONT'D)

Acronym	Definition
Pb	Lead
PCB	Polychlorinated biphenyl
PeMS	Caltrans' Performance System Website
PFCs	Perfluorocarbons
PHF	Peak Hour Factor
p.m.	Post Meridiem (between the hours of noon and midnight)
PM	Post Meridiem (between the hours of noon and midnight)
$PM_{2.5}$	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
ppt	parts per trillion
PPV	Peak Particle Velocity
PRC	Public Resources Code
PRMA	Paleontological Resource and Monitoring Assessment
PRPA	Paleontological Resources Preservation Act
Pub. Res. Code	Public Resources Code
PUC	Public Utilities Commission
PV	Photovoltaic
QCB	Quino checkerspot butterfly
R-A	Residential Agricultural (Zoning Designation)
RCA	Regional Conservation Authority
RCB	Reinforced Concrete Box
RCDEH	Riverside County Department of Environmental Health
RCDWR	Riverside County Department of Waste Resources
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCFD	Riverside County Fire Department
RCHCA	Riverside County Habitat Conservation Agency
RCIT	Riverside County Information Technology
RCLIS	Riverside County Land Information System
RCP	Regional Comprehensive Plan
RCPLS	Riverside County Public Library System
RCRA	Resource Conservation and Recovery Act
RCSD	Riverside County Sheriff's Department
RCTC	Riverside County Transportation Commission
RCTLMA	Riverside County Transportation and Land Management Agency

ACRONYMS AND ABBREVIATIONS (CONT'D)

Acronym	Definition
REC	Recognized Environmental Condition(s)
RECLAIM	Regional Clean Air Incentives Market
REMEL	Reference Energy Mean Emission Level
RLAFCO	Riverside Local Agency Formation Commission
rms	root mean square
RMS	Root Mean Square
ROGs	Reactive Organic Gasses
ROW	Right-of-Way
RP	Reclamation Plan
RPS	Renewable Portfolio Standards
RTA	Riverside Transit Agency
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
RWRF	Regional Water Reclamation Facility
SAA	Streambed Alteration Agreement
SAR	Second Assessment Report
SARA	Superfund Amendments and Reauthorization Act
SAWPA	Santa Ana Watershed Project Authority
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCH	California State Clearinghouse (Office of Planning and Research)
SCS	Sustainable Communities Strategy
SDWA	Safe Drinking Water Act
sf	square feet
s.f.	square foot or square feet
SF_6	Sulfur Hexafluoride
SFP	School Facilities Program
SGMA	Sustainable Groundwater Management Act
SHA	Safe Harbor Agreement
SHMA	Urban Seismic Hazards Mapping Act
SHPO	State Historic Preservation Officer
SHRC	State Historical Resources Commission
SHS	State Highway System

ACRONYMS AND ABBREVIATIONS (CONT'D)

Acronym	Definition
SIP	State Implementation Plan
SKR	Stephens' Kangaroo Rat
SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SLF	Sacred Lands Files
SMARA	Surface Mining and Reclamation Act of 1975
SNUR	Significant New Use Rules
SO_2	Sulfur Dioxide
SO_4	Sulfates
SO_x	Sulfur Oxides
SOC	Statement of Overriding Considerations
SOI	Sphere of Influence
SP	Specific Plan
SP	Service Population
SPA	Specific Plan Amendment
SR-74	State Route 74
SR-91	State Route 91
SRA	Source Receptor Area
SRA	State Responsibility Area
SRRE	Source Reduction and Recycling Element
STC	Sound Transmission Class
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Regional Control Board
TAC	Toxic Air Contaminant(s)
TCHS	Temescal Canyon High School
TCL	Traditional Cultural Landscape
TCR	Tribal Cultural Resources
TIA	Traffic Impact Analysis
TIF	Traffic Infrastructure Fee
TIP	Transportation Improvement Plan
TIS	Traffic Impact Study
tpd	tons per day
TPM	Tentative Parcel Map
tpw	tons per week
TS/MRF	Transfer Station/Material Recovery Facility
TTM	Tentative Tract Map
TUMF	Transportation Uniform Mitigation Fee
UBC	Uniform Building Code

ACRONYMS AND ABBREVIATIONS (CONT'D)

Acronym	Definition
UNFCCC	United Nations Framework Convention on Climate Change
U.S.	United States
USC	United States Code
USCB	United States Census Bureau
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
UV	Ultraviolet
UWMP	Urban Water Management Plan
VCS	VCS Environmental (Project Technical Consultant)
Vdb	Vibration Decibel
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
VPH	Vehicles per Hour
WDR	Waste Discharge Requirements
WMI	Watershed Management Initiative
WMIE	Waste Management of the Inland Empire
WMWD	Western Municipal Water District
WQMP	Water Quality Management Plan
WRCOG	Western Riverside Association of Governments
WRF	Water Reclamation Facility
WRP	Waste Recycling Plan
WRRA	Waste Reuse and Recycling Act
YBP	Years Before Present
ZC	Zone Change
ZORI	Zones of Required Investigation

F.0 Final Environmental Impact Report

F.1 Project Scope

This Final Environmental Impact Report (FEIR) prepared for the Nichols Ranch Specific Plan (hereafter, the "Project" or "proposed Project") was prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code § 21000 *et seq.*) and CEQA Guidelines (Title 14, California Code of Regulations, § 15000 *et seq.*). The proposed Project consists of applications for a General Plan Amendment (GPA No. 2018-01), the Nichols Ranch Specific Plan (SP No. 2018-01), an Amendment to the Alberhill Ranch Specific Plan (SPA No. 2017-03), a Zone Change (ZC No. 2018-01), and a Tentative Tract Map (TTM No. 37305), all of which were processed under Planning Application 2017-29.

According to CEQA Guidelines § 15132, the FEIR shall consist of:

a. The Draft (EIR) or revision of the draft;
b. Comments and recommendations received on the DEIR either verbatim or in summary;
c. A list of persons, organizations, and public agencies commenting on the DEIR;
d. The responses of the Lead Agency to significant environmental points raising in the review and consultation process; and
e. Any other information added by the Lead Agency.

This Section contains responses to comments received on the Draft Environmental Impact Report (DEIR) for the proposed Project, and also provides a summary of revisions made to the DEIR in response to public comments. These comments were received during the public review period for the DEIR, which commenced on March 19, 2019 and concluded on May 2, 2019. This FEIR document was prepared in accordance with CEQA and the CEQA Guidelines and represents the independent judgement of the CEQA Lead Agency (City of Lake Elsinore). This FEIR and the DEIR comprise the Final Environmental Impact Report for the proposed Project, in accordance with CEQA Guidelines § 15132.

F.2 Responses to DEIR Comments and Summary of Revisions

§ 15088 of the CEQA Guidelines requires the Lead Agency (City of Lake Elsinore) to evaluate comments on environmental issues received from public agencies and interested parties who reviewed the DEIR. This section provides all comments received on the DEIR and the City's responses to each comment. A list of agencies, organizations, and persons that submitted comments on the DEIR during the public review period is presented in Table F-1, *Organizations, Persons, and Public Agencies that Commented on the DEIR*.

F.2.1 CEQA Requirements Regarding Comments and Responses

CEQA Guidelines § 15024(a) outlines parameters for submitting comments, and notes the focus of review and comment of EIRs should be:

Table F-1 Organizations, Persons, and Public Agencies that Commented on the DEIR

Comment Letter	Commenting Organization, Person, or Public Agency	Date
A	Department of Water Resources	April 22, 2019
B	South Coast Air Quality Management District	May 2, 2019
C	Pechanga Cultural Resources, Temecula Band of Luiseño Mission Indians	May 3, 2019
D	Soboba Band of Luiseño Indians	May 2, 2019
E	Riverside Transit Agency	March 27, 2019
F	Riverside County TLMA, Transportation Department	May 3, 2019

> *…on the sufficiency of the document in identifying and analyzing possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible…CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or suggested by commenters. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.*

CEQA Guidelines § 15204(c) further advises that, "Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to CEQA Guidelines § 15064, "an effect shall not be considered significant in the absence of substantial evidence." CEQA Guidelines § 15204(d) also notes that, "Each responsible agency and trustee agency shall focus its comments on environmental information germane to that agency's statutory responsibility." CEQA Guidelines § 15204(e) states that, "This section shall not be used to restrict the ability of reviewers to comment on the general adequacy of a document or of the lead agency to reject comments not focused as recommended by [CEQA Guidelines § 15204]."

Pursuant to CEQA Guidelines § 15088(b), copies of the written responses shall be provided to commenting public agencies and other interested parties at least ten (10) days prior to certifying the FEIR. The responses shall be provided along with an electronic copy of this FEIR, as permitted by CEQA, and shall conform to the legal standards established for response to comments on DEIRs.

F.2.2 Responses to Comments on the Recirculated Draft Environmental Impact Report

CEQA Guidelines § 15088 requires the Lead Agency (City of Lake Elsinore) to evaluate comments on environmental issues received from public agencies and interested parties who review the DEIR and to provide written response to any substantive comments received. Six (6) comment letters were received in response to the DEIR's public review period. A copy of each letter with bracketed comment numbers on the right margin is followed by the response for each comment as indexed in the letter. Comment letters and specific comments are given letters and numbers for reference purposes.

COMMENT LETTER A

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY
GAVIN NEWSOM, Governor

DEPARTMENT OF WATER RESOURCES
1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

APR 2 2 2019

Ms. Damaris Abraham
City of Elsinore Planning Division
130 South Main Street
Lake Elsinore, California 92530

Notice of Completion and Environmental Document Transmittal
Nichols Ranch Specific Plan - SCH # 2018051051
Riverside County

Dear Ms. Abraham:

We have reviewed the Notice of Completion and Environmental Document Transmittal for the Nichols Ranch Specific Plan for the development of an approximately 72.5-acre site. The Plan includes the construction of two drainage basins, designated at WQ Basin "A1" and WQ Basin "A2."

Insufficient information was provided for us to make a determination on whether the two drainage basins are subject to State jurisdiction for dam safety. Therefore, preliminary plans for the basins need to be submitted so that we can make a jurisdictional determination.

As defined in sections 6002 and 6003, Division 3 of the California Water Code, dams 25 feet or higher with a storage capacity of more than 15 acre-feet, and dams higher than 6 feet with a storage capacity of 50 acre-feet or more are subject to State jurisdiction. Dam height is defined as the vertical distance measured from the maximum possible water storage level to the downstream toe of the barrier.

If the basins are subject to State jurisdiction, a construction application, together with plans, specifications, and the appropriate filing fee must be filed with the Division of Safety of Dams for each basin. All dam safety related issues must be resolved prior to approval of the application, and the work must be performed under the direction of a Civil Engineer registered in California. Erik Malvick, our Design Engineering Branch Chief, is responsible for the application process and can be reached at (916) 227-4660.

If you have any questions or need additional information, you may contact, Area Engineer Brandon Cruz at (916) 227-4602 or me at (916) 227-4600.

A-1

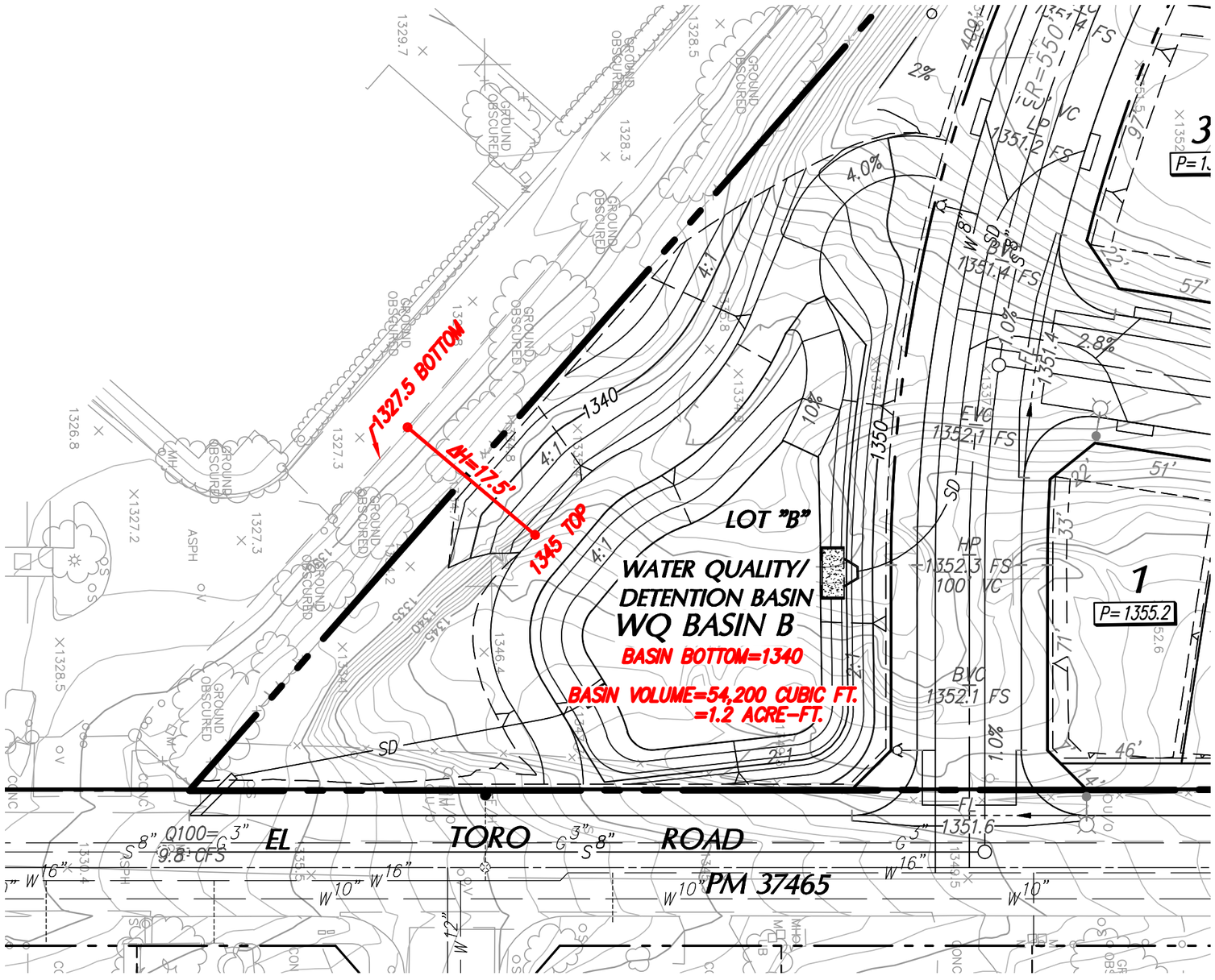
Sincerely,

Ernie. M. Tapia, Acting Regional Engineer
Southern Region
Field Engineering Branch
Division of Safety of Dams

cc: Governor's Office of Planning and Research
State Clearinghouse
state.clearinghouse@opr.ca.gov

LETTER A Department of Water Resources

A-1 Additional information regarding the Project's proposed water quality/detention basins is provided on Figure F-1 and Figure F-2, *Detention Basin Capacities and Depths*. As shown, the western detention basin would have a storage capacity of 8.7 acre-feet, with a maximum slope height of 16 feet. The eastern detention basin would have a capacity of 1.2 acre-feet and a maximum slope height of 17.5 feet. Thus, neither of the proposed detention basins would have dams greater than 25 feet with a storage capacity of more than 15 acre-feet. Although slopes proposed in the eastern detention basins would measure up to 17.5 feet in height, neither detention basin would have a storage capacity of 50 acre-feet or more. As such, neither basin is subject to State jurisdiction, and the Project is not subject to any construction applications with the Division of Safety of Dams.

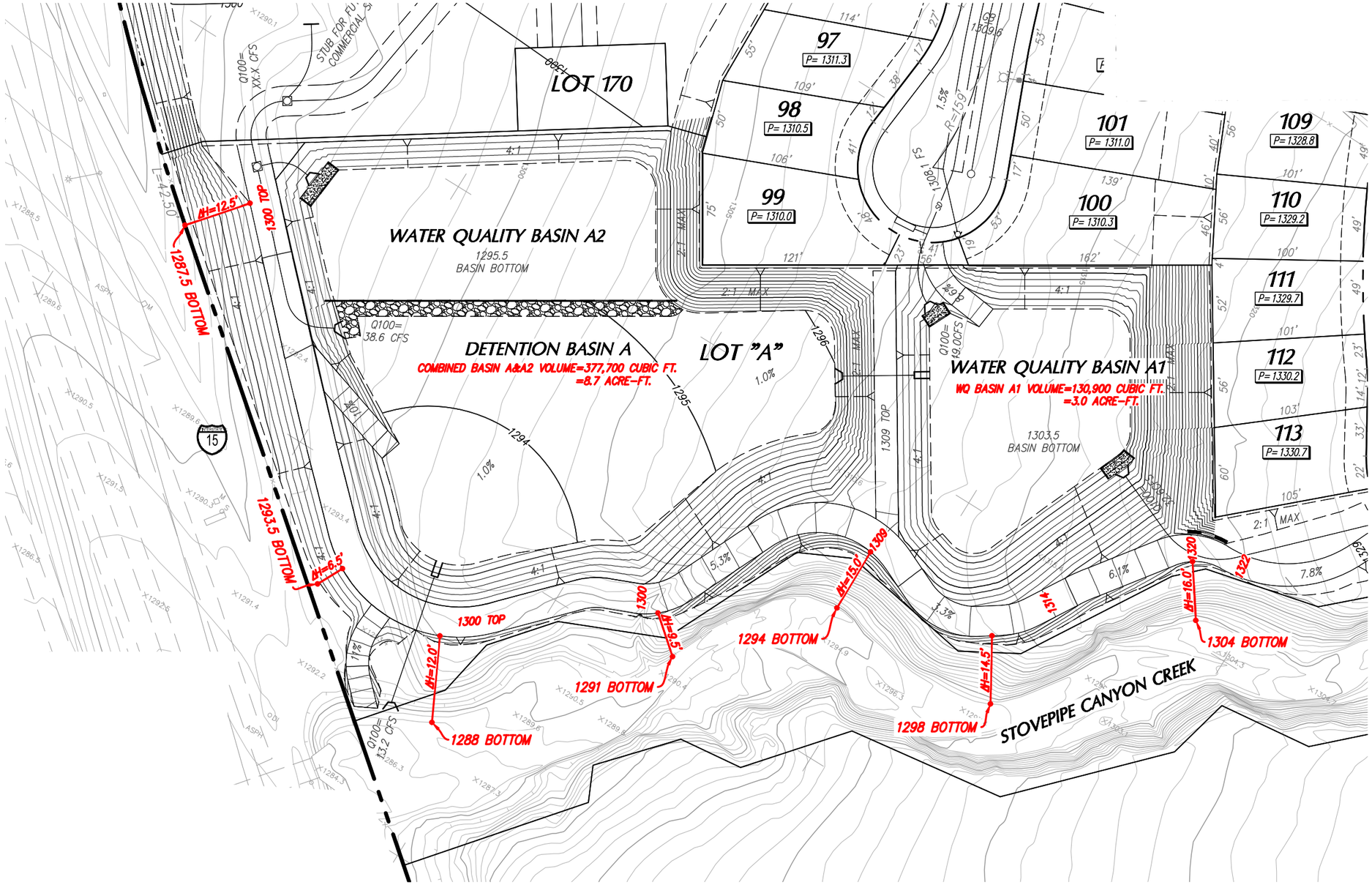


Source(s): K&A Engineering (05-02-2019)

Figure F-1

NOT TO SCALE

DETENTION BASIN CAPACITIES AND DEPTHS (1 OF 2)



Source(s): K&A Engineering (05-02-2019)

Figure F-2

NOT TO SCALE

DETENTION BASIN CAPACITIES AND DEPTHS (2 OF 2)

COMMENT LETTER B

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL AND USPS: May 2, 2019
dabraham@lake-elsinore.org
Damaris Abraham, Senior Planner
City of Lake Elsinore, Community Development Department
Planning Division
130 South Main Street
Lake Elsinore, CA 92530

Draft Environmental Impact Report (Draft EIR) for the Proposed Nichols Ranch Specific Plan (SCH No.: 2018051051)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final EIR. B-1

South Coast AQMD Staff's Summary of Project Description
The Lead Agency proposes to construct 168 residential units, a hotel with 130 rooms, 49,000 square feet of restaurant uses, 12,400 square feet of retail uses, 43,000 square feet of office uses, 8.3 acres of recreational uses, a 5.5-acre drainage basin, 5.3 acres of roadways, 1.3 acres of open space, and a gasoline service station with 16 fueling pumps on 72.5 acres (Proposed Project). The Proposed Project is located on the southwest corner of Nichols Road and El Toro Road within the City of Lake Elsinore. Construction is anticipated to begin in 2019 and will occur in three phases over a six-year period with overlapping construction and operational years. The Proposed Project is anticipated to be fully operational by 2024[1]. B-2

South Coast AQMD Staff's Summary of Air Quality Analysis
In the Air Quality Analysis section, the Lead Agency quantified the Proposed Project's construction and operational emissions and compared those emissions to South Coast AQMD's recommended regional and localized air quality CEQA significance thresholds. Based on the analyses, the Lead Agency found that the Proposed Project's regional construction and operational air quality impacts would be significant and unavoidable, and cumulatively considerable[2] for NOx emissions. Localized construction air quality impacts would be less than significant for PM10 and PM2.5[3], after the incorporation of Mitigation Measure (MM) 4.2-1, which requires that all off-road equipment with engines greater than 150 horsepower (hp) meet EPA/CARB Tier 3 off-road emission standards during grading activities[4]. Additionally, the Lead Agency prepared a Health Risk Assessment (HRA) for operating the proposed gasoline service station and found that it would result in a cancer risk of 7.33 in one million at the maximum impacted sensitive receptor[5], which would not exceed South Coast AQMD's CEQA significance threshold of 10 in one million for cancer risk[6]. B-3

[1] Draft EIR. Section 3. Project Description. Pages 3-27.
[2] Draft EIR. Executive Summary. Pages S-7-S-8.
[3] Draft EIR. Section 4.2 Air Quality. Page 4.2-29.
[4] *Ibid.* Page 4.2-34.
[5] Draft EIR. Section 4.7 Hazards and Hazardous Materials Page 4.7-15.
[6] South Coast AQMD has developed the CEQA significance threshold of 10 in one million for cancer risk. When South Coast AQMD acts as the Lead Agency, South Coast AQMD staff conducts a HRA, compares the maximum cancer risk to the threshold of 10 in one million to determine the level of significance for health risk impacts, and identifies mitigation measures if the risk is found to be significant.

COMMENT LETTER B

Damaris Abraham May 2, 2019

South Coast AQMD's 2016 Air Quality Management Plan
On March 3, 2017, the South Coast AQMD's Governing Board adopted the 2016 Air Quality Management Plan (2016 AQMP)[7], which was later approved by the California Air Resources Board on March 23, 2017. Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP provides a regional perspective on air quality and the challenges facing the South Coast Air Basin. The most significant air quality challenge in the Basin is to achieve an additional 45 percent reduction in nitrogen oxide (NOx) emissions in 2023 and an additional 55 percent NOx reduction beyond 2031 levels for ozone attainment. B-4

South Coast AQMD Staff's General Comments
As described in the 2016 AQMP, achieving NOx emissions reductions in a timely manner is critical to attaining the National Ambient Air Quality Standard (NAAQS) for ozone before the 2023 and 2031 deadlines. South Coast AQMD is committed to attaining the ozone NAAQS as expeditiously as practicable. The Proposed Project plays an important role in contributing to regional NOx emissions during the six-year construction period[8] and operational period thereafter. To further reduce the Proposed Project's significant and unavoidable NOx emissions during construction and operation, South Coast AQMD staff recommends additional mitigation measures that should be reviewed for incorporation in the Final EIR. Additionally, South Coast AQMD staff has comments on the Air Quality Analysis. The Proposed Project would be constructed in three phases. Construction of one phase may overlap with operation of another phase. However, the Lead Agency did not analyze an overlapping construction and operational scenario. The Proposed Project would also include operation of a gasoline service station with 16 pumps. The Lead Agency did not quantify operational ROG emissions generated from storage tanks or from the fueling process during operation. Finally, South Coast AQMD staff recommends that the Lead Agency include discussions of multiple South Coast AQMD rules in the Final EIR. Please see the attachment for more information. B-5 B-6 B-7 B-8

Conclusion
Pursuant to California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088(b), South Coast AQMD staff requests that the Lead Agency provide South Coast AQMD staff with written responses to all comments contained herein prior to the certification of the Final EIR. In addition, issues raised in the comments should be addressed in detail giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice (CEQA Guidelines Section 15088(c)). Conclusory statements do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and to the public who are interested in the Proposed Project. Further, when the Lead Agency makes the finding that the recommended mitigation measures are not feasible, the Lead Agency should describe the specific reasons for rejecting them in the Final EIR (CEQA Guidelines Section 15091). South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Alina Mullins, Assistant Air Quality Specialist, at amullins@aqmd.gov or (909) 396-2402, should you have any questions. B-9

Sincerely,

Lijin Sun

Lijin Sun, J.D.
Program Supervisor, CEQA IGR
Planning, Rule Development & Area Sources

Attachment
LS:AM
RVC190321-04
Control Number

[7] South Coast AQMD. March 3, 2017. *2016 Air Quality Management Plan*. Accessed at: http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan.
[8] Draft EIR. Chapter 3Project Description. Page 3-27.

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ATTACHMENT

Air Quality Analysis – Overlapping Construction and Operational Activities

1. In the Draft EIR, the Lead Agency stated that the Proposed Project would be developed in three phases: Phase 1 will begin in 2019 and be operational by 2020; Phase 2 will begin in 2020 and be operational by 2021; and Phase 3 would begin in 2021 and be operational by 2024[9]. Based on the anticipated construction and operational scenarios, portions of the Proposed Project may be under construction while other portions of the Proposed Project are operational. However, the Lead Agency did not analyze a scenario where construction activities overlap with operational activities in the Draft EIR. Since an overlapping construction and operation scenario is reasonably foreseeable at the time the Draft EIR is prepared, South Coast AQMD staff recommends that the Lead Agency analyze a worst-case impact scenario by identifying the overlapping years, combining construction emissions (including emissions from demolition) with operational emissions, and comparing the combined emissions to South Coast AQMD's air quality CEQA *operational* thresholds of significance to determine the level of significance in the Final EIR, unless the Lead Agency includes requirements and/or conditions in applicable bid document and/or development agreement to expressly prohibit overlapping construction and operational activities. If the Lead Agency, after revising the Air Quality Analysis, finds that the Proposed Project's overlapping construction and operational activities would result in significant air quality impacts, mitigation measures will be required pursuant to CEQA Guidelines Section 15126.4. For more information on potential mitigation measures as guidance to the Lead Agency, please see Comment Nos. 4 and 5 below, and visit South Coast AQMD's CEQA Air Quality Handbook website[10].

B-10

Air Quality Analysis – Gasoline Service Station

2. Upon a review of the Air Quality Analysis in the Draft EIR, it did not appear that the Lead Agency quantified operational ROG emissions that would be generated from storage tanks and the fueling process during operation. This may have likely led to an under-estimation of the Proposed Project's operational emissions. Although South Coast AQMD Rule 461 – Gasoline Transfer and Dispensing requires the use of California Air Resources Board (CARB) certified Phase I and Phase II enhanced vapor recovery systems with minimum volumetric efficiencies of 98% and 95%, respectively[11], ROG emissions are not entirely eliminated from the fueling process and should be taken into consideration when analyzing the Proposed Project's operational air quality impacts. The Lead Agency should use its best efforts to quantify and disclose ROG emissions from the fueling process in the Final EIR. Since the EIR is an informational document, the Lead Agency should, at a minimum, include a discussion on potential operational air quality impacts from the fueling process. If there is no substantial evidence to support a quantitative analysis of ROG emissions from the fueling process, the Lead Agency should disclose the reasons for not including a quantitative analysis supported by factual information in the Final EIR. It is also important to note that while CalEEMod[12] quantifies mobile source emissions (e.g., trip visits by patrons) associated with operating a gasoline service station, CalEEMod does not quantify the operational stationary source emissions from the storage tanks and fueling equipment.

B-11

Guidance on Siting Gasoline Dispensing Facilities Near Sensitive Receptors

3. South Coast AQMD staff recognizes that there are many factors Lead Agencies must consider when making local planning and land use decisions. To facilitate stronger collaboration between Lead Agencies and South Coast AQMD to reduce community exposure to source-specific and cumulative air pollution impacts, South Coast AQMD adopted the *Guidance Document for Addressing Air Quality*

B-12

[9] Draft EIR. Section 3. Project Description. Pages 3-27.
[10] South Coast AQMD. Accessed at: http://www.aqmd.gov/home/regulations/ceqa.
[11] South Coast AQMD. Rule 461 – Gasoline Transfer and Dispensing. Accessed at: http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-461.pdf.
[12] CalEEmod incorporates up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and is available free of charge at: www.caleemod.com.

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Issues in General Plans and Local Planning in 2005[13]. Additionally, the California Air Resources Board (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective* recommends avoiding siting housing within 300 feet of a large gas station or 50 feet for a typical gas station[14]. In April 2017, CARB released a Technical Advisory as a supplement to this Handbook[15]. These guidance documents provide recommendations that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. South Coast AQMD staff recommends that the Lead Agency review and consider these guidance documents when making local planning and land use decisions.

B-12 CONT.

Recommend Changes to Existing Mitigation Measure (MM) 4.2-1

4. While the incorporation of MM 4.2-1, which requires the use of Tier 3 construction equipment with engines greater than 150 horsepower during grading activities, would reduce NOx emissions from 204 pounds per day (lbs/day) to 122 lbs/day, the Proposed Project's construction air quality impacts from NOx remain significant and unavoidable[16][17]. To further reduce NOx emissions during construction and support the South Coast AQMD's commitment to NOx emissions as outlined in the 2016 AQMP, South Coast AQMD staff recommends that the Lead Agency revise MM 4.2-1 as follows:

MM 4.2-1

During ~~grading activities~~ each phase of construction, all construction equipment greater than ~~150~~ 50 horsepower shall consist of off-road diesel construction equipment that complies with or exceeds EPA/CARB ~~Tier 3~~ Tier 4 emissions standards. Such equipment should be outfitted with Best Available Control Technology (BACT) devices including, but not limited to, a CARB certified Level 3 Diesel Particulate Filters (DPF). Level 3 DPFs are capable of achieving at least an 85 percent reduction in particulate matter emissions. A list of CARB verified DPFs are available on the CARB website. Additionally, the Lead Agency should include this requirement in applicable bid documents, and that successful contractor(s) must demonstrate the ability to supply compliant equipment prior to the commencement of any construction activities. The construction contractor also shall ensure all equipment is tuned and maintained in accordance with the manufacturer's specifications. The construction contractor shall keep a log of all applicable construction equipment demonstrating compliance with these requirements, and the log shall be made available for inspection by City of Lake Elsinore staff upon request. In the event that the Lead Agency finds that Tier 4 construction equipment is not feasible pursuant to CEQA Guidelines Section 15364, the Project representative or contractor must demonstrate through future study with written findings supported by substantial evidence that is reviewed and approved by the Lead Agency before using other technologies/strategies. Alternative applicable strategies may include, but would not be limited to, Tier 3 construction equipment, reduction in the number and/or horsepower rating of construction equipment, limiting the number of daily construction haul truck trips to and from the Proposed Project, and/or limiting the number of individual construction project phases occurring simultaneously, if applicable.

B-13

Additional Recommended Mitigation Measures

5. CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize or eliminate any significant adverse air quality impacts. Since the Proposed Project will result in significant and unavoidable construction and operational related NOx emissions, South Coast AQMD staff recommends that the Lead Agency incorporate the following mitigation measures in the Final EIR

B-14

[13] South Coast AQMD. May 2005. "Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning" Accessed at: http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.
[14] California Air Resources Board. Air Quality and Land Use Handbook: *A Community Health Perspective*. Accessed at: https://www.arb.ca.gov/ch/handbook.pdf
[15] California Air Resources Board. Technical Advisory: *Strategies to Reduce Air Pollution Exposure Near High-Volume* Roadways. Accessed at: https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF.
[16] Draft EIR. Appendix B. Air Quality Report. Page 27.
[17] *Ibid.*

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Damaris Abraham May 2, 2019

to further reduce the Proposed Project's significant and unavoidable air quality impacts. South Coast AQMD staff has compiled a list of recommended mitigation measures as suggested resources and guidance to the Lead Agency to assist the identification of feasible mitigation measures for incorporation in the Final EIR. For more information on potential mitigation measures as guidance to the Lead Agency, please visit South Coast AQMD's CEQA Air Quality Handbook website[18]. B-14 CONT.

Mitigation Measures for Significant and Unavoidable Construction Air Quality Impacts

- CARB's On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation mandates fleet turn-over to ensure that, by January 1, 2023, nearly all on-road diesel trucks will have 2010 model year engines or equivalent[19]. Since the Proposed Project's construction schedule extends into 2024 or beyond[20], 2010 model year trucks will be required for implementation, at a minimum, when Phase 3 is under construction. Therefore, South Coast AQMD staff recommends that the Lead Agency require the use of zero-emissions or near-zero emission on-road haul trucks (e.g., material delivery trucks and soil import/export) such as heavy-duty trucks with natural gas engines that meet the CARB's adopted optional NOx emissions standard at 0.02 grams per brake horsepower-hour (g/bhp-hr). At a minimum, require that construction vendors, contractors, and/or haul truck operators commit to using 2010 model year or newer engines that meet CARB's 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions or newer, cleaner trucks. The Lead Agency should include analyses to evaluate and identify sufficient power available for zero emission trucks and supportive infrastructures in the Energy and Utilities and Service Systems Sections of the Final EIR, where appropriate. Require that operators maintain records of all trucks associated with the Proposed Project's construction and make these records available to the Lead Agency upon request. The records will serve as evidence to prove that each truck called to the Proposed Project meets the minimum 2010 model year engine emission standards. The Lead Agency should conduct regular inspections of the records to the maximum extent feasible and practicable to ensure compliance with this mitigation measure. B-15

- Restrict non-essential diesel engine idle time, to not more than five consecutive minutes or another time-frame as allowed by the California Code of Regulations, Title 13 section 2485 - CARB's Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. For any vehicle delivery that is expected to take longer than five minutes, each project applicant, project sponsor, or public agency will require the vehicle's operator to shut off the engine. Notify the vendors of these idling requirements at the time that the purchase order is issued and again when vehicles enter the gates of the Proposed Project. To further ensure that drivers, operators, and vendors understand the idling requirement, post signs at the entry of the construction site and throughout the Proposed Project site stating that idling longer than five minutes is not permitted. B-16

- Encourage construction contractors to apply for South Coast AQMD "SOON" funds. The "SOON" program provides funds to applicable fleets for the purchase of commercially-available low-emission heavy-duty engines to achieve near-term reduction of NOx emissions from in-use off-road diesel vehicles. More information on this program can be found at South Coast AQMD's website: http://www.aqmd.gov/home/programs/business/business-detail?title=off-road-diesel-engines. B-17

[18] South Coast AQMD. Accessed at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.
[19] California Air Resources Board. December 20, 2018. https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm.
[20] Draft EIR. Chapter 3Project Description. Page 3-27.

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Mitigation Measures for Significant and Unavoidable Operational Air Quality Impacts from Mobile Sources

- Provide incentives for vendors and material delivery trucks that would be visiting the hotel and commercial uses to encourage the use of zero-emission or near-zero emission heavy-duty trucks during operation, such as trucks with natural gas engines that meet CARB's adopted optional NOx emissions standard of 0.02 grams per brake horsepower-hour (g/bhp-hr). At a minimum, incentivize the use of 2010 model year or newer engines that meet CARB's 2010 engine emission standards of 0.01 g/bhp-hr for particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions or newer, cleaner trucks. Include analyses to evaluate and identify sufficient power available for zero emission trucks and supportive infrastructures in the Energy and Utilities and Service Systems Sections of the Final EIR, where appropriate. B-18
- Provide electric vehicle (EV) charging stations. Require at least 5% of all vehicle parking spaces include EV charging stations, or at a minimum, require the Proposed Project to be constructed with the appropriate infrastructure to facilitate sufficient electric charging for trucks to plug-in. Electrical hookups should be provided at the onsite truck stop for truckers to plug in any onboard auxiliary equipment. Electrical panels should be appropriately sized to allow for future expanded use. The Lead Agency should also include analyses to evaluate and identify sufficient power available for zero emission trucks and supportive infrastructures (e.g., EV charging stations) in the Energy and Utilities and Service Systems Sections of the Final EIR, where appropriate. B-19
- Design the Proposed Project such that the entrances and exits for the commercial uses are such that vendors and material delivery trucks are not traversing past neighbors or other sensitive receptors. B-20
- Design the Proposed Project such that any check-in point for vendors and material delivery trucks is well inside the Proposed Project site to ensure that these trucks do not que outside of the commercial use boundaries. B-21
- Restrict overnight vendors and material delivery truck parking in residential areas. B-22
- Develop, adopt, and enforce vendors and material delivery truck routes both in and out of the specific plan area, and in and out of the commercial use boundaries. B-23
- Provide incentives for employees working at the proposed office uses to encourage the use of public transportation or carpooling, such as discounted transit passes or carpool rebates. B-24
- Implement a rideshare program for employees working at the proposed office uses and set a goal to achieve a certain participation rate over a period of time. B-25

Mitigation Measures for Operational Air Quality Impacts from Area Sources

- Maximize the use of solar energy including solar panels. Installing the maximum possible number of solar energy arrays on the building roofs and/or on the Proposed Project site to generate solar energy for the facility and/or EV charging stations. B-26
- Require the use of electric landscaping equipment, such as lawn mowers and leaf blowers. B-27
- Require use of electric or alternatively fueled sweepers with HEPA filters. B-28
- Maximize the planting of tress in landscaping and parking lots. B-29

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- Use light colored paving and roofing materials. B-30
- Utilize only Energy Star heating, cooling, and lighting devices, and appliances. B-31

Responsible Agency, Permits, and Compliance with South Coast AQMD Rules

6. The Proposed Project includes the operation of a gasoline service station with 16 pumps. Operation of a gasoline service station requires a permit from South Coast AQMD. South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the Final EIR (CEQA Guidelines Section 15381). South Coast AQMD staff recommends that the Lead Agency include discussions to demonstrate compliance with the following South Coast AQMD rules and initiate consultation with South Coast AQMD as required under CEQA Guidelines Section 15096(b). Ms. Alina Mullins, Assistant Air Quality Specialist, is the designated South Coast AQMD staff to attend meetings requested by the Lead Agency to discuss the scope and content of the EIR (CEQA Guidelines Section 15096(c)). It is important to note that the assumptions in the Air Quality Analysis in the Final EIR will be used as the basis for permit conditions and limits. If there is any information in the permitting process suggesting that the Proposed Project would result in significant adverse air quality impacts not analyzed in the Final EIR or substantially more severe air quality impacts than those analyzed in the Final EIR, the Lead Agency should commit to reevaluating the Proposed Project's air quality impacts through a CEQA process (CEQA Guidelines Section 15162). Should there be any questions on permits, please contact South Coast AQMD's Engineering and Permitting staff at (909) 396-3385. For more general information on permits, please visit South Coast AQMD's webpage at: http://www.aqmd.gov/home/permits. B-32 B-33

Gasoline Service Station

7. The Lead Agency discussed South Coast AQMD Rule 461 in the Draft EIR. South Coast AQMD staff recommends that the Lead Agency include discussions to demonstrate compliance with other applicable South Coast AQMD Rules, including, but not limited to, Rule 201 – Permit to Construct[21], Rule 203 – Permit to Operate[22], and Rule 1401 – New Source Review of Toxic Air Containments[23] in the Final EIR. Please note any assumptions used in the Air Quality and Health Risk Assessment (HRA) analyses in the Final EIR will be used as the basis for permit conditions and limits. The 2015 revised Office of Environmental Health Hazard Assessment (OEHHA) methodology[24] is being used by South Coast AQMD for determining operational health impacts for permitting applications and also for all CEQA projects where South Coast AQMD is the Lead Agency. B-34

Commercial Operations

8. Operation of the Proposed Project's commercial elements may require permits from South Coast AQMD. In the event that operation of the Proposed Project will require the use of stationary diesel-fueled internal combustion or compression engines (i.e., generators or firefighting equipment), South Coast AQMD Rule 1470 – Requirement for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines[25] and South Coast AQMD Rule Series 1146 – Emissions of Oxides of B-35

[21] South Coast AQMD. Rule 201 – Permit to Construct. Accessed at: http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-201.pdf.
[22] South Coast AQMD. Rule 203 – Permit to Operate. Accessed at: http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-203.pdf.
[23] South Coast AQMD. Rule 1401 – New Source Review of Toxic Air Contaminants. Accessed at: http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401.pdf.
[24] Office of Environmental Health Hazard Assessment. "Notice of Adoption of Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments 2015". Accessed at: https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0.
[25] South Coast AQMD. Rule 1470 – Requirement for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines. Accessed at: http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1470.pdf.

COMMENT LETTER B

Damaris Abraham May 2, 2019

Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters[26], including Rule 1146.1 – Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters[27] and Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters[28] would apply and should be discussed in the Final EIR. Therefore, South Coast AQMD staff recommends that the Lead Agency consult with South Coast AQMD Permitting and Engineering staff as early as feasible to determine permit requirements and any applicable rules and regulations that should be discussed in the CEQA document for the Proposed Project.

B-35 CONT.

Rule 403(e) Additional Requirements for Large Operations

9. The Lead Agency included a discussion of general compliance with South Coast AQMD Rule 403 – Fugitive Dust in the Draft EIR. Since the Proposed Project is a large operation of approximately 72.5 acres[29] and will disturb 73.8 acres during construction (50-acre sites or more of disturbed surface area; or daily earth-moving operations of 3,850 cubic yards or more on three days in any year) in the South Coast Air Basin, the Lead Agency is required to comply with Rule 403(e) – Additional Requirements for Large Operations[30]. Additional requirements may include, but are not limited to, Large Operation Notification (Form 403 N), appropriate signage, additional dust control measures, and employment of a dust control supervisor that has successfully completed the Dust Control in the South Coast Air Basin training class[31]. Therefore, South Coast AQMD recommends that the Lead Agency include a discussion to demonstrate specific compliance with South Coast AQMD Rule 403(e) in the Final EIR. Compliance with South Coast Rule 403(e) will further reduce regional and localized emissions from particulate matters during construction.

B-36

[26] South Coast AQMD. Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters. Accessed at: http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1146.pdf.
[27] South Coast AQMD. Rule 1146.1 – Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters. Accessed at: http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1146-1.pdf.
[28] South Coast AQMD. Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters. Accessed at: http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1146-2.pdf.
[29] *Ibid*. Page 4.3-47.
[30] South Coast AQMD. Rule 403. Last amended June 3, 2005. Accessed at: http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf.
[31] South Coast AQMD Compliance and Enforcement Staff's contact information for Rule 403(e) Large Operations is (909) 396-2608 or by e-mail at dustcontrol@aqmd.gov.

LETTER B South Coast Air Quality Management District

B-1 Comment is acknowledged. Please refer to the individual responses to the comments provided in this letter, below.

B-2 Comment describing the Project's proposed land uses is slightly inaccurate. Specifically, the Project proposes 6,000 s.f. of fast food restaurant uses with drive-through window use, 5,500 s.f. of fast food restaurant uses without drive-through windows, and 9,400 s.f. f sit down restaurant uses. Thus, the total area proposed for restaurant uses would comprise 20,900 s.f., and not 49,000 s.f. as indicated in this comment. This comment otherwise accurately describes the proposed Project.

B-3 Comment accurately describes the results of the air quality analysis as presented in the DEIR. No response is necessary.

B-4 The DEIR includes a description of the SCAQMD Air Quality Management Plan (AQMP), and the City acknowledges the air quality challenges associated with NO_X emissions. Please refer to the individual responses to SCAQMD staff's comments, below.

B-5 The City acknowledges the SCAQMD's recommendations for mitigation measures. Please refer to the responses to Comments B-13 through B-31.

B-6 Comment regarding the overlap in construction and operational phases is acknowledged. Please refer to the response to Comment B-10.

B-7 Comment regarding ROG emissions associated with the proposed gas station is acknowledged. Please refer to the response to Comment B-11.

B-8 Comment acknowledged. Please refer to the response to Comments B-33 through B-36.

B-9 As required by CEA Guidelines Section 15088(b), written responses to the comments included in this letter will be sent to SCAQMD staff at least 10 days prior to certification of the EIR. Additionally, the responses included herein include an explanation of whether recommended comments and suggested are accepted. All responses provided to this comment letter are based on substantial evidence and are not based on conclusory statements. Additionally, for recommended mitigation measures that have been rejected, the responses herein include an explanation as to why the recommended measures were rejected.

B-10 The comment states that the peak daily emissions associated with the Project were not adequately calculated because the emissions for construction and operation were calculated separately. While it is acknowledged that there would be periods of overlap between the construction and operational phases of the Project (i.e., during construction of Phases 2 and 3 of the Project), pursuant to the SCAQMD CEQA Air Quality Handbook, the recommended approach to calculate proposed emissions for criteria pollutants is to quantify construction and operation emissions separately and compare each to the

applicable construction and operational thresholds of significance (Chapters 6 and 9 of the CEQA Handbook). To the City's knowledge, the SCAQMD has not developed or published combined construction and operational emission significance thresholds, with the exception of its December 5, 2008 adoption of a GHG Significance Threshold for certain projects where SCAQMD is the lead agency. There, the construction emissions are amortized over 30 years and added to the operational emission. Additionally, the SCAQMD did not make a request for this type of combined assessment in its comments on the Project's Notice of Preparation (NOP).

Nonetheless, in response to the SCAQMD request, Table F-2, *Emissions for Combined Construction and Operational Activities*, provides a summary of the analysis of peak daily emissions associated with potential overlapping operational and mitigated construction activities that would occur from the Project. It is important to note that SCAQMD has not adopted significance thresholds that apply to the combined construction and operation activities. The City has determined that it is most appropriate to determine the significance of these emissions by comparing them to the SCAQMD daily construction emission thresholds. While the comment suggests using the operational threshold of significance for this purpose, the analysis uses construction thresholds instead, since this overlapping situation is caused by the temporary presence of construction activities.

Table F-2 Emissions for Combined Construction and Operational Activities

Year	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Phase 1 Operational Emissions + Phase 2 Fine Grading and Building Construction Emissions						
Phase 1 Operational Emissions	2.19	5.97	11.75	0.04	2.48	0.74
Phase 2 Construction (Fine Grading and Building Construction)	25.88	65.06	75.77	0.16	9.23	4.71
Maximum Daily Emissions	**28.07**	**71.03**	**87.52**	**0.20**	**11.71**	**5.45**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
Phase 1 + Phase 2 Operational Emissions + Phase 3 Fine Grading and Building Construction Emissions						
Phase 1 + 2 Operational Emissions	10.58	27.76	54.92	0.19	12.31	3.67
Phase 3 Construction (Fine Grading and Building Construction)	29.79	64.31	74.55	0.16	9.22	4.63
Maximum Daily Emissions	**40.37**	**92.07**	**129.47**	**0.35**	**21.53**	**8.30**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

As shown on Table F-2, the Project would not exceed the construction emissions thresholds. Furthermore, the combined overlapping construction and operational emissions as summarized on Table F-2 would not exceed the total emissions for either peak construction or peak operational activities for any emissions. As such no new impacts would occur beyond those that have already been

identified in the DEIR and no additional mitigation is required. Refer also to the responses to Comments B-13 and B-14, below.

B-11 The commenter states that the Air Quality Study used in the DEIR, which utilizes CalEEMod, does not quantify the operational, stationary source emissions from the storage tanks and fueling equipment. The commenter requests that the EIR include or clarify if ROG emissions from storage tanks and the fueling process have been included in the DEIR.

The gasoline dispensing facility would be required to obtain separate permits from the SCAQMD prior to operation. At this time, the annual throughput of gasoline dispensing is unknown. Notwithstanding, even if a maximum annual throughput of 3,000,000 gallons is conservatively presumed, this would result in a negligible amount of VOC emissions. Per the California Air Resources Board's "Revised Emission Factors for Gasoline Marketing Operations at California Gasoline Dispensing Facilities" report, the emissions of gasoline dispensing for a Phase II Enhanced Vapor Recovery would be 0.855 pounds of VOCs per thousand gallons of fuel dispensed, or 0.000855 pounds per gallon. Therefore, even if a maximum annual throughput of 3,000,000 gallons is presumed, this would result in 7.02 pounds of VOC emissions per day from gasoline dispensing. Even if this was added to the totals identified in Table 4.2-8 in Section 4.2, *Air Quality*, in the DEIR, the emissions of the Project would still be below the SCAQMD threshold of 55 pounds of VOC emissions per day, and no significant impacts would occur with respect to VOC emissions. Therefore, stationary source emissions from the proposed gas station would not result in any new significant environmental effects not already identified in the DEIR.

This comment does not affect the analysis completed or conclusions provided in the DEIR, does not provide new information or evidence related to the analysis completed in the DEIR, and does not diminish the adequacy or content of the DEIR. As such, no revisions to the DEIR have been made pursuant to this comment.

B-12 The commenter states that the Draft EIR should consider the *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* ("Guidance Document") and the California Air Resources Board (CARB) *Land Use Handbook: A Community Health Perspective*, which recommends avoiding housing within 300 feet of a large gas station (defined as more than 3.8 million gallons of annual throughput) or 50 feet for a typical gas station (less than 3.8 million gallons of annual throughput). The City of Lake Elsinore has reviewed these documents and determined that there is more than an adequate buffer distance between the proposed gasoline service station and existing residents. As illustrated on Figure 4.11-7 in Section 4.11, *Noise*, in the DEIR, the nearest off-site residential land use is located more than 2,000 feet away from the proposed gasoline service station. Thus, there would be no residences within 300 feet of the proposed gas station, and the Project would be consistent with the siting recommendations pursuant to the Guidance Document and CARB's Land Use Handbook. No revisions to the DEIR are warranted pursuant to this comment.

B-13 The City acknowledges that the Project's emissions of NO_X during construction would exceed the SCAQMD Regional Thresholds, and that Mitigation Measure MM 4.2-1 would not fully reduce the

Project's NOx emissions impact to below a level of significance. Additionally, Mitigation Measure MM 4.2-1 is specific to construction equipment that is greater than 150 horsepower (hp) because the majority of equipment used during grading would be 150 hp or greater (e.g., most dozers and scrapers are over 200 and 300 hp respectively, at a minimum). It is the larger construction equipment that causes the exceedance of the SCAQMD Regional Threshold for NOx during construction, and restricting smaller equipment would have a minimal effect on the Project's overall NOx emissions during construction.

Furthermore, the use of Tier 4 construction equipment, even when limited to equipment greater than 150 hp, is likely infeasible. Based on the information that CARB has in their database for reported fleets, there are 392 Tier 4 engines greater than 150 hp in operation within the state, as compared to the total 46,435 engines greater than 150 hp that are reported in CARB's DOORs program. This represents 0.84% or less than 1% of the entire available fleet of equipment. To break this down further, the 392 total pieces of Tier 4, the following distribution of available Tier 4 equipment would generally correlate to typical grading equipment used for the Project:

- 91 Tractors
- 22 graders
- 2 dozers
- 15 scrapers

As shown, clearly there are very limited number of Tier 4 pieces of equipment (specifically dozers and scrapers) available in the State, which makes the mitigation measure recommended in this comment infeasible. Refer to the e-mail exchange between CARB staff and the Project's air quality consultant (Urban Crossroads) along with the information from their database, which has been added to EIR Technical Appendix M, *Written Correspondence*.

Notwithstanding, the Project Applicant has agreed to the recommended changes to Mitigation Measure MM 4.2-1, with minor modifications. The City finds that the recommended mitigation language offers alternatives to the use of Tier 4 equipment that may be necessary given that Tier 4 equipment is currently not readily available in the State and/or is not cost effective.

B-14 The City acknowledges the recommended mitigation measures to further reduce the Project's construction and operational emissions of NOx. Please refer to the individual responses to these proposed measures below.

B-15 The comment recommends a new mitigation measure requiring the use of haul trucks with zero-emissions or near-zero emissions controls, which are more stringent than the current regulatory framework. The California Air Resources Board (CARB) has worked closely with the U.S. Environmental Protection Agency (U.S. EPA), engine and vehicle manufacturers, and other interested parties to reduce emissions from heavy-duty diesel vehicles in California through a combination of measures including regulations requiring the use of ultra-low sulfur diesel fuel, new emission standards, restrictions on idling, addition of post-combustion filter and catalyst equipment, and retrofits

for diesel truck fleets. These programs are expected to result in significant reductions in particulate matter (PM), nitrous oxides (NO_X), volatile organic compounds (VOC), and carbon monoxide (CO) emissions as they are fully implemented.

Federal and state agencies regulate and enforce vehicle emission standards. It is not feasible for the City of Lake Elsinore staff to effectively enforce a prohibition on trucks from entering the property that are otherwise permitted to operate in California and to access other properties in the city, region, and State. Further if a truck that did not meet this requirement were to attempt access to the site and be denied there would be more idling emissions and travel emissions associated with that truck. Lastly, the SCAQMD provides no evidence on the availability of near-zero or zero emissions trucks. For these reasons, this recommended mitigation measure has not been imposed on the Project, and no revisions to the DEIR have been made in response to this comment.

B-16 DEIR Mitigation Measure MM 4.2-1 has been modified to require the posting of signage limiting idling of diesel delivery trucks to no more than five minutes, and also requires posting of the contact information for the construction manager and CARB to report violations.

B-17 Mitigation Measure MM 4.2-2 has been added to the DEIR to require that as a condition of grading or building permits the construction manager must provide information to all construction contractors regarding SCAQMD's "SOON" funds.

B-18 The comment recommends a new mitigation measure requiring the use of haul trucks with zero-emissions or near-zero emissions controls, which are more stringent than the current regulatory framework. The California Air Resources Board (CARB) has worked closely with the U.S. Environmental Protection Agency (U.S. EPA), engine and vehicle manufacturers, and other interested parties to reduce emissions from heavy-duty diesel vehicles in California, through a combination of measures including regulations requiring the use of ultra-low sulfur diesel fuel, new emission standards, restrictions on idling, addition of post-combustion filter and catalyst equipment, and retrofits for diesel truck fleets. These programs are expected to result in significant reductions in particulate matter (PM), nitrous oxides (NO_X), volatile organic compounds (VOC), and carbon monoxide (CO) emissions as they are fully implemented.

Federal and state agencies regulate and enforce vehicle emission standards. It is not feasible for the City of Lake Elsinore staff to effectively enforce a prohibition on trucks from entering the property that are otherwise permitted to operate in California and access other properties in the city, region, and State. Additionally, even if the City were to apply such a restriction, it would merely encourage commercial business operators using truck fleets that are not near-zero or zero-emissions to locate in another location in the South Coast Air Basin where the restriction does not apply, thereby resulting in no improvement to regional air quality. Further if a truck that did not meet this requirement were to attempt access to the site and be denied there would be more idling emissions and travel emissions associated with that truck. Lastly, the SCAQMD provides no evidence on the availability of near-zero or zero emissions trucks. For these reasons, this recommended mitigation measure has not been imposed on the Project, and no revisions to the DEIR have been made in response to this comment.

B-19 This measure appears to apply to a warehouse-distribution center type of project that would have a significant number of heavy-duty truck trips during on-going operations. As the majority of operational emissions associated with the Project's proposed commercial uses would occur from passenger vehicles, no changes to the DEIR have been made to incorporate this requirement. Notwithstanding, it should be noted that the 2016 California Green Building Standards Code (CALGreen) for Nonresidential uses already requires the provision of charging stations for passenger vehicles (refer to CALGreen Section 5.106.5.3, *Electric Vehicle (EV) Charging)*.

B-20 This measure appears to apply to a warehouse-distribution center type of project that would have a significant number of heavy-duty truck trips during on-going operations, and is not applicable to the proposed Project. Additionally, this recommended measure would not reduce any of the Project's significant environmental effects, which are the result of construction and operational emissions of NO_X and not due to impacts to nearby sensitive receptors. The Project's potential impacts to sensitive receptors were evaluated in the DEIR. As discussed therein, the nearest sensitive receptors are existing residences located to the immediately adjacent to the project site boundary. As discussed in the DEIR, there are no impacts to sensitive receptors located near the entrances and exits of the Project site, and thus there is no basis under CEQA to warrant the redesign of the project or imposition of additional mitigation in this regard. No changes to the DEIR have been made pursuant to this comment.

B-21 This measure appears to apply to a warehouse-distribution center type of project that would have a significant number of heavy-duty truck trips during on-going operations, and is not needed for the commercial uses proposed by the Project. The commercial area would include large vehicle parking areas that would provide ample parking opportunities for delivery vehicles, and there is no evidence to demonstrate a potential for adverse effects to adjoining roadways. Accordingly, no revision to the DEIR has been made pursuant to this comment.

B-22 The commercial component of the Project provides ample parking on-site and there would be no need for vendor and material delivery trucks to park in residential areas. Moreover, this measure would not serve to reduce the Project's construction or operational emissions of NO_X, which are the only significant unavoidable impacts to air quality that would result from the Project. As such, no revisions have been made to the DEIR pursuant to this comment.

B-23 The Project Applicant does not have the legal authority to develop and enforce truck routes. However, the City of Lake Elsinore has developed a Circulation Element with local truck routes that the Project would be required to comply with. In addition, the commenter does not provide additional documentation as to why the suggested measure would be required under CEQA, as this proposed measure would not address the Project's unavoidable impacts due to construction- and operational-related NO_X emissions. Accordingly, the commenter's proposed mitigation is not warranted and therefore has not been included.

B-24 This recommended measure has been added to the DEIR as part of Mitigation Measure MM 4.2-3.

B-25 This recommended measure has been added to the DEIR as part of Mitigation Measure MM 4.2-3.

B-26 The City finds that the proposed development would be subject to the current CALGreen requirements for solar ready buildings. Furthermore, development of the Project would be subject to the 2019 Title 24 Building Energy Efficiency Standards, which will require that all new homes under three stories high shall include solar panels starting January 1, 2020. Thus, the City finds that a mitigation measure requiring the provision of solar is not necessary. Furthermore, the Project would result in significant and unavoidable air quality impacts due to construction and operational emissions of NO_X, and the requirement to provide solar panels would not serve to substantially reduce the Project's NO_X emissions as the majority of the Project's NO_X emissions are generated by passenger vehicle and truck traffic. Accordingly, no revisions to the DEIR have been made pursuant to this comment.

B-27 The Project site encompasses more than 45 acres and would not be feasibly served by electric landscaping equipment because of the limited length of electrical cords and the current battery life for electrical equipment. As electric lawn mowers and leaf blowers become more efficient and cost effective, they will be utilized more frequently as part of landscaping activities on the property. Accordingly, no changes to the DEIR have been made pursuant to this comment.

B-28 The Project Applicant does not have authority to regulate street-sweepers that are in use by the City of Lake Elsinore. As such, this mitigation measure would not be feasible for the Project Applicant to implement, and no revisions have been made to the DEIR pursuant to this comment.

B-29 The Project's landscape plan includes large trees are on the periphery of the Project site, along roadways, within parking lot planters, and throughout the residential common open space areas. In addition to trees, the Project includes shrubs, groundcover, and potted plants. The City has reviewed the proposed landscaping plan of the Nichols Ranch Specific Plan and finds that it provides for the planting of an appropriate number of trees, including trees within parking lots. No revision has been made to the DEIR pursuant to this comment.

B-30 This measure recommends the use of light-colored paving and roofing materials. The Project would result in significant and unavoidable impacts due to construction- and operational-related NO_X emissions, and this proposed measure would not reduce the Project's emissions of NO_X. As such, this recommended mitigation measure has not been included, and no revisions to the DEIR have been made pursuant to this comment.

B-31 The commenter does not provide any rationale for how this measure would reduce the Project's NO_X emissions during long-term operation. Notwithstanding, the Project would be required to comply with contemporary Title 24 and CalGreen building requirements, which include measures for energy efficient heating, cooling, and lighting devices and appliances. No revision to the DEIR has been made pursuant to this comment.

B-32 The DEIR has been revised in Sections 1.0 and 3.0 to identify the SCAQMD as a Responsible Agency (refer to DEIR subsection 1.4, subsection 3.5, and Table 3-6).

B-33 At this time, the annual throughput of gasoline dispensing is unknown, and it would be speculative to definitively state an annual throughput without a tenant identified. The commenter states that any assumptions made in the EIR would be the basis for future permit limitations. The City disagrees in this regard since a specific tenant has not been identified and site-specific analysis for the gasoline service station would be required prior to SCAQMD issuing permits to operate. The air quality analysis included in the DEIR made reasonable assumptions regarding the future gasoline service station and included emissions from the gas station operations. While it is acknowledged that future permits for the gasoline station would be required, such permit(s) will be pursued once a site-specific proposal for the gasoline dispensing station is identified. Accordingly, no revisions were made to the DEIR in response to this comment.

B-34 SCAQMD Rule 201 requires a permit to be issued prior to the construction of any use which may result in air contaminants. Thus, a Permit to Construct would be required from the SCAQMD prior to construction of the gasoline service station. A Permit to Operate also would be required prior to operations occurring at the gasoline service station. SCAQMD Rule 1401 specifies limits for maximum individual cancer risk (MICR), cancer burden, and noncancer acute and chronic hazard index (HI) from new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants. As shown in the Air Quality Report in Appendix B of the Draft EIR, the proposed gas station was included in the air quality analysis for construction emissions and operational emissions associated with area, energy, and mobile sources. Therefore, the construction of the station and the associated operational trips were analyzed. See also the response to Comment B-12. Because the Project adheres to the recommended siting requirements by the commenter, no further health risk analyses are required at this time. A site-specific HRA would be required during the SCAQMD's permitting process based on the specific characteristics of the tenant once identified. Notwithstanding, EIR subsection 4.2.7 has been revised to list SCAQMD Rules 1401, 1401.1, 212, and 461 as regulatory requirements of the proposed Project.

B-35 The City acknowledges that future end users of the commercial components of the Project may require permits from the SCAQMD, and may be subject to SCAQMD Rules 1470, 1146, 1146.1, and/or 1146.2. However, the tenants of individual buildings are not known at this time and it would be speculative to identify any such end users that may require permits from the SCAQMD. Compliance with SCAQMD rules and regulations is required under law. As such, no changes to the DEIR have been made pursuant to this comment.

B-36 The DEIR acknowledges that the Project is required to comply with the provisions of SCAQMD Rule 403, as indicated in DEIR subsection 4.2.7 and in the Project's MMRP. Any requirements of Rule 403 (including subsection "e") are implicit in this requirement. The Project Applicant is required by law to comply with applicable regulatory requirements, including the provisions of Rule 403. No revision has been made to the DEIR in response to this comment.

COMMENT LETTER C

PECHANGA CULTURAL RESOURCES
Temecula Band of Luiseño Mission Indians

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May 3, 2019

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VIA E-Mail and USPS

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Re: Pechanga Tribe Comments on the Draft Environmental Impact Report for Nichols Ranch Specific Plan

Dear Ms. Abraham:

This comment letter is submitted by the Pechanga Band of Luiseño Indians (hereinafter, "the Tribe"), a federally recognized Indian tribe and sovereign government, in response to receipt of the March 19, 2019 Draft Environmental Impact Report (DEIR) for the above named project. C-1

The Tribe agrees with the proposed mitigation measures for cultural resources as presented in the DEIR for this Project and request that they be incorporated into the final EIR and added as conditions of approval for the Project. C-2

It should be noted that the Luiseño recognize that the world was created in the area now known as Temecula[1], and that the Luiseño People have been in this area since the beginning of time. The Pechanga Tribe's knowledge of our ancestral boundaries is based on reliable information passed down to us from our elders; published academic works in the areas of anthropology, history and ethno-history; and through recorded ethnographic and linguistic accounts. Many anthropologists and historians who have presented boundaries of the Luiseño traditional territory have included the City of Lake Elsinore area in their descriptions (Drucker 1937; Heizer and Whipple 1957; Kroeber 1925; Smith and Freers 1994), and such territory descriptions correspond with what was communicated to the Pechanga people by our elders. While historic accounts and anthropological and linguistic theories are important in determining traditional Luiseño territory, the Pechanga Tribe asserts that the most critical sources of information used to define our traditional territories are our songs, creation accounts, and oral traditions. Early Ethnographers often misidentified the Luiseño language and the Shoshonean C-3

[1] Masiel-Zamora, Myra, 2016, *'Éxva Teméeku: Where We Began.* Great Oak Press, Pechanga, California.

Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need

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language as one group of the Uto-Aztecan Language Family[2]. The Luiseño languages are within the Californian Uto-Aztecan branch while the Shoshonean languages are of the Northern Uto-Aztecan branch therefore making them two distinct language sub-groups within in the Uto-Aztecan Language Family. For further clarification, the Glottolog organization[3] has language classification charts. The Lusieño have never migrated into the area from the Great Basin Region. Linguistic theory and archaeological data now support the view that the Luiseño were in California before the "Shoshonean wedge" occurred[4]. Therefore, the Tribe would like to assert that the "Shoshonean wedge" theory is no longer supported by current research and all mention of the "Shoshonean migration" be removed from the DEIR's Tribal Cultural Resources section for this project.

C-3 CONT.

Therefore, the Tribe requests the following changes and additions to the 4.17.1 (A) and 4.17.4 as identified below. Please note that underlines are requested additions and strikethroughs are requested removals to the presented language.

C-4

4.17.1 EXISTING CONDITIONS

A. Prehistoric Setting

1. Prehistoric Period Setting

The Project site is located in the northeastern portion of the City of Lake Elsinore in western Riverside County. The Paleo Indian, Archaic Period Milling Stone Horizon, and the Late Prehistoric ~~Shoshonean groups~~ are the three general cultural periods represented in Riverside County, as summarized briefly below. The following discussion of the cultural history of Riverside County references the San Dieguito Complex, Encinitas Tradition, Milling Stone Horizon, La Jolla Complex, Pauma Complex, and San Luis Rey Complex, since these culture sequences have been used to describe archaeological manifestations in the region. The Late Prehistoric component present in the Riverside County area was represented by the Cahuilla, Gabrielino, and Luiseño Indians. (BFSA, 2018, p. 2.0-5) Refer to Section 2.3 of the Project's cultural resources assessment (Technical Appendix H) for a more detailed discussion about the prehistoric cultural periods in Riverside County.

C-5

- Late Pleistocene/Paleo Indian Period (11,500 to circa 9,000 Years Before Present [YBP]). The Paleo Indian Period is associated with the terminus of the late Pleistocene

[2] Bean, Lowell J.; Shipek, Florence, 1978, *Luiseño: Handbook of North American Indian.* Smithsonian Institution, Washington. Pp. 550.
[3] http://glottolog.org/resource/languoid/id/luis1253
[4] Sutton, Mark, 2010, *A Reevaluation of Early Northern Uto-Aztecan Prehistory in Alta California.* California Archaeology, Vol. 2, Issue 1.

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(12,000 to 10,000 YBP). The environment during the late Pleistocene was cool and moist, which allowed for glaciation in the mountains and the formation of deep, pluvial lakes in the deserts and basin lands. However, by the terminus of the late Pleistocene, the climate became warmer, which caused the glaciers to melt; sea levels to rise; greater coastal erosion; large lakes to recede and evaporate; extinction of Pleistocene megafauna; and major vegetation changes. The coastal shoreline at 10,000 YBP, depending upon the particular area of the coast, was near the 30-meter isobath, or two to six kilometers further west than its present location. Paleo Indians were likely attracted to multiple habitat types, including mountains, marshlands, estuaries, and lakeshores. These people likely subsisted using a more generalized hunting, gathering, and collecting adaptation utilizing a variety of resources including birds, mollusks, and both large and small mammals. (BFSA, 2018, p. 2.0-6)

C-5 CONT.

- Early and Middle Holocene/Archaic Period (circa 9,000 to 1,300 YBP). Between 9,000 and 8,000 YBP, a widespread complex was established in the southern California region, primarily along the coast but also present around the Lake Elsinore region. This complex is locally known as the La Jolla Complex, which is regionally associated with the Encinitas Tradition and shares cultural components with the widespread Milling Stone Horizon. The coastal expression of this complex appeared in the southern California coastal areas and focused upon coastal resources and the development of deeply stratified shell middens that were primarily located around bays and lagoons. The older sites associated with this expression are located at Topanga Canyon, Newport Bay, Agua Hedionda Lagoon, and some of the Channel Islands. Radiocarbon dates from sites attributed to this complex span a period of over 7,000 years in this region, beginning over 9,000 YBP. (BFSA, 2018, p. 2.0-6)

The Encinitas Tradition is best recognized for its pattern of large coastal sites characterized by shell middens, grinding tools that are closely associated with the marine resources of the area, cobble-based tools, and flexed human burials. While ground stone tools and scrapers are the most recognized tool types, coastal Encinitas Tradition sites also contain numerous utilized flakes, which may have been used to pry open shellfish. Artifact assemblages at coastal sites indicate a subsistence pattern focused upon shellfish collection and nearshore fishing. This suggests an incipient maritime adaptation with regional similarities to more northern sites of the same period. Other artifacts associated with Encinitas Tradition sites include stone bowls, doughnut stones, discoidals, stone balls, and stone, bone, and shell beads. (BFSA, 2018, p. 2.0-6)

C-6

The coastal lagoons in southern California supported large Milling Stone Horizon populations circa 6,000 YBP, as is shown by numerous radiocarbon dates from the many sites adjacent to the lagoons. The ensuing millennia were not stable environmentally, and by 3,000 YBP, many of the coastal sites in central San Diego County had been abandoned. The abandonment of the area is usually attributed to the sedimentation of

Comment Letter C

coastal lagoons and the resulting deterioration of fish and mollusk habitat, a situation well-documented at Batiquitos Lagoon. Over a 2,000-year period at Batiquitos Lagoon, dominant mollusk species occurring in archaeological middens shift from deep-water mollusks (Argopecten sp.) to species tolerant of tidal flat conditions (Chione sp.), indicating water depth and temperature changes. This situation likely occurred for other small drainages (Buena Vista, Agua Hedionda, San Marcos, and Escondido creeks) along the central San Diego coast where low flow rates did not produce sufficient discharge to flush the lagoons they fed (Buena Vista, Agua Hedionda, Batiquitos, and San Elijo lagoons). Drainages along the northern and southern San Diego coastline were larger and flushed the coastal hydrological features they fed, keeping them open to the ocean and allowing for continued human exploitation. Peñasquitos Lagoon exhibits dates as late as 2,355 YBP and San Diego Bay showed continuous occupation until the close of the Milling Stone Horizon. Additionally, data from several drainages in Camp Pendleton indicate a continued occupation of shell midden sites until the close of the period, indicating that coastal sites were not entirely abandoned during this time. (BFSA, 2018, p. 2.0-7)

By 5,000 YBP, an inland expression of the La Jolla Complex is evident in the archaeological record, exhibiting influences from the Campbell Tradition from the north. These inland Milling Stone Horizon sites have been termed "Pauma Complex." By definition, Pauma Complex sites share a predominance of grinding implements (manos and metates), lack mollusk remains, have greater tool variety (including atlatl dart points, quarry-based tools, and crescentics), and seem to express a more sedentary lifestyle with a subsistence economy based upon the use of a broad variety of terrestrial resources. ~~Although originally viewed as a separate culture from the coastal La Jolla Complex, it appears that these inland sites may be part of a subsistence and settlement system utilized by the coastal peoples. Evidence from the 4S Project in inland San Diego County suggests that these inland sites may represent seasonal components within an annual subsistence round by La Jolla Complex populations.~~ Including both coastal and inland sites of this time period in discussions of the Encinitas Tradition, therefore, provides a more complete appraisal of the settlement and subsistence system exhibited by this cultural complex. (BFSA, 2018, p. 2.0-7)

C-6 CONT.

- Late Holocene/Late Prehistoric/San Luis Rey Period (1300 YBP to 1790).

~~Approximately 1,350 YBP, a Shoshonean-speaking group from the Great Basin region moved into Riverside County, marking the transition to the Late Prehistoric Period.~~ This period is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, technological innovations. Technological developments during this period included the introduction of the bow and arrow between A.D. 400 and 600 and the introduction of ceramics. Atlatl darts were

C-7

Comment Letter C

replaced by smaller arrow darts, including Cottonwood series points. Other hallmarks of the Late Prehistoric Period include extensive trade networks as far-reaching as the Colorado River Basin and cremation of the dead. (BFSA, 2018, pp. 2.0-7 and 2.0-8)

C-7 CONT.

• Late Holocene/Late Protohistoric Period (1790 to Present). Ethnohistoric and ethnographic evidence indicates that three ~~Shoshonean-speaking~~ groups occupied portions of Riverside County including the Cahuilla, the Gabrielino, and the Luiseño. The geographic boundaries between these groups in pre- and protohistoric times are difficult to place, but the Project is located in the ancestral territory of the ~~on the border of ethnographic~~ Luiseño and is on the border of historic Cahuilla territory. Further ethnographic information for the Luiseño, Cahuilla, and Gabrielino groups is presented in section 2.3.4 of the Project's Cultural Resources Assessment (Technical Appendix H). (BFSA, 2018, p. 2.0-8)

C-8

4.17.4 IMPACT ANALYSIS

Pechanga Band of Luiseño Indians: The City of Lake Elsinore held an initial consultation meeting with the Pechanga Band of Luiseño Indians on January 30, 2019. A follow-up consultation meeting was held on February 21, 2019. ~~As part of the consultation, the Pechanga Band of Luiseño Indians did not identify any potential TCRs within the Project's potential impact limits. However, the Pechanga Band of Luiseño Indians did indicate a concern over the potential for uncovering TCRs or other tribal affiliated resources during construction of the Project.~~ According to the Pechanga Band of Luiseno Indians, the Project area and the surrounding area are situated within a culturally sensitive area. There is a complex of related sites and features having cultural value and meeting the definition of TCR. The sites and features surrounding the Nichols Ranch Specific Plan Project consist of several place names, villages, and sacred areas that make up several Traditional Cultural Properties that have been listed with the Native American Heritage Commission's Sacred Lands File. In addition, the project APE contains recorded Luiseño cultural items. Traditional knowledge always holds a referent and relation to material components and elements of the ancestral territory. The Tribe, through tribal consultation and written submittals has provided information showing the cultural significance of the project area.

A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment (Cal Pub Res C 21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource (Cal Pub Res C 21084.3(a)). Because avoidance and preservation in place are preferences for treatment of TCRs, the Tribe prefers any unanticipated finds will be preserved in a dedicated open space area that will protect the resources so as to not materially impair the physical resources.

C-9

COMMENT LETTER C

~~In response,~~ Through consultation discussions and upon reaching agreement with the Pechanga Tribe, ~~on February 25, 2019~~ the City Planning staff provided the ~~Soboba Band of Luiseño Indians~~ Pechanga Band of Luiseño Indians with recommended mitigation measures for review to address the potential for ~~subsurface~~ TCRs on the Project site on February 25, 2019. The mitigation measures agreed to by the various tribes that were consulted is provided in EIR Subsection 4.8 as Mitigation Measures 4.8-1 through 4.8-7. The ~~Soboba Band~~ Pechanga Band of Luiseño Indians indicated that they were in agreement with the identified mitigation measures, and the AB 52/SB18 consultation process was concluded on March 15, 2019.

C-9 CONT.

City of Lake Elsinore is a culturally significant area and the Tribe appreciates the opportunity to preserve and protect our sensitive cultural resources and to monitor earthmoving activities in the area. The Tribe thanks the City for inclusion of the proposed mitigation measures which address the potential impacts to cultural resources, and for the inclusion of the Tribe in those measures, as well as considering proposed edits to the Tribal Cultural Resources section of the DEIR as identified above.

The Pechanga Tribe looks forward to continuing to work together with the City of Lake Elsinore in protecting the invaluable Pechanga cultural resources found in the City. Please contact me at 951-770-6313 if you have any questions or comments.

C-10

Sincerely,

Tuba Ebru Ozdil
Cultural Analyst

cc: Pechanga Office of the General Counsel

Pechanga Cultural Resources • Temecula Band of Luiseño Mission Indians
Post Office Box 2183 • Temecula, CA 92592

Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need

LETTER C Pechanga Cultural Resources

C-1 Comment is acknowledged. Please refer to the individual responses to the comments provided in this letter, below.

C-2 The City acknowledges that the Tribe agrees with the proposed mitigation measures for cultural resources as presented in the DEIR. All mitigation measures listed in the DEIR and in the Project's MMRP will be imposed as conditions of approval on future implementing permits, including grading permits.

C-3 The City acknowledges the history and knowledge of the Pechanga Tribe, and that the historic Luiseno territory includes the City of Lake Elsinore area. The City also acknowledges that the "Shoshonean wedge" theory is no longer supported by current research. As indicated in the responses below, references to the "Shoshonean migration" have been removed from the DEIR.

C-4 Please refer to the individual responses to the recommended changes, below. As indicated, all requested revisions to the DEIR have been incorporated.

C-5 The requested revision has been made on DEIR Pages 4.8-1 and 4.17-1.

C-6 The requested revisions have been made on DEIR Pages 4.8-2, 4.8-3, 4.17-2, and 4.17-3.

C-7 The requested revision has been made on DEIR Pages 4.8-3 and 4.17-3.

C-8 The requested revisions have been made on DEIR Pages 4.8-3 and 4.17-3.

C-9 The requested revisions have been made on DEIR Pages 4.17-11 and 4.17-12.

C-10 The City acknowledges that the Lake Elsinore region is a culturally significant area, and appreciates the opportunity to consult with the Pechanga Band of Luiseño Indians regarding the Project's potential environmental effects. The City will contact the individual listed in this comment letter with any questions or comments.

COMMENT LETTER D

May 2, 2019

Attn: Damaris Abraham, Senior Planner
Community Development Department-Planning Division
City of Lake Elsinore
130 South Main Street
Lake Elsinore, Ca 92530

RE: Nichols Ranch Specific Plan, Draft Environmental Impact Report ("DEIR")
(State Clearinghouse Number 2018051051)

This letter is intended as a formal response from the Soboba Band of Luiseño Indians, to the City of Lake Elsinore Community Development Department, Planning Division, regarding the Nichols Ranch Specific Plan DEIR.

After review of the proposed DRAFT EIR and the attached PHASE I AND II CULTURAL RESOURCES ASSESSMENT FOR THE NICHOLS RANCH SPECIFIC PLAN PROJECT, prepared for The City of Lake Elsinore by Brian F. Smith and Associates, there were a number of concerns identified by the Soboba Band of Luiseño Indians. The Soboba Band recognizes the Nichols Ranch Specific Plan to be located within two existing Traditional Cultural Landscapes, that received no mention within the report. One of which, the consultant Brian F. Smith is well aware of, due to the fact that this firm was the consultant for the project where the TCL was identified. The Soboba Band of Luiseño Indians is advising The City of Lake Elsinore that the Cultural Resources Assessment provided to the tribe is inadequate in many ways. It is the intention of the Soboba Band to identify those inadequacies below.

D-1

1.3 Recommendation Summary

- **Within this section the consultant states,** *"The Nichols Ranch Project will result in direct impacts to recorded cultural resources RIV-8120 and P-33-026830, both of which have been evaluated as not CEQA-significant. As such, the site and isolate do not qualify as Historical Resources and site-specific mitigation measures are not required. However, due to the presence of cultural resources documenting prehistoric and historic use of this property, the potential exists that other unidentified cultural resources may exist within the APE that may be exposed during grading. In order to identify any cultural resources uncovered by the development of this project, all earthwork (grading or trenching) shall be monitored by an archaeologist."* **Brian F. Smith and Associates fails to mention that some isolated artifacts do qualify as a historical resource, such as those considered unique: significant features, ceremonial items, and artifacts that are of the archaic period.**

D-2

- **Additionally the consultant states,** *"Should the archaeologist identify any Native American sites, deposits, features, or artifacts, the City of Lake Elsinore will be notified. Subsequently, a Native American representative will be requested from the Pechanga Tribe to be on-site for all grading activities in the area of the*

D-3

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discovery." **First, tribal representatives (monitors), must be onsite for all initial "grading activities". The inclusion of the tribal monitor is not at the discretion of Brian F. Smith and Associates. Secondly, the Soboba Band concurs with the inclusion of the Pechanga Band, as they are our sister Luiseño Band. Although, it is obvious that Brian F. Smith and Associates is making assumptions based on personal preference, where they state that a request will be issued to the, "Pechanga Tribe". Brian F. Smith and Associates has been active in this area long enough to understand, that this is an inclusive process, not an exclusive process. Coordination with tribes who have been actively involved, and who have been determined most likely descendants for previously discovered human remains within the vicinity, is not at the discretion of Brian F. Smith and Associates. It is the request of the Soboba Band that the inclusion of tribal monitors be extended to, *"Both The Soboba Band and The Pechanga Band"*.**

D-3 CONT.

2.1 Previous Work

- **Within this section Brian F. Smith and Associates states**, *"The records search for the property from the EIC at UCR reported that 33 cultural resource sites and 36 cultural resource studies have been recorded within a one-mile radius of the project."* **Although, once again, Brian F. Smith and Associates fails to mention the two previously identified Traditional Cultural Landscapes and Traditional Cultural Properties known as Paa'o, Paayaxchi and Paayaxchi Nive'wuna. As mentioned in the previous comment under 1.3, Brian F. Smith and Associates was the hired consultant for the Saddleback Estates Project where the Paa'o TCL was identified. Consultation for the said project took place during mid-2017 to mid-2018, where this assessment was completed July 17, 2017, revised December 19, 2017, and again revised April 27, 2018. Therefore, providing plenty of opportunity for Brian F. Smith and Associates to at least include the mention of the Paa'o TCL.**

D-4

3.3 Laboratory Methods

- **Within this section, the Soboba Band deems it necessary that the mention of Tribal Cultural Resources and artifacts of Native American origin, are cataloged using basic recordation. Any testing would be limited to non-destructive analysis, and subject to approval by consulting tribe(s). With the exception of historic resources,** *"keeping with generally accepted archaeological procedures"*, **may not be acceptable to tribe(s)**

D-5

3.5 Native American Consultation

- **Within this section Brian F. Smith and Associates goes on to state, "***The analysis of site components and artifacts did not indicate Native American religious, ritual, or other special activities at this location"*. **This is completely inadequate when considering the oral histories associated with the identified**

D-6

COMMENT LETTER D

Traditional Cultural Landscapes and Traditional Cultural Properties that the project sits within, for Paa'o, Paayaxchi and Paayaxchi Nive'wuna, are are directly associated with Luiseño creation and religion.

D-6 CONT.

- **Brian F. Smith and Associates also stated,** *"BFSA requested a review of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC) to determine if any recorded Native American sacred sites or locations of religious or ceremonial importance are present within one mile of the project. The NAHC SLF search did not indicate the presence of a sacred site within the search radius."* **It must be understood that unfortunately the NAHC Sacred Land File is not an extensive list. The SLF list is a compilation of locations that tribes nominate for inclusion to the database. The SLF list should in no way be considered the only resource to determine whether a location is significant to tribes or not.**

D-7

- **Brian F. Smith and Associates states that,** *"A list of Native American contacts was also provided by the NAHC. In accordance with the recommendations of the NAHC, BFSA contacted all tribal Native American consultants listed in the NAHC response letter. As of the date of this report, four groups have responded."* **The four tribes mentioned in the summary are Agua Caliente, Rincon, Augustine, and the Soboba Band, yet in 1.3 the Recommendation Summary, none of the aforementioned tribes are who Brian F. Smith and Associates states they will be requesting to be onsite for all grading activities.**

D-8

- **Brian F. Smith and Associates goes on to state that,** *"a response from the Soboba Band of Luiseño Indians stated that the project area does fall within the bounds of their Tribal Traditional Use Areas and requested to be included in the mandatory AB 52 consultation process; they have also requested that a Native American monitor be present during any ground disturbing proceedings for the project."* **The Soboba Band of Luiseno Indians is the only tribe that clearly identified a connection to the project location during the tribal scoping stage. The Soboba Band made a direct request to have a monitor present during ground disturbing, yet there was no mention of the Soboba Band in the Recommendation Summary from Brian F. Smith and Associates, which seems to obviously be based on personal preference.**

D-9

5.0 RECOMMENDATIONS

- **Although the Conditions of Approval state,** *"for the Nichols Ranch Project, all prehistoric artifacts were prepared for curation with the Pechanga Band of Luiseño Mission Indians in Temecula, California."*, **the consideration for onsite reburial if agreeable to tribe(s), should must be mentioned.**

D-10

COMMENT LETTER D

5.1 Mitigation Monitoring

- **Brian F. Smith and Associates states,** *"Monitoring during ground-disturbing activities, such as grading or trenching, by a qualified archaeologist is recommended to ensure that if buried features (i.e., human remains, hearths, or cultural deposits) are present, they will be handled in a timely and proper manner."* **In reality, it is the tribes themselves who know how our remains, hearths and cultural deposits should be handled, and what constitutes a proper manner, not Brian F. Smith and Associates. Based on the lack of tribal inclusion in the process, it is obvious that Brian F. Smith and Associates is not only insensitive, but unaware of traditional tribal protocols relating to the said issues.**

D-11

Mitigation Monitoring and Reporting Program (MMRP)

- **Within this section Brian F. Smith and Associates states under 2), "***The project applicant shall provide Native American monitoring during grading in the event that prehistoric Native American artifacts or features are identified. The Native American monitor, if needed, shall work in concert with the archaeological monitor to observe ground disturbances and search for cultural materials."* **This is unacceptable, considering that tribal monitoring must be take place for all initial ground-disturbing activities. Again, tribal monitoring is not at the discretion of Brian F. Smith and Associates. The language provided by Brian F. Smith and Associates, gives the impression the tribal monitor is present as needed.**

D-12

- **Brian F. Smith and Associates also states,** *"6) In the event that previously unidentified cultural resources are discovered, the archaeologist shall have the authority to divert or temporarily halt ground disturbance operation in the area of discovery to allow for the evaluation of potentially significant cultural resources. The archaeologist shall contact the lead agency at the time of discovery. The archaeologist, in consultation with the lead agency, shall determine the significance of the discovered resources."* **All evaluations must include the tribe(s). Again, Brian F. Smith and Associates has excluded tribal involvement in the determination of significance for our own resources. It is our recommendation this procedure is not accepted as part of the MMRP.**

D-13

- **Brian F. Smith and Associates later states,** *"If any human bones are discovered, the county coroner and lead agency 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."*

  The phrase "Human Bones" is hardly sensitive to fact that if determined to be of Native American origin, these are the remains of our ancestors. Unprofessionalism is obvious, when there is no mention of existing statutes

D-14

Comment Letter D

such as California Health and Safety Code Section 7050.5(b). Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the applicant shall comply with the statute relating to the disposition of Native American burials that fall within the jurisdiction of the NAHC (PRC Section 5097). The coroner shall contact the NAHC to determine the most likely descendant(s). The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The Disposition of the remains, shall be overseen by the most likely descendant(s), to determine the most appropriate means of treating the human remains, and any associated grave goods (artifacts).

D-14 CONT.

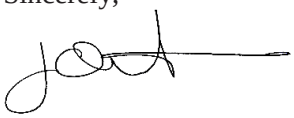
Additionally, it should be mentioned that according to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052) determined in consultation between the project proponent and the MLD. In the event that the project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

D-15

As I have pointed out, there are numerous inconsistencies, lack of consideration for traditional tribal practices, and obvious attempts at excluding consulting tribal nations from being actively involved in the process. It is my formal request that a meeting with the City of Lake Elsinore is scheduled to address the Soboba Band's concerns regarding the Nichols Ranch Specific Plan Draft EIR. I look forward to receiving a timely response from the City of Lake Elsinore.

D-16

Sincerely,



Joseph Ontiveros, Tribal Historic Preservation Officer
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581
Phone (951) 654-5544 ext. 4137
Cell (951) 663-5279
jontiveros@soboba-nsn.gov

LETTER D Soboba Band of Luiseño Indians

D-1 The City acknowledges that the Soboba Band of Luiseño Indians has concerns regarding the Project and the Project's Cultural Resources Assessment. The City also notes that the comments in this letter pertain to the Cultural Resources Assessment that was prepared for the proposed Project, and that the comments in this letter do not specifically address the content included in the DEIR. As indicated in the responses below, some of the revisions requested by this comment letter were addressed in the DEIR. The City also acknowledges that the Project site occurs within two existing Traditional Cultural Landscapes (TCLs). Please refer to the individual responses to the comments raised by this comment letter, below.

D-2 Mr. Ontiveros's comments regarding the possibility that isolate artifacts could be significant is not pertinent to this Project or the artifacts identified. Archaeologically speaking, isolates or single artifacts discovered without an associated context or provenience are not significant because their origin, authenticity, or connection to people and places cannot be confirmed. Admittedly, some specific types of artifacts found in an isolated context may have significance to Native Americans due to recognized religious or ceremonial connections. However, this is not the case with the two flakes identified on the Project site, as they only represent detritus from the process of flaking stone.

D-3 The archaeological study has been changed to reflect the monitoring status of both the Soboba Band and the Pechanga Band. The recommendation states that Native American representatives that have requested to be part of the mitigation monitoring program during their Assembly Bill (AB) 52 consultation process with the City should be provided the opportunity to provide monitoring during grading. This requirement also was reflected in DEIR Mitigation Measure MM 4.8-4, which requires coordination with consulting Native American Tribe(s) that have requested monitoring through consultation with the City during the AB 52 and/or the SB 18 process ("Monitoring Tribes"), and requires the Project Applicant to coordinate with the Monitoring Tribe(s) to develop individual Tribal Monitoring Agreement(s).

D-4 The Traditional Cultural Landscapes (TCLs)/Traditional Cultural Properties (TCPs) mentioned by Mr. Ontiveros are not listed on the National Register and the boundaries of the TCLs/TCPs have not been listed in any archaeological records. Furthermore, the TCL of Paa'o was recognized by the State Historic Preservation Office only for the Saddleback Estates Project, as related to a specific location and situation. The United States Army Corps of Engineers does not recognize these TCLs/TCPs aside from the Saddleback Estates Project, which is located several miles north of the Nichols Ranch Specific Plan Project. For the purposes of the Project's archaeological study, Brian F. Smith and Associates, Inc. (BFSA) reported the officially recorded cultural resources listed in the statewide register of recorded historic properties. However, because Mr. Ontiveros has indicated concern that these properties should be part of the listing of resources in the area, the BFSA report has been amended to include a statement that the Soboba Band believes that the two TCLs/TCPs noted by Mr. Ontiveros possibly include the current project area (refer to Page 4.0-7 of the revised Cultural Resources Assessment, included as *Technical Appendix H*).

D-5 The BFSA report has been amended to include a notation that laboratory cataloging of Native American artifacts will not include any destructive analytical methods. Refer to Page 5.0-7 of the revised Cultural Resources Assessment, included as *Technical Appendix H* to the Final EIR.

D-6 From an archaeological perspective, the linkage of the two flakes identified on the property to the TCLs/TCPs listed by Mr. Ontiveros contradicts what is known and accepted by archaeologists with regards to archaeological site composition or patterns of prehistoric site utilization. The discovery of the flakes certainly documents use of the area by Native Americans; however, that use would be transitory at best on this particular property given the absence of any occupation sites or temporary camps. No revisions to the Cultural Resources Assessment have been made pursuant to this comment.

D-7 The records search at the Eastern Information Center at the University of California at Riverside and at the Native American Heritage Commission are basic sources of data from which archaeologists can document the archaeological resources in a given area. Given that tribes do not generally share specific culturally sensitive information with archaeologists outside of the AB 52 process, the statement by Mr. Ontiveros can be addressed by including a passage in the archaeological report that additional resources recognized by tribes as significant may be located in the Project, but cannot be disclosed in a public document. Refer to Page 4.0-1 of the revised Cultural Resources Assessment, included as *Technical Appendix H* to the Final EIR.

D-8 If tribes were notified but elected not to respond, or they responded to say they would not participate in a project because it was not within their tribal boundaries, then they would not be listed as potential monitors for the project. Additionally, DEIR Mitigation Measure 4.8-4 is clear in requiring that the Project Applicant must contact the consulting Native American Tribe(s) that have requested monitoring through consultation with the City during the AB 52 and/or the SB 18 process ("Monitoring Tribes"), and must coordinate with the Monitoring Tribe(s) to develop individual Tribal Monitoring Agreement(s). Tribes that requested consultation as part of the Project include only the Rincon Band of Luiseño Indians, Pechanga Band of Luiseño Indians, and the Soboba Band of Luiseño Indians; thus, these three tribes would be allowed to conduct monitoring as part of site grading operations.

D-9 The Cultural Resources Assessment has been changed to state that Native American monitoring will be provided by those Native American representatives that request to be monitors as part of their AB 52 consultation process. Refer to Page 5.0-1 of the revised Cultural Resources Assessment, included as *Technical Appendix H* to the Final EIR. As noted above, tribes that requested consultation as part of the Project include the Rincon Band of Luiseño Indians, Pechanga Band of Luiseño Indians, and the Soboba Band of Luiseño Indians; thus, these three tribes would be allowed to conduct monitoring as part of site grading operations pursuant to DEIR Mitigation Measure 4.8-4.

D-10 The Cultural Resources Assessment has been amended to include a statement that artifacts will be repatriated to the tribes and possibly reburied on-site in a location designated for permanent open space. The determination of the disposition of Native American artifacts will be at the discretion of the participating Native American tribes. Refer to Page 5.0-1 of the revised Cultural Resources Assessment, included as *Technical Appendix H* to the Final EIR. Additionally, refer to the mitigation

measures included in DEIR subsection 5.8.7, which include specific mitigation recommendations provided by the Pechanga Band of Luiseño Indians.

D-11 The Cultural Resources Assessment report has been amended to rephrase the excerpt listed by Mr. Ontiveros to state that discoveries will be treated in accordance with California Environmental Quality Act (CEQA) regulations and tribal input. Refer to Page 5.0-1 of the revised Cultural Resources Assessment, included as *Technical Appendix H* to the Final EIR. Additionally, refer to DEIR Mitigation Measures MM 4.8-2 and MM 4.8-3, which include measures to ensure tribal consultation regarding the disposition of cultural resources.

D-12 It is worth noting that Native American monitoring is not a mandatory CEQA regulation, but is stipulated by the lead agency as a measure to mitigate impacts to resources that may be encountered during monitoring. Nevertheless, the Cultural Resources Assessment has been revised to stipulate that Native American monitoring by consulting tribes should be part of the Mitigation Monitoring and Reporting Program. Refer to Page 5.0-1 of the revised Cultural Resources Assessment, included as *Technical Appendix H* to the Final EIR. Additionally, refer to DEIR Mitigation Measure MM 4.8-4, which requires the Project Applicant to contact the consulting Native American Tribe(s) that have requested monitoring through consultation with the City during the AB 52 and/or the SB 18 process ("Monitoring Tribes"), and to coordinate with the Tribe(s) to develop individual Tribal Monitoring Agreement(s). As indicated, the Tribal Monitor would be present during ground-disturbing activities, as would be set forth as part of the Tribal Monitoring Agreement(s).

D-13 Refer to the response to Comment D-11. No further response is necessary.

D-14 The term "human bones" has been revised to "human remains" in the Cultural Resources Assessment (refer to Pages 5.0-5 through 5.0-7). This information already was included in the DEIR (refer to DEIR Mitigation Measure MM 4.8-6).

D-15 The appropriate section of the California Health and Safety Code related to the treatment of human remains identified as Native American has been placed in the Cultural Resources Assessment report (refer to Page 5.0-5). This information already was included in the DEIR (refer to DEIR Mitigation Measure MM 4.8-6).

D-16 The City appreciates the comments provided by this commenter on the Project's Cultural Resources Assessment. It should be noted that the mitigation requirements identified in the DEIR are based on mitigation measures as requested by the Pechanga Band of Luiseño Indians as part of their consultations with the City of Lake Elsinore. As indicated in the mitigation contained in the DEIR, the Soboba Band of Luiseño Indians would not be excluded from being involved in the process; on the contrary, DEIR Mitigation Measure MM 4.8-4 explicitly requires the Project Applicant to contact the consulting Native American Tribe(s) that have requested monitoring through consultation with the City during the AB 52 and/or the SB 18 process ("Monitoring Tribes"), and to coordinate with the Monitoring Tribe(s) to develop individual Tribal Monitoring Agreement(s). Consultation on the proposed Project as required by SB 18 and AB 52 occurred between the City and the Soboba Band of

Luiseño Indians, and the formal consultation process was concluded on February 6, 2019. Because this comment letter does not identify any issues with the mitigation measures or requirements as presented in the DEIR, no revisions to the DEIR have been made pursuant to this comment letter.

Comment Letter E

Jer Harding

From: Mauricio Alvarez <malvarez@riversidetransit.com>
Sent: Wednesday, March 27, 2019 8:46 AM
To: Damaris Abraham
Subject: Nichols Ranch Specific Plan

Good Morning Ms. Abraham,

RTA has reviewed the plans that you have sent and we have several comments:

1. A bus turn out on Nichols Rd NS A Street with ADA compliant, connected sidewalk E-1
2. A bus stop on Nichols Rd NS B Street with ADA compliant, connected sidewalk E-2
3. A bus stop on B Street NS F Street with ADA compliant, connected sidewalk E-3
4. A bus stop on B Street NS El Toro Rd with ADA compliant, connected sidewalk E-4

Thank you for considering these comments.

Mauricio Alvarez, MBA
Planning Analyst
Riverside Transit Agency
p: 951.565.5260 | e: malvarez@riversidetransit.com
Website | Facebook | Twitter | Instagram
1825 Third Street, Riverside, CA 92507

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LETTER E Riverside Transit Agency

E-1 The Project Applicant is only required to improve the southern half of Nichols Road, with an interim asphalt berm proposed along the northern edge of the road. As such, bus stops at this location are not warranted at this time, but can be accommodated in the future once either the County improves the northern portion of Nichols Road, or the property owner to the north improves the northern half of Nichols Road.

E-2 The Project Applicant is only required to improve the southern half of Nichols Road, with an interim asphalt berm proposed along the northern edge of the road. As such, bus stops at this location are not warranted at this time, but can be accommodated in the future once either the County improves the northern portion of Nichols Road, or the property owner to the north improves the northern half of Nichols Road.

E-3 Based on a review of the Project's plans, a bus stop along B at Street F with ADA compliant, connected sidewalk can be accommodated at such a time that the Riverside Transit Agency (RTA) establishes bus service in the Project area.

E-4 Based on a review of the Project's plans, a bus stop along B at El Toro with ADA compliant, connected sidewalk can be accommodated at such a time that the Riverside Transit Agency (RTA) establishes bus service in the Project area.

COMMENT LETTER F

Jer Harding

From: Damaris Abraham <dabraham@lake-elsinore.org>
Sent: Friday, May 03, 2019 2:03 PM
To: Jer Harding
Cc: Eric Higuchi; Eric Werner; Todd Pendergrass
Subject: FW: [External]DEIR for Nichols Ranch Specific Plan

FYI

From: Justin Kirk <jkirk@Lake-Elsinore.org>
Sent: Friday, May 3, 2019 1:30 PM
To: Damaris Abraham <dabraham@lake-elsinore.org>
Subject: Fwd: [External]DEIR for Nichols Ranch Specific Plan

FYI...

Sent from my iPad

Begin forwarded message:

> **From:** "Tsang, Kevin" <KTSANG@RIVCO.ORG>
> **Date:** May 3, 2019 at 1:22:24 PM PDT
> **To:** Justin Kirk <jkirk@lake-elsinore.org>
> **Subject: [External]DEIR for Nichols Ranch Specific Plan**
>
> **Message from external sender. Use Caution.**
> Hello Justin,
>
> The Transportation Department has received the DEIR for the Nichols Ranch Specific Plan. Can you indicate what provisions in the specific plan or conditions of approval are included to ensure the roads along the project's frontage will be improvement. In particular, the County would like to ensure improvements along El Toro Road will be provided with the implementing projects of the specific plan. Also, in our comment letter made on the Notice of Preparation we indicated that specific plan needs to coordinate its improvements on Nichols Road with the County's capital project that would the I-15 to SR-74 via Nichols Road. F-1 F-2
>
> Thanks,
>
> **Kevin Tsang, P.E.**
> Riverside County, TLMA
> Transportation Department
> 4080 Lemon Street, 8th Floor
> Riverside, CA 92501
> *Tel: (951) 955-6828*
> *Fax: (951) 955-0049*
>
> *Note: My e-mail has changed to ktsang@rivco.org*

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LETTER F Riverside County Transportation Department

F-1 As indicated on the proposed Tentative Tract Map No. 37305 (TTM No. 37305) and as shown on DEIR Figures 3-2 and 3-3, as part of Phase 1 of the proposed Project the Project Applicant would be required to improve the western edges of El Toro Road and Wood Mesa Court along the site's frontage. El Toro Road would be improved to include an additional 13 feet of drive aisle, curb and gutter, and a 10-foot wide parkway with a 6-foot wide curb-adjacent sidewalk along the Project site's frontage. Wood Mesa Court would be improved to provide an additional 13 feet of drive aisle, a 6-inch AC berm, and a 10-foot parkway along the Project site's frontage.

F-2 The Project Applicant has coordinated with the Riverside County Transportation Commission (RCTC) and the Riverside County Transportation Department (RCTD) via RCTD's consultant, Michael Baker Company. Coordination efforts with Michael Baker Company commenced at the beginning of 2018. The Project Applicant has provided Michael Baker Company with all information regarding the proposed alignment for Nichols Road adjacent to the Project site, and it is the City's understanding that Michael Baker Company has since incorporated the Project's proposed alignment into their plans for this facility.

F.3 ADDITIONS, CORRECTIONS, AND REVISIONS TO THE DRAFT EIR

Substantive changes made to the text, tables, and/or exhibits of the DEIR in response to public comments on the DEIR are itemized in Table F-3, *Errata Table of Additions, Corrections, and Revisions.* Additions are shown in Table F-3 as underline text and deletions are shown as ~~stricken~~ text. No corrections or additions made to the DEIR are considered substantial new information requiring recirculation or additional environmental review under CEQA Guidelines § 15088.5.

Table F-3 Errata Table of Additions, Corrections, and Revisions

REVISED DEIR PAGE(S)	SECTION(S)	ADDITIONS, CORRECTIONS, AND REVISIONS
Throughout	Throughout	The date of the Project's Cultural Resources Assessment has been updated throughout to reflect the updated version of the report.
S.0	Table S-1	Table S-2 has been revised to reflect changes to mitigation and regulatory requirements, as described below.
1-6	1.4	Subsection 1.4 has been revised to include the South Coast Air Quality Management District (SCAQMD) as a Responsible Agency for the proposed Project.
3-30 through 3-32	3.5 and Table 3-6	Section 3.5 and Table 3-6 have been revised to identify the SCAQMD as a Responsible Agency for the Project, and to identify permits that would be required from the SCAQMD.
4.2-34	4.2.7	The following revisions were made pursuant to comments from the SCAQMD to indicate additional SCAQMD rules to which the Project would be required to comply: The Project shall comply with standards applicable to operation of equipment which emit Toxic Air Contaminants (TACs), such as the proposed fueling station. In particular, the Project shall comply with SCAQMD Rules 1401 and 1401.1, which provide screening-level risk estimates for fueling stations, including ones placed near schools, for new, relocated, and modified units requiring SCAQMD permits. SCAQMD Rule 212 also shall be applicable to the project, which has standards for approving permits and issuing public notices. Under Rule 212, the fueling station shall not be granted a Permit to Construct or Permit to Operate, unless the applicant shows the equipment is designed and controlled to a sufficient standard. SCAQMD Rule 461 regulates the transfer of gasoline, which includes vapor emissions.
4.2-34 and 4.2-35	4.2.7	Mitigation Measure MM 4.2-1 has been modified based on comments received from the SCAQMD, as follows: MM 4.2-1 Prior to grading permit issuance, the City of Lake Elsinore shall verify the following notes ~~is~~ are included on the grading plan. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Lake Elsinore staff or its designee to confirm compliance. ~~This~~ These notes also shall be specified in bid documents issued to prospective construction contractors. • *"During ~~grading activities~~each phase of construction, all construction equipment greater than ~~1~~50 horsepower shall consist of off-road diesel construction equipment that complies with EPA/CARB Tier 4~~3~~ emissions standards, if such equipment is readily available and cost effective at the time of construction of each phase of the proposed Project. In such cases*

Table F-3 Errata Table of Additions, Corrections, and Revisions

REVISED DEIR PAGE(S)	SECTION(S)	ADDITIONS, CORRECTIONS, AND REVISIONS
		where feasible, equipment outfitted with Best Available Control Technology (BACT) devices including, but not limited to, a CARB-certified Level 3 Diesel Particulate Filters (DPF), are encouraged. Level 3 DPFs are capable of achieving at least an 85 percent reduction in particulate matter emissions. A list of CARB verified DPFs are available on the CARB website. Additionally, the Construction Manager should include this requirement in applicable bid documents, and must demonstrate the ability to supply compliant equipment prior to commencement of any construction activities. The construction contractor also shall ensure all equipment is tuned and maintained in accordance with the manufacturer's specifications. The construction contractor shall keep a log of all applicable construction equipment demonstrating compliance with these requirements, and the log shall be made available for inspection by City of Lake Elsinore staff upon request. In the event that the City of Lake Elsinore determines that Tier 4 construction equipment is infeasible pursuant to CEQA Guidelines Section 15364, the Project Applicant shall demonstrate through future study with written findings supported by substantial evidence that is reviewed and approved by the City of Lake Elsinore before using other technologies/strategies. For purposes of this measure, "infeasible" means construction equipment is either no readily available or is not cost effective. Alternative applicable strategies may include, but would not be limited to, Tier 3 construction equipment, reduction in the number and/or horsepower rating of construction equipment, and/or limiting the number of daily construction haul truck trips to and from the Project site." • *"During all construction phases, signs shall be posted at construction entry points and in construction equipment staging areas requiring truck drivers to turn off engines when not in use, and limiting idling of diesel delivery trucks servicing the Project to no more than five (5) minutes. The signs also shall include telephone numbers of the construction manager and the California Air Resources Board (CARB) to report violations."*
4.2-35	4.2.7	The following mitigation measures have been added in response to comment letters received from the SCAQMD. MM 4.2-2 As a condition of all grading and building permits, the Construction Manager shall be required to provide information to construction contractors regarding SCAQMD "SOON" funds to encourage fleet turnover to cleaner vehicles. All construction contractors shall be referred the SCAQMD's web site at the following address: http://www.aqmd.gov/home/programs/business/business-detail?title=off-road-diesel-engines&parent=vehicle-engine-upgrades MM 4.2-3 Prior to the issuance of occupancy permits for the proposed office uses on site, the Project Applicant shall demonstrate that future occupants of the building have been provided materials regarding the benefits of public transportation and carpooling, and that future tenants have been encouraged

Table F-3 Errata Table of Additions, Corrections, and Revisions

REVISED DEIR PAGE(S)	SECTION(S)	ADDITIONS, CORRECTIONS, AND REVISIONS
		to provide incentives for public transportation and carpooling, such as discounted transit passes or carpool rebates. Future occupants also shall be encouraged to implement a rideshare program and to set goals to achieve a certain participation rate over a period of time.
4.8-1 and 4.17-1	4.8.1 and 4.17.1	The following revision was made pursuant to comments received by the Pechanga Band of Luiseño Indians (refer to Comment Letter C in subsection F.2.2): The Project site is located in the northeastern portion of the City of Lake Elsinore in western Riverside County. The Paleo Indian, Archaic Period Milling Stone Horizon, and the Late Prehistoric ~~Shoshonean groups~~ are the three general cultural periods represented in Riverside County, as summarized briefly below.
4.8-2 and 4.17-2	4.8.1 and 4.17.1	The following revision was made pursuant to comments received by the Pechanga Band of Luiseño Indians (refer to Comment Letter C in subsection F.2.2): Between 9,000 and 8,000 YBP, a widespread complex was established in the southern California region, primarily along the coast but also present around the Lake Elsinore region.
4.8-2, 4.8-3, 4.17-2, and 4.17-3	4.8.1 and 4.17.1	The following revision was made pursuant to comments received by the Pechanga Band of Luiseño Indians (refer to Comment Letter C in subsection F.2.2): By definition, Pauma Complex sites share a predominance of grinding implements (manos and metates), lack mollusk remains, have greater tool variety (including atlatl dart points, quarry-based tools, and crescentics), and seem to express a more sedentary lifestyle with a subsistence economy based upon the use of a broad variety of terrestrial resources. ~~Although originally viewed as a separate culture from the coastal La Jolla Complex, it appears that these inland sites may be part of a subsistence and settlement system utilized by the coastal peoples. Evidence from the 4S Project in inland San Diego County suggests that these inland sites may represent seasonal components within an annual subsistence round by La Jolla Complex populations.~~ Including both coastal and inland sites of this time period in discussions of the Encinitas Tradition, therefore, provides a more complete appraisal of the settlement and subsistence system exhibited by this cultural complex.
4.8-3 and 4.17-3	4.8.1 and 4.17.1	The following revision was made pursuant to comments received by the Pechanga Band of Luiseño Indians (refer to Comment Letter C in subsection F.2.2): Late Holocene/Late Prehistoric/San Luis Rey Period (1300 YBP to 1790). ~~Approximately 1,350 YBP, a Shoshonean-speaking group from the Great Basin region moved into Riverside County, marking the transition to the Late Prehistoric Period.~~ This period is characterized by higher population densities and elaborations in social, political, and technological systems.
4.8-3and 4.17-3	4.8.1 and 4.17.1	The following revisions were made pursuant to comments received by the Pechanga Band of Luiseño Indians (refer to Comment Letter C in subsection F.2.2): Ethnohistoric and ethnographic evidence indicates that three ~~Shoshonean-speaking~~ groups occupied portions of Riverside County including the Cahuilla, the Gabrielino, and the Luiseño. The geographic boundaries between these groups in pre- and

Table F-3 Errata Table of Additions, Corrections, and Revisions

REVISED DEIR PAGE(S)	SECTION(S)	ADDITIONS, CORRECTIONS, AND REVISIONS
		protohistoric times are difficult to place, but the Project is located <u>in the ancestral territory of the</u>~~on the border of ethnographic~~ Luiseño and <u>is on the border of historic</u> Cahuilla territory.
4.17-11 and 4.17-12	4.17.4	The following revisions were made pursuant to comments received by the Pechanga Band of Luiseño Indians (refer to Comment Letter C in subsection F.2.2): • <u>Pechanga Band of Luiseño Indians</u>: The City of Lake Elsinore held an initial consultation meeting with the Pechanga Band of Luiseño Indians on January 30, 2019. A follow-up consultation meeting was held on February 21, 2019. ~~As part of the consultation, the Pechanga Band of Luiseño Indians did not identify any potential TCRs within the Project's potential impact limits. However, the Pechanga Band of Luiseño Indians did indicate a concern over the potential for uncovering TCRs or other tribal-affiliated resources during construction of the Project.~~ <u>According to the Pechanga Band of Luiseño Indians, the Project area and the surrounding area are situated within a culturally sensitive area. There is a complex of related sites and features having cultural value and meeting the definition of TCR. The sites and features surrounding the Nichols Ranch Specific Plan Project consist of several place names, villages, and sacred areas that make up several Traditional Cultural Properties that have been listed with the Native American Heritage Commission's Sacred Lands File. In addition, the Project Area of Potential Effect (AOE) contains recorded Luiseño cultural items. Traditional knowledge always holds a referent and relation to material components and elements of the ancestral territory. The Tribe, through tribal consultation and written submittals has provided information showing the cultural significance of the Project area.</u> <u>A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resources is a project that may have a significant effect on the environment (Cal Pub Res C 21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource (Cal Pub Res C 201084.3(a)). Because avoidance and preservation in place are preferences for treatment of TCRs, the Tribe prefers any unanticipated finds will be preserved in a dedicated open space area that will protect the resources so as to not materially impair the physical resources.</u> ~~In response~~<u>Through consultation discussions and upon reaching agreement with the Pechanga Tribe,</u> ~~on February 25, 2019~~ <u>the</u> City Planning staff provided the ~~Soboba~~ <u>Pechanga</u> Band of Luiseño Indians with recommended mitigation measures for review to address the potential for subsurface TCRs on the Project site. The mitigation measures agreed to by the various tribes that were consulted is provided in EIR Subsection 4.8 as Mitigation Measures 4.8-1 through 4.8-7. The ~~Soboba~~ <u>Pechanga</u> Band of Luiseño Indians indicated that they were in agreement with the identified mitigation measures, and the AB 52/SB18 consultation process was concluded on March 15, 2019.

F.4 No Recirculation of the Draft Environmental Impact Report Required

CEQA Guidelines § 15088.5 describes the conditions under which a DEIR that was circulated for public review is required to be re-circulated for additional public review and comment. CEQA Guidelines § 15088.5 states that new information added to a DEIR is not significant unless the DEIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:

a. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

b. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

c. A feasible project alternative or mitigation measure considerably different from the others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.

d. The DEIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

As summarized in F.3, *Additions, Corrections, and Revisions to the Draft EIR*, and based on the comment letters and responses thereto presented in Subsection F.2.2, *Responses to Comments on the Recirculated Draft Environmental Impact Report*, there were no public comments or changes to the text or analysis contained in the DEIR that resulted in the identification of any new significant environmental effect or a substantial increase in the severity of environmental effects that were disclosed in the DEIR. Only minor clarifications and amplifications have been made to the DEIR in response to public comments, including revisions to more accurately characterize cultural resources and the Project's tribal consultation process. Furthermore, public comment letters on the DEIR did not identify any alternatives to the proposed Project considerably different from those analyzed in the DEIR that would substantially lessen the significant environmental impacts of the proposed Project while still attaining the Project's basic objectives. Additionally, the DEIR was fundamentally and basically adequate, and all conclusions within the DEIR were supported by substantial evidence provided within the DEIR or the administrative record for the proposed Project.

Based on the foregoing, recirculation of the DEIR is not warranted according to the guidance set forth in § 15088.5 of the CEQA Guidelines.

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 Environmental Impact Report (EIR), having California State Clearinghouse (SCH) No. 2018051051 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 Nichols Ranch 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 of Lake Elsinore 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 Lake Elsinore Planning Commission prior to recommending approval, approval with modification, or rejection of the proposed Project. The City of Lake Elsinore City Council will consider whether to approve, approve with modifications, or reject the proposed Project and 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 Lake Elsinore 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 Lake Elsinore determined that the scope of this EIR should cover 18 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 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 Lake Elsinore and in consideration of public comment on the NOP, the 18 environmental subject areas that could be reasonably and significantly affected by planning, constructing, and/or operating the proposed Project are analyzed herein, including:

1. Aesthetics
2. Air Quality
10. Land Use and Planning
11. Noise

3. Biological Resources
4. Energy
5. Geology and Soils
6. Greenhouse Gas Emissions
7. Hazards and Hazardous Materials
8. Historic and Archaeological Resources
9. Hydrology and Water Quality
12. Paleontological Resources
13. Population and Housing
14. Public Services
15. Recreation
16. Transportation and Traffic
17. Tribal Cultural Resources
18. 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 18 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 (May 25, 2018) and/or that will exist following completion of reclamation activities on the northern 45.4 acres of the site; 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 with a proportional nexus to the Project's impacts 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 Lake Elsinore on the Project to lessen or avoid those impacts is included in this Executive Summary as Table S-1, *Summary of Impacts, Mitigation Measures, and Conclusions*. The City of Lake Elsinore 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 Lake Elsinore 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 Project site is located in the northeastern portion of the City of Lake Elsinore, California. Lake Elsinore is located within western Riverside County, which abuts San Bernardino County to the northeast, Orange County to the west, San Diego to the south, and Los Angeles County to the northwest. Figure 2-1, *Regional Map*, depicts the Project site's location within the regional vicinity. Riverside County is located in an urbanized area of southern California commonly referred to as the Inland Empire. The Inland Empire is an approximately 28,000 square mile region comprising Riverside County, San Bernardino County, and the eastern tip of Los Angeles County. The Southern California Association of Governments (SCAG) estimates that the SCAG region will grow to 22 million people by the year 2040 – an increase of nearly four million

people from the current population in the SCAG region (SCAG, 2016, p. 3). According to U.S. Census data, the 2010 population of Riverside County was 2,189,641 (USCB, 2016). SCAG forecast models predict that the population of Riverside County will grow to approximately 3,324,000 persons (an approximate 1.1 million persons increase) by the Year 2035 (SCAG, 2016).

The Project site is located east of and adjacent to I-15, south of Nichols Road, and west of Wood Mesa Court/El Toro Road. Access to the site is currently provided by Nichols Road and El Toro Road/Wood Mesa Court. The Project site encompasses Assessor Parcel Numbers (APNs) 389-200-038, 389-210-008, 389-210-032, 389-210-034, and 389-210-036 as illustrated on Figure 2-2, *Vicinity Map*, and Figure 2-3, *USGS Topographical Map*. The Project site is located within Section 25, Township 5 South, and Range 5 West, and is located at 32° 42' 27" North Longitude and 117° 21' 1" West Latitude.

The City of Lake Elsinore's prevailing planning document is its General Plan, dated 2011. Figure 2-5, *Existing General Plan Land Use Designations*, shows the land use designations assigned by the City of Lake Elsinore General Plan to the Project site and surrounding properties that are located within the City of Lake Elsinore. As shown, the City's General Plan designates the northern 45.4 acres of the Project site as "Specific Plan" (Alberhill Ranch Specific Plan, herein "ARSP") with an "Extractive Overlay." The Extractive Overlay provides for continued operations of extractive uses. The ARSP designates the northern 45.4 acres of the Project site for "Commercial – Specific Plan" land uses and allows for up to 380,000 s.f. of regional general commercial uses. The General Plan designates the southern 27.1 acres of the Project site as "General Commercial," which allow for retail, services, restaurants, professional and administrative offices, hotels and motels, mixed-use projects, public and quasi-public uses, and similar and compatible uses. (Lake Elsinore, 2011a, pp. 2-16 through 2-19 and Figure 2.1A; Lake Elsinore, 1997, p. 7)

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 purposes of the proposed Project are to develop a single-family residential community with commercial areas, as well as comply to the greatest feasible extent with applicable City of Lake Elsinore standards, codes, and policies. The following is a list of specific objectives that the proposed Project intends to achieve.

A. To efficiently develop an underutilized property with a complementary mix of land uses, including residential, commercial, recreational, and open space land uses.

B. To establish a master-planned community in a manner that is sensitive to the environment as well as visually and functionally compatible with surrounding existing and proposed land uses.

C. To develop a mixed-use community with a design that takes topographic, geologic, hydrologic, and environmental opportunities and constraints into consideration to minimize alterations to Stovepipe Creek, where practical.

D. To increase the available housing supply within the region by providing detached single-family homes in traditional subdivision layouts that will be marketable within the evolving economic profile of the City of Lake Elsinore and surrounding communities.

E. To construct commercial and hotel uses within proximity to regional transportation facilities that will provide for employment opportunity and that can attract tenants at competitive lease rates to help ensure that the uses are occupied and positively contribute to the local economy.

F. To provide a system of public and community facilities, including recreational facilities and trails, in an efficient and timely manner and meet the needs of Project residents and residents of surrounding communities.

G. To require project design elements such as architecture, landscaping, color, paving, walls, fencing, signage, entry treatments, and other similar design features that would ensure the community is developed in a manner that is aesthetically pleasing.

H. To establish development phasing that results in logical coordinated growth.

I. To develop the site with complementary mixed uses in a manner that preserves, to the extent feasible, natural drainages.

S.3 PROJECT SUMMARY DESCRIPTION

The proposed Project consists of applications for a General Plan Amendment (GPA No. 2018-01), Specific Plan (SP No. 2018-01), Specific Plan Amendment (SPA No. 2017-03), Zone Change (ZC No. 2018-01), and a Tentative Tract Map (TTM No. 37305), which collectively are being processed under Planning Application No. 2017-29 to establish a master-planned, low-medium-density residential community (5.1 to 5.8 dwelling units per acre) with commercial uses on an approximately 72.5-acre site. Approval of these applications would allow for development of the subject property with up to 168 dwelling units on minimum 4,500 s.f. lots, 14.5 acres commercial uses, and 8.3 acres of recreational uses. Associated improvements to the property would include roadway improvements, utility infrastructure, landscaping, exterior lighting, and water quality detention basins. The Project also would require connections to off-site utility lines. Additional discretionary and administrative actions that would be necessary to implement the proposed Project are listed in Table 3-5, *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.

- General Plan Amendment No. 2018-2018-01 (GPA No. 2018-01) proposes to redesignate the southern 27.1 acres of the Project site from "General Commercial" to "Specific Plan" land uses. With approval of GPA No. 2018-01 and the Project's other discretionary applications, development of the entire 72.5-acre property would be governed by the proposed Nichols Ranch Specific Plan (SP No. 2018-01).

- The Project proposes Amendment No. 3.1 to the Alberhill Ranch Specific Plan (ARSP, SP No. 2017-03), which would remove the northern 45.4 acres of the Project site that are currently located within

the ARSP. With approval of the Project, development of the northern 45.4 acres of the Project site would be regulated by the Nichols Ranch Specific Plan (NRSP) instead of by the ARSP.

- Specific Plan No. 2018-01 proposes to establish the Nichols Ranch Specific Plan (NRSP) across the 72.5-acre site, which would allow for development of the site with 168 single-family residential homes on approximately 31.1 acres; 14.5 acres of commercial uses accommodating a 130-room hotel, 6,000 s.f. of fast-food restaurant uses with drive-through window use, 5,500 s.f. of fast-food restaurant uses without drive-through window use, 9,400 s.f. of sit-down restaurant uses, 4,400 s.f. of commercial retail uses, an 8,000 s.f. health and fitness club, a gas station (including market and car wash) with 16 fueling stations, and 43,000 s.f. of office uses; recreation uses on 8.3 acres; drainage basins on 5.5 acres; open space on 1.3 acres; and roadways on 5.3 acres. The NRSP also would establish development standards and design guidelines to provide guidance for future development of the site.

- Zone Change No. 2018-01 (ZC No. 2018-01) proposes to modify the zoning designation on the southern 27.1 acres of the site from "Commercial Mixed Use (CMU)" to "Nichols Ranch Specific Plan." ZC No. 2018-01 also would change the zoning designation of the northern 45.4 acres of the site from "Alberhill Ranch Specific Plan" to "Nichols Ranch Specific Plan." ZC No. 2018-01 also would establish zoning boundaries on-site to reflect the NRSP land use plan for the 72.5-acre site. Additionally, ZC No. 2018-01 would establish allowable uses and development standards for the 72.5-acre NRSP area.

- Tentative Tract Map No. 37305 (TTM No. 37305) proposes to subdivide the approximately ±72.50-acre site to implement the land uses proposed by the NRSP. TTM 37305 would create 168 residential lots on approximately 22.74 acres; one commercial retail lot on 14.43 acres; a sewer lift station lot on 0.13 acre; a park site lot on 6.49 acres; two drainage basin lots on 5.45 acres; nine (9) landscape lots on 1.45 acres; three (3) open space/landscape lots on 3.04 acres; two (2) open space lots on 6.49 acres; and public streets (Streets A through J) on 12.28 acres. TTM 37305 also identifies cross-sections for Nichols Road as well as internal roadways and identifies the improvements that would be constructed as part of the Project.

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 Lake Elsinore) be identified in the Executive Summary. The Lead Agency has not identified any 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 Lake Elsinore 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; historic/archaeological resources; transportation and traffic; and tribal cultural resources.

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 summarized below.

S.5.1 NO PROJECT / NO DEVELOPMENT ALTERNATIVE (NDA)

The No Project/No Development Alternative (NDA) considers no new development/disturbance on the Project site following completion of site reclamation activities beyond that which occurs under existing conditions. As such, the 72.5-acre Project site would consist of undeveloped land that is routinely disced as part of on-going fire abatement activities. 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 (i.e., post-reclamation) conditions, in conformance with CEQA Guidelines § 15126.6(e)(3)(B).

S.5.2 NO PROJECT / GENERAL PLAN LAND USE ALTERNATIVE (GPLUA)

The No Project/General Plan Land Use Alternative (GPLUA) considers development of the 72.5-acre Project site in accordance with the site's existing land use designations. For the northern 45.4 acres of the Project site, development would occur in conformance with the Alberhill Ranch Specific Plan (ARSP), which allows for up to 380,000 s.f. of regional general commercial uses. The southern 27.1 acres of the Project site would be developed in conformance with the underlying General Plan land use designation of "General Commercial," which allows for retail, services, restaurants, professional and administrative offices, hotels and motels, mixed-use projects, public and quasi-public uses, and similar and compatible uses. For purposes of analysis, it is assumed that the GPLUA would be developed to the maximum Floor Area Ratio (FAR) of 0.40 for the southern 27.1 acres of the site, which would allow for up to 472,190 s.f. of commercial area. Thus, this Alternative would allow for approximately 852,190 s.f. of general commercial building area, for an overall FAR of 0.27. This Alternative proposes a bridge crossing over Stovepipe Creek slightly to the east of the location of the Project's proposed crossing. Similar to the proposed Project, it is assumed that Stovepipe Creek would be preserved on site on 6.5 acres. Additionally, under this alternative there would be a connection to El Toro Road/Wood Mesa Court near the Project's southeastern boundary.

S.5.3 REDUCED PROJECT ALTERNATIVE

The Reduced Project Alternative (RPA) considers development of the Project site with a reduced number of dwelling units and commercial square footage in order to reduce the Project's significant and unavoidable

impacts to air quality and traffic/transportation. Specifically, the RPA accommodates up to 104 "Low-Medium Residential" dwelling units on 38.4 acres at an overall density of 2.7 dwelling units per acre (du/ac); 7.2 acres of "General Commercial" land uses, which could accommodate up to 125,453 s.f. of general commercial land uses (at a maximum Floor Area Ratio [FAR] of 0.40); 8.3 acres of "Recreational (Park)" land uses; 1.3 acres of "Open Space" land uses; "Public Institutional (Drainage Basin)" land uses on 5.5 acres; "Floodway" (open space" land uses on 6.5 acres; and 5.3 acres of backbone circulation facilities. Except for the reduction in the number of dwelling units and areas proposed for commercial, all remaining components of the RPA would be the same as the proposed Project, including areas subject to grading and disturbance. This alternative was selected for evaluation by the Lead Agency to compare the environmental effects of the proposed Project against an alternative that would reduce the Project's significant and unavoidable impacts to air quality and traffic/transportation by reducing the total number of dwelling units and commercial square footage on the Project site.

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 18 subject areas determined by the City of Lake Elsinore 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*. Only two subject areas: agriculture/forest resources and mineral resources were determined by the City of Lake Elsinore to have less-than-significant impacts requiring no further analysis in this EIR. This EIR addresses the topics of agriculture/forest resources and mineral resources in EIR Subsection 5.0, *Other CEQA Considerations*.

S.6.2 Impacts of the Proposed Project

Table S-1, *Summary of Impacts, Mitigation Measures, and Conclusions*, provides a summary of the proposed Project's environmental impacts, as required by CEQA Guidelines § 15123(a). Also presented are the mitigation measures recommended by the City of Lake Elsinore 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 four significant and unavoidable environmental effects, as summarized below.

- Air Quality: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Project construction- and operational-related air quality emissions would exceed the Regional Thresholds established by the SCAQMD for NO_X. No feasible mitigation measures exist to reduce the Project's emissions of NO_X to below the applicable SCAQMD Regional Thresholds of significance. During construction activities, the majority of construction-source NO_X emissions would be generated from soil import activities, while under operational conditions over 93 percent of operational-source NO_X emissions would be generated by Project-related traffic. Neither the Project Applicant nor the Lead Agency (City of Lake Elsinore) can substantively or materially affect reductions in mobile-source emissions beyond the regulatory requirements and mitigation measures identified herein. Accordingly, the Project's significant direct and cumulatively-considerable impact due to a conflict with the SCAQMD 2016 AQMP would be significant and unavoidable. Additionally, Project construction and

operation would result in unavoidable direct and cumulatively-considerable impacts due to projected violations of an applicable air quality standard (NO_X) and the Project's substantial contribution to an existing air quality violation for ozone, as NO_X is an ozone precursor. Additionally, the Project's construction and operational emissions would represent a cumulatively-considerable net increase of a criteria pollutant for which the Project region is non-attainment (i.e., ozone); this also represents a significant and unavoidable direct and cumulatively-considerable impact of the proposed Project.

- Biological Resources: Significant and Unavoidable Direct Impact. Although the mitigation identified in EIR Subsection 4.3.7 would reduce the Project's impacts to biological resources to below a level of significance, the Project would nonetheless not comply with the MSHCP objectives for Cell Group W because strict compliance with the MSHCP Conservation Criteria would require the conservation of most or all of the 45.4-acre MSHCP-Excluded Project Area, which inherently conflicts with the Project's primary objective to develop the site with residential, commercial, and recreational land uses. Accordingly, the Project's direct impact due to a non-compliance with the MSHCP conservation requirements for the site represents a significant impact of the proposed Project that cannot be mitigated to below a level of significance.

- Transportation and Traffic: Significant and Unavoidable Direct and Cumulatively-Considerable Impacts. Implementation of the proposed Project would result in a number of direct and cumulatively-considerable impacts to study area facilities. Unavoidable impacts would result from one or more of the following factors: 1) improvements required to achieve an acceptable Level of Service (LOS) are funded by a local or regional funding program (i.e., DIF or TUMF), but it cannot be assured that the improvements would be in place prior to the facilities experiencing a deficient LOS; 2) although fair-share monetary contributions have been identified for the Project's cumulatively-considerable impacts, a funding program does not currently exist for the facility and it cannot be assured that required improvements would be in place prior to the facility experiencing a deficient LOS; and/or 3) the affected facility is under the jurisdiction of another agency (e.g., Caltrans), and no funding programs exist beyond regional programs (e.g., TUMF) to implement improvements needed to achieve an acceptable LOS. A summary of the Project's unavoidable impacts to transportation/traffic is presented in Table 4.16-34 through Table 4.16-38 in EIR Subsection 4.16, *Transportation and Traffic*.

- Transportation and Traffic: Significant and Unavoidable Direct and Cumulatively-Considerable Impacts. Implementation of the proposed Project would result in a number of direct and cumulatively-considerable impacts to regional facilities identified in the 2011 Riverside County Congestion Management Plan (CMP). Unavoidable impacts to CMP facilities would result from one or more of the following factors: 1) improvements required to achieve an acceptable Level of Service (LOS) are funded by a local or regional funding program (i.e., DIF or TUMF), but it cannot be assured that the improvements would be in place prior to the facilities experiencing a deficient LOS; and/or 2) the affected facility is under the jurisdiction of another agency (e.g., Caltrans), and no funding programs exist beyond regional programs (e.g., TUMF) to implement improvements needed to achieve an acceptable LOS. A summary of the Project's unavoidable impacts to CMP facilities is presented in n Table 4.16-34 through Table 4.16-38 in EIR Subsection 4.16, *Transportation and Traffic*.

Table S-1 Summary of Impacts, Mitigation Measures, and Conclusions

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
4.1 Aesthetics				
Threshold a): No unique or scenic vistas would be impacted by the Project. The Project site does not contain any scenic vistas, nor does it offer unique views of any visually prominent features; therefore, impacts to scenic vistas resulting from the Project would be less than significant.	Less than Significant	**CRDR 4.1-1** The Project is required to comply with the Development Standards and Design Guidelines of the proposed Nichols Ranch Specific Plan. Compliance with these Project design features which include but are not limited to guidelines for architecture, landscaping, and lighting, would be assured by the City's future review of implementing building permits for compliance with the Nichols Ranch Specific Plan.	Project Applicant/ Building & Safety Division	Prior to issuance of building permits
Threshold b): The Project would not be prominently visible to SR-74, an "Eligible State Scenic Highway – Not Officially Designated" due to intervening development and topography. The Project would affect views from I-15; however, the Project would be compatible with surrounding land uses and distant hillsides seen from I-15 are not prominent nor unique and would remain visible in the distance beyond the Project site. Impacts to scenic highway corridors would be less than significant.	Less than Significant	**CRDR 4.1-2** The Project is required to comply with the City of Lake Elsinore's Zoning Code (Municipal Code Title 17), which regulates the character and use of property throughout the various zones in the City.	Project Applicant/ Planning Division	Prior to issuance of grading or building permits
Threshold c): The Project would not substantially degrade the existing visual character or quality of the site or its surrounding areas. The Project proposes residential and commercial development that would be similar in character and quality to development in the surrounding areas to the east, west, and south of the Project site.	Less than Significant			
Threshold d): The Project would not create substantial amounts of light or glare. Compliance with the City of Lake Elsinore Municipal Code Title 17, including § 17.112.040, and Chapters 17.16, 17.20, 17.36, and 17.40 would ensure less-than-significant impacts associated with light and glare affecting day or nighttime views in the area.	Less than Significant			

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
4.2 Air Quality				
Threshold a): No feasible mitigation measures exist to reduce the Project's emissions of NO_X to below the applicable SCAQMD Regional Thresholds of significance. During construction activities, the majority of construction-source NO_X emissions would be generated from soil import activities, while under operational conditions over 93 percent of operational-source NO_X emissions would be generated by Project-related traffic. Neither the Project Applicant nor the Lead Agency (City of Lake Elsinore) can substantively or materially affect reductions in mobile-source emissions beyond the regulatory requirements and mitigation measures already imposed on the proposed Project.	Significant and Unavoidable	**MM 4.2-1** Prior to grading permit issuance, the City of Lake Elsinore shall verify the following notes ~~is~~ are included on the grading plan. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Lake Elsinore staff or its designee to confirm compliance. ~~This~~ These notes also shall be specified in bid documents issued to prospective construction contractors. ▪ *"During ~~grading activities~~each phase of construction, all construction equipment greater than ~~1~~50 horsepower shall consist of off-road diesel construction equipment that complies with EPA/CARB Tier 4~~3~~ emissions standards, if such equipment is readily available and cost effective at the time of construction of each phase of the proposed Project. In such cases where feasible, equipment outfitted with Best Available Control Technology (BACT) devices including, but not limited to, a CARB-certified Level 3 Diesel Particulate Filters (DPF), are encouraged. Level 3 DPFs are capable of achieving at least an 85 percent reduction in particulate matter emissions. A list of CARB verified DPFs are available on the CARB website. Additionally, the Construction Manager should include this requirement in applicable bid documents, and must demonstrate the ability to supply compliant equipment prior to commencement of any construction activities. The construction contractor also shall ensure all equipment is tuned and maintained in accordance with the manufacturer's specifications. The construction contractor shall keep a log of all applicable construction equipment demonstrating compliance with these requirements, and the log shall be made available for inspection by City of Lake Elsinore staff upon request. In the event that the City of Lake*	Project Applicant, Construction Manager/ Engineering Division	Prior to issuance of grading permits and during grading activities
Threshold b): Project construction- and operational-related air quality emissions would exceed the Regional Thresholds established by the SCAQMD for NO_X. As noted above, during construction activities, the majority of construction-source NOX emissions would be generated from soil import activities, while under operational conditions over 93 percent of operational-source NOx emissions would be generated by Project-related traffic. Neither the Project Applicant nor the Lead Agency (City of Lake Elsinore) can substantively or materially affect reductions in mobile-source emissions beyond the regulatory requirements and mitigation measures identified herein. Accordingly, the Project would result in unavoidable direct and cumulatively-considerable impacts due to projected violations of an applicable air quality standard (NOX) and the Project's substantial contribution to an existing air quality violation for ozone, as NOX is an ozone precursor. Additionally, the Project's construction and operational emissions would represent a cumulatively-considerable net increase of a criteria pollutant for which the Project region is non-attainment (i.e., ozone); this also	Significant and Unavoidable			

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
represents a significant and unavoidable direct and cumulatively-considerable impact of the proposed Project. **Threshold c):** With implementation of Mitigation Measure MM 4.2-1, construction-related emissions would not exceed the SCAQMD LSTs for any criteria pollutant during construction. **Threshold d):** During both construction and operation, the Project would not create objectionable odors affecting a substantial number of people. Impacts due to odors would be less than significant.	Less than Significant with Mitigation Less than Significant	*Elsinore determines that Tier 4 construction equipment is infeasible pursuant to CEQA Guidelines Section 15364, the Project Applicant shall demonstrate through future study with written findings supported by substantial evidence that is reviewed and approved by the City of Lake Elsinore before using other technologies/strategies. For purposes of this measure, "infeasible" means construction equipment is either not readily available or is not cost effective. Alternative applicable strategies may include, but would not be limited to, Tier 3 construction equipment, reduction in the number and/or horsepower rating of construction equipment, and/or limiting the number of daily construction haul truck trips to and from the Project site."* ▪ *"During all construction phases, signs shall be posted at construction entry points and in construction equipment staging areas requiring truck drivers to turn off engines when not in use, and limiting idling of diesel delivery trucks servicing the Project to no more than five (5) minutes. The signs also shall include telephone numbers of the construction manager and the California Air Resources Board (CARB) to report violations."* **MM 4.2-2** As a condition of all grading and building permits, the Construction Manager shall be required to provide information to construction contractors regarding SCAQMD "SOON" funds to encourage fleet turnover to cleaner vehicles. All construction contractors shall be referred the SCAQMD's web site at the following address: http://www.aqmd.gov/home/programs/business/business-detail?title=off-road-diesel-engines&parent=vehicle-engine-upgrades	Project Applicant, Construction Manager/ Engineering Division	Prior to commencement of grading activities

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		MM 4.2-3 Prior to the issuance of occupancy permits for the proposed office uses on site, the Project Applicant shall demonstrate that future occupants of the building have been provided materials regarding the benefits of public transportation and carpooling, and that future tenants have been encouraged to provide incentives for public transportation and carpooling, such as discounted transit passes or carpool rebates. Future occupants also shall be encouraged to implement a rideshare program and to set goals to achieve a certain participation rate over a period of time.	Project Applicant/ Planning Division	Prior to issuance of occupancy permits for proposed office uses
		CRDR 4.2-1 The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust" by implementing the following dust control measures during construction activities, such as earth moving activities, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the City shall verify that the following notes are included on the grading plan. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Lake Elsinore staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors. ▪ All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph) per SCAQMD guidelines in order to limit fugitive dust emissions. ▪ The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day,	Project Applicant, Grading Contractor/ SCAQMD, Building & Safety Division	Prior to issuance of grading permit and during grading

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		preferably in the midmorning, afternoon, and after work is done for the day. ▪ The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 mph or less.		
		CRDR 4.2-2 The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 113, Table of Standards, by requiring that all architectural coatings must consist of low VOCs (i.e., VOCs of less than 100 grams per liter [g/L]) unless otherwise specified in the SCAQMD Table of Standards.	Project Applicant, Construction Manager/ SCAQMD, Building & Safety Division	During architectural coating application
		CRDR 4.2-3 The Project is required to comply with applicable SCAQMD rules for construction activities on the Project site. SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1403 (Asbestos); Rule 1113 (Architectural Coatings); Rule 431.2 (Low Sulfur Fuel); Rule 403 (Fugitive Dust); and Rule 1186 / 1186.1 (Street Sweepers).	Project Applicant, Construction Manager/ SCAQMD, Building & Safety Division	During grading and construction
		CRDR 4.2-4 The Project is required to comply with the provisions of SCAQMD Rule 402, "Nuisance" which requires that a person shall not discharge air contaminants or other materials that would cause health or safety hazards to any considerable number of persons or the public.	Project Applicant, Project Residents/ SCAQMD	During construction and long-term operation
		CRDR 4.2-5 The Project is required to comply with SCAQMD Rule 445, which prohibits the use of wood burning stoves and fireplaces in new development.	Project Applicant/ Building & Safety Division	Prior to issuance of building permits
		CRDR 4.2-6 The Project has been designed to provide pedestrian connections along selected roads and trails within the	Project Applicant/	Prior to issuance of occupancy

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		development to provide access to the various uses and activity centers within the Project. Facilitating pedestrian access encourages people to walk instead of drive. The Project would not impose barriers to pedestrian access and interconnectivity.	Planning Division	permits
		CRDR 4.2-7 The Project is designed to accommodate a mix of uses (i.e., residential, commercial, and recreational land uses) which would serve to reduce travel distances and regional vehicle miles traveled (VMT) by consolidating trips and reducing requirements for multiple trips.	Project Applicant/ Planning Division	Prior to issuance of building permits
		CRDR 4.2-8 The Project shall comply with standards applicable to operation of equipment which emit Toxic Air Contaminants (TACs), such as the proposed fueling station. In particular, the Project shall comply with SCAQMD Rules 1401 and 1401.1, which provide screening-level risk estimates for fueling stations, including ones placed near schools, for new, relocated, and modified units requiring SCAQMD permits. SCAQMD Rule 212 also shall be applicable to the project, which has standards for approving permits and issuing public notices. Under Rule 212, the fueling station shall not be granted a Permit to Construct or Permit to Operate, unless the applicant shows the equipment is designed and controlled to a sufficient standard. SCAQMD Rule 461 regulates the transfer of gasoline, which includes vapor emissions.	Project Applicant/ SCAQMD, Planning Division	Prior to Occupancy of Uses Subject to SCAQMD Regulation
4.3 Biological Resources				
Threshold a): With implementation of appropriate CRDRs, including the payment of fees, as well as implementation of Mitigation Measures MM 4.3-1 through MM 4.3-5, Project impacts to species identified as a candidate, sensitive, or special status species are mitigated to less-than-significant levels.	Less than Significant with Mitigation	**MM 4.3-1** Prior to the issuance of grading permits, the City of Lake Elsinore shall ensure that the following note is included on the Project's grading plans. Project contractors shall be required to ensure compliance with this note and permit periodic inspection of the construction site by City of Lake Elsinore staff or its designee to confirm compliance. This note also shall be specified in bid documents issued to prospective construction contractors.	Project Applicant/ Engineering Division	Prior to issuance of grading permits and during ground-disturbing activities
Threshold b): With implementation of Mitigation Measures	Less than			

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
MM 4.3-4 through MM 4.3-7, impacts to riparian habitat and other sensitive natural communities would be reduced to less-than-significant levels. **Threshold c):** Implementation of Mitigation Measures MM 4.3-4 and MM 4.3-6 would reduce to less-than-significant levels the Project's impacts to federally-protected wetlands as defined by Section 404 of the Clean Water Act. **Threshold d):** The Project site lacks migratory wildlife corridors and wildlife nursery sites and does not occur within MSHCP Cores or Linkages. The Project would preserve and avoid the on-site portion of Stovepipe Creek and preserve the majority of the sage scrub habitats located on-site which serve as local wildlife corridors, thereby reducing impacts to native resident or migratory wildlife corridors and wildlife nursery sites to less-than-significant levels. **Threshold e):** The Project Applicant would be required to pay SKR fees pursuant to Lake Elsinore Municipal Code Chapter 19.04. For the southern 27.1 acres of the Project site, the Project Applicant would be required to pay MSHCP fees pursuant to Lake Elsinore Municipal Code Chapter 16.85. The Project Applicant would be exempt from the fee requirements of Lake Elsinore Municipal Code Chapter 16.85 for the northern 45.4 acres of the site because the Project's impacts in the northern portions of the site would not be covered under the MSHCP. In addition, the Project would not conflict with the City's palm tree preservation program (Chapter 5.116 of the Lake Elsinore Municipal Code). **Threshold f):** Although the required mitigation would reduce the Project's impacts to biological resources to below a level of significance, the Project would nonetheless not comply	Significant with Mitigation Less than Significant with Mitigation Less than Significant Less than Significant Significant and Unavoidable	"*Vegetation clearing shall be conducted outside of the bird nesting season (February 1 to August 31) to the extent feasible. If avoidance of the nesting season is not feasible, a nesting bird survey shall be conducted by a qualified biologist within no more than 72 hours of such scheduled disturbance, to determine the presence of nests or nesting birds. If active nests are identified, the biologist shall establish appropriate buffers around the vegetation (typically 500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers shall be halted until the nesting effort is finished (i.e. the juveniles are surviving independent from the nest). The biologist shall review and verify compliance with these nesting boundaries and shall verify the nesting effort has finished. Work may resume within the buffer area when no other active nests are found. Alternatively, a qualified biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the City of Lake Elsinore for mitigation monitoring compliance record keeping. If vegetation removal is not completed within 72 hours of a negative survey during nesting season, the nesting survey must be repeated to confirm the absence of nesting birds.*" **MM 4.3-2** In accordance with MSHCP Objective 6, prior to issuance of grading permits or other permits authorizing ground disturbance, the Project Applicant shall retain a qualified biologist to perform a pre-construction burrowing owl survey. The pre-construction burrowing owl survey shall occur within the Burrowing Owl Survey Area where suitable habitat is present	Project Applicant, Project Biologist/ Planning Division	Prior to issuance of grading permits and during ground-disturbing activities

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
with the MSHCP objectives for Cell Group W because strict compliance with the MSHCP Conservation Criteria would require the conservation of most or all of the 45.4-acre MSHCP-Excluded Project Area, which inherently conflicts with the Project's primary objective to develop the site with residential, commercial, and recreational land uses. Accordingly, the Project's direct impact due to a non-compliance with the MSHCP conservation requirements for the site represents a significant impact of the proposed Project that cannot be mitigated to below a level of significance.		within 30 days prior to Project commencement of any ground-disturbing activities at the Project site. If active burrowing owl burrows are detected during the breeding season, all work within an appropriate buffer (typically a minimum 300 feet) of any active burrow shall be halted until that nesting effort is finished. The on-site biologist shall review and verify compliance with these boundaries and shall verify the nesting effort has finished. Work can resume in the buffer when no other active burrowing owl burrows nests are found within the buffer area. If active burrowing owl burrows are detected outside the breeding season or during the breeding season and its determined nesting activities have not begun, then passive and/or active relocation may be approved following consultation with CDFW. The installation of one-way doors may be installed as part of a passive relocation program. Burrowing owl burrows shall be excavated with hand tools by a qualified biologist when determined to be unoccupied, and back filled to ensure that animals do not re-enter the holes/dens. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to CDFW. A copy of the results of the pre-construction survey (and all additional surveys), as well as copies of the Burrowing Owl Management Plan, if required, shall be provided to the City of Lake Elsinore Planning Division for review and approval (in the case of the Burrowing Owl Management Plan) prior to any vegetation clearing and ground disturbance activities. **MM 4.3-3** Prior to issuance of grading permits or other permits authorizing ground disturbance that would commence during the breeding season of bat species potentially utilizing the site (April 1 through August 31), the Project Applicant shall retain a qualified biologist to conduct a pre-construction survey to determine if active bat roosts are present on the Project site. The survey shall be conducted no earlier than 72 hours prior to	Project Applicant, Project Biologist/ Planning Division	Prior to issuance of grading permits and during ground-disturbing activities

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		commencement of vegetation removal that would occur during the bat breeding season. If work begins outside of breeding season, no roosting bats are found, or if bats have not established an active maternity roost, no further mitigation is required. If an established maternity roost is found, either (1) postpone or halt construction within 200 feet of the roost until the roost is vacated and juveniles have fledged, or (2) require that a qualified biologist develop alternative measures, such as biological monitoring during active construction within the 200-foot buffer to ensure established maternity roosts are not impacted. In the event ground-disturbing activities do not commence within 72 hours of the most recent survey, an additional survey shall be conducted within 72 hours of ground-disturbing activities. A copy of the results of the pre-construction survey(s) (and all additional surveys), shall be provided to the City of Lake Elsinore Planning Division for review prior to any vegetation clearing and ground disturbance activities. **MM 4.3-4** Prior to the issuance of grading permits, the Project Applicant shall provide evidence to the City of Lake Elsinore Planning Division that impacts to 0.23 acre of Riversidean Sage Scrub and 0.07 acre of Riversidean Alluvial Fan Sage Scrub have been compensated for at a minimum 2:1 ratio (impact: mitigation) through off-site mitigation at an agency-approved mitigation bank, with an in-lieu fee program, on-site mitigation, or at an off-site permittee sponsored location. It should be noted that the 0.14-acre compensatory mitigation required by this mitigation measure for impacts to Riversidean Alluvial Fan Sage Scrub is included in, and is not in addition to, the mitigation requirements specified by Mitigation Measure MM 4.3-6. **MM 4.3-5** Prior to the issuance of grading permits, the Project Applicant shall provide evidence to the City of Lake Elsinore Planning Division that impacts to 0.28 acres of disturbed	Project Applicant/ Planning Division Project Applicant/ Planning Division	Prior to issuance of grading permits Prior to issuance of grading permits

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		Riversidean sage scrub (including Disturbed Riversidean Sage Scrub – Encelia dominant) have been compensated for at a minimum 1:1 ratio (impact: mitigation) through off-site mitigation at an agency-approved mitigation bank, with an in-lieu fee program, on-site mitigation, or at an off-site permittee sponsored location.		
		MM 4.3-6 Prior to the issuance of grading permits, the Project Applicant shall provide evidence to the City of Lake Elsinore Planning Division that impacts to 0.42 acre of streambed waters of the State have been compensated for at a minimum 2:1 ratio through off-site mitigation at an agency-approved mitigation bank, with an in-lieu fee program, on-site mitigation, or at an off-site permittee sponsored location. It should be noted that the 0.14-acre of Riversidean Alluvial Fan Sage Scrub mitigation required by Mitigation Measure MM 4.3-4 is included within (and not in addition to) the 0.84-acre of compensatory mitigation for streambed waters required by this mitigation measure.	Project Applicant/ Planning Division	Prior to issuance of grading permits
		MM 4.3-7 Prior to the issuance of a grading permit, the proposed Project shall obtain the necessary authorizations from the regulatory agencies for proposed impacts to jurisdictional waters subject to Regional Water Quality Control Board and the California Department of Fish and Wildlife. Authorizations anticipated for this Project include, but are not necessarily limited to, Waste Discharge Requirements from the RWQCB and a Section 1600 Streambed Alteration Agreement from the CDFW.	Project Applicant/ Planning Division, RWQCB, CDFW	Prior to issuance of grading permits
		CRDR 4.3-1 The Project Applicant shall make payment of Western Riverside County MSHCP fees pursuant to City of Lake Elsinore Municipal Code Chapter 16.85 for the southern 27.1 acres. Fees shall be paid in compliance with Municipal Code Chapter 16.85.	Project Applicant/ Planning Division	Prior to issuance of building permits

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		CRDR 4.3-2 The Project Applicant shall make payment of SKR HCP fees pursuant to City of Lake Elsinore Municipal Code Chapter 19.04. Fees shall be paid in compliance with Municipal Code Chapter 19.04. **CRDR 4.3-3** To ensure compliance with the Western Riverside County MSHCP, the following shall be required: ▪ As part of its review of implementing discretionary applications (e.g., building permits), the City of Lake Elsinore shall assure that landscaping plans do not include the use of invasive plant species listed in Volume I, Table 6-2 of the MSHCP or in Table IV-2, Prohibited Plant List, of the Nichols Ranch Specific Plan. ▪ Prior to approval of grading permits, the Project's construction contractor shall develop and implement a Storm Water Pollution Prevention Program (SWPPP) to address runoff and potential water quality degradation during construction. ▪ All construction plans (i.e., grading permits, building permits, etc.) shall include the following note, compliance with which shall be assured by the construction contractor: "*During any nighttime construction activities, all lighting shall direct lighting away from the preserved on-site drainage and associated habitat.*"	Project Applicant/ Planning Division Project Applicant/ Planning Division, Building & Safety Division, Engineering Division	Prior to issuance of grading permits Prior to issuance of grading and/or building permits
4.4 Energy				
Thresholds a) and b): There are no adopted state or local plans for renewable energy or energy efficiency in the Project area. Additionally, the Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. Impacts due to energy demand would be less than significant.	Less than Significant	Impacts due to the Project's energy demands would be less than significant and mitigation is not required.	N/A	N/A

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
4.5 Geology and Soils				
Threshold a): Implementation of Mitigation Measure MM 4.4-1 would ensure that the Project implements the recommendations of the Project's geotechnical study (Technical Appendix D), which in turn would ensure measures are implemented to address potential impacts due to the exposure of people or structures to adverse effects, including loss, injury, or death as a result of strong seismic ground shaking. Implementation of the required mitigation would ensure that impacts are reduced to less-than-significant levels.	Less than Significant with Mitigation	**MM 4.5-1** Prior to issuance of grading or building permits, the City Building and Safety Division shall verify that all of the recommendations given in the Project's February 2. 2018 "Geotechnical Investigation and Geologic Evaluation Report Tentative Tract No. 37305 Lake Elsinore, California" by CHJ Consultants, are incorporated into the construction and grading plans. The recommendations shall include, but not be limited to the following: ▪ Perform earthwork in accordance with the General Earthwork and Grading Specifications in Technical Appendix D. The recommendations contained in Technical Appendix D, are general grading specifications provided for typical grading projects and some of the recommendations may not be strictly applicable to the proposed Project.	Project Applicant, Project Grading Contractor; Building & Safety Division; Engineering Division	Prior to issuance of grading permits and during grading operations
Threshold b): The Project would not result in substantial soil erosion or loss of topsoil. The Project Applicant would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities and adhere to a Storm Water Pollution Prevention Plan (SWPPP) as well as SCAQMD Rule 403 and City of Lake Elsinore Municipal Code Chapters 14.08 and 15.04. With mandatory compliance to these regulatory requirements, the potential for water and wind erosion impacts during construction would be less than significant. Following development, 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 and drainage would be controlled through a storm drain system. Furthermore, the Project is required by law to implement a WQMP during operation, which would preclude substantial erosion impacts in the long-term.	Less than Significant	The contract between the Project Applicant and earthwork contractor shall be worded such that it is the responsibility of the contractor to place fill properly in accordance with the recommendations of the Geotechnical Report, the specifications in Appendix D of the Geotechnical Report, applicable County City Grading Ordinances, notwithstanding the testing and observation of the geotechnical consultant during construction. ▪ Existing vegetation, trash, debris, and other deleterious materials shall be removed and wasted from the site prior to commencing removal of unsuitable soils and placement of compacted fill materials. Additionally, all pre-existing foundations elements, standpipes, irrigation lines, and utility conduits shall be removed and wasted off-site. Concrete can be placed in the fill		
Threshold c): Implementation of Mitigation Measure MM 4.4-1 would ensure that the Project implements the recommendations of the Project's geotechnical study (Technical Appendix D), thereby ensuring that measures are	Less than Significant with Mitigation			

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
incorporated into the Project's design to preclude impacts associated with lateral spreading, liquefaction, and collapse. With implementation of the required mitigation, impacts would be less than significant.		provided it is broken down into pieces smaller than 12 inches (largest dimension). Cesspools and septic systems shall be properly removed and/or backfilled in accordance with the local governing agency.		
Threshold d): The Project site contains soils with low susceptibility to expansion. Potential hazards associated with expansive soils would, thus, be less than significant.	Less than Significant	▪ Soil, undocumented fills, alluvium, weathered portions of the older alluvium, and bedrock shall be removed in areas planned to receive compacted fill intended to support settlement-sensitive structures such as buildings, roads and underground improvements. The resulting undercuts shall be replaced with engineered fill. It shall be noted that local variations can be expected requiring an increase in the depth of removal for unsuitable and weathered deposits. The extent of removals can best be determined in the field during grading when observation and evaluation can be performed by the soil engineer and/or engineering geologist. Removal bottoms shall expose saturated (S>85%) alluvium, very old alluvial fan deposit, and/or bedrock. The removal bottom shall be observed and mapped by the engineering geologist prior to fill placement. The bottoms shall be scarified to a depth of approximately six (6) inches, brought to near optimum moisture content and recompacted to at least 93 percent relative compaction in accordance with ASTM D1557.		
Threshold e): No septic tanks or alternative wastewater disposal systems are proposed to be installed on the Project site. Accordingly, no impact would occur associated with soil compatibility for wastewater disposal systems.	Less than Significant	▪ Footings for any structures shall not be allowed to span from cut to fill or from shallow fill to deep fill soil conditions. Should grading result in a situation where footings bear on more than eight (8) feet of compacted fill, the sub-excavation of the building pad shall be deepened as necessary so as to provide a uniform fill mat below bottom of footing. The deepening of sub-		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		excavation will involve additional removals of older alluvium or bedrock. The uniform mat shall not vary in thickness from one (1) side of the building pad area to the other by more than 50 percent, 10 feet maximum. The "building pad area" includes the structure footprint and the zone of influence consisting of a 1(h):1(v) downward projection from the structure footing. All footing shall rest entirely upon competent native soils or minimum of 12 inches of properly compacted fill material. The sub-excavation shall extend at least two (2) feet laterally beyond the footing lines, where possible. Foundation concrete shall be placed in neat excavations with vertical sides, or the concrete shall be formed and the excavations properly backfilled as recommended for compacted fill. The on-site soils shall provide adequate quality fill material, provided they are free from roots, other organic matter and deleterious materials. Rock or similar irreducible material with a maximum dimension greater than six (6) inches shall not be buried or placed within the top 10 feet of fills. Import fill shall be inorganic, non-expansive, granular soil free from rocks or lumps greater than six (6) inches in maximum dimension. The contractor shall notify the geotechnical engineer of import sources sufficiently ahead of their use so that the sources can be observed and approved as to the physical characteristic of the import material. Fills shall be spread in near-horizontal layers, approximately eight (8) inches in thickness. ▪ The contractor shall make their own investigations and estimates of shrinkage. Final grades shall be adjusted and/or contingency plans to import or export material		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		shall be made to accommodate possible variations in actual quantities during site grading. ▪ Materials between approximately 12 and 48 inches in size may be placed in areas of fill depth greater than approximately 20 feet below finish grade with the approval of the building official. Areas shall be designated on plans as rock disposal areas. The oversized rock shall be placed in windrows and adequately spaced to prevent nesting. Then, sandy matrix material shall be flooded between the rocks to fill any void spaces. Continuous observation of the rock placement and flooding operation shall be conducted by the geotechnical engineer. ▪ All grades shall provide effective drainage away from the buildings during and after construction and shall be maintained throughout the life of the structures. Water retained next to the building can result in soil movements greater than those discussed in the Project's geotechnical report. Greater movements can result in unacceptable differential floor slab and/or foundation movements, cracked slabs and walls, and roof leaks. The roofs shall have gutters/drains with downspouts that discharge onto splash blocks at a distance of at least 10 feet from the buildings. The Project shall have a minimum horizontal setback distance of 10 feet from the perimeter of any building and the high-water elevation of the nearest stormwater retention basin. Setbacks for structures shall be maintained from the steep slopes in Stovepipe Wash. The Project shall have a minimum horizontal distance equivalent to 1.5 times the height of the slope be maintained for all structures from the top of the slope.		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		If significant erosion/scour is expected to occur along Stovepipe Wash, greater setbacks would be necessary. ▪ Exposed ground should be sloped and maintained at a minimum three (3) percent away from the buildings for at least 10 feet beyond the perimeter of the buildings. After building construction and landscaping, final grades shall be verified to document effective drainage has been achieved. Grades around the structures shall also be periodically inspected and adjusted as necessary as part of the structures' maintenance program. ▪ Shallow excavations for the proposed building structures are anticipated to be accomplished with conventional construction equipment except for the area of hard bedrock in the west portion of the Nichols Road grading project. Upon completion of filling and grading, care shall be taken to maintain the subgrade water content prior to construction of floor slabs. Construction traffic over the completed subgrades shall be avoided. The site shall be graded to prevent ponding of surface water on the prepared subgrades or in excavations. Water collecting over, or adjacent to, construction areas shall be removed. If the subgrade freezes, desiccates, saturates, or is disturbed, the affected material shall be removed, or the materials shall be scarified, moisture conditioned, and recompacted, prior to floor slab or pavement construction. At a minimum, excavations shall be performed in accordance with OSHA 29 CFR, Part 1926, Subpart P, "Excavations" and its appendices, and in accordance with any applicable local, and/or State regulations.		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		▪ The earthwork efforts shall be monitored under the direction of the geotechnical engineer. Monitoring shall include documentation of adequate removal of vegetation and top soil, proof-rolling and mitigation of areas delineated by the proof-roll to require mitigation. Each lift of compacted fill shall be tested, evaluated, and reworked as necessary until approved by the geotechnical engineer prior to placement of additional lifts. Each lift of fill shall be tested for density and water content at a frequency of at least one (1) test for every 2,500 square feet of compacted fill in the structure areas and 5,000 square feet in pavement areas. One density and water content test shall be performed for each 1-foot of backfill, for every 250 linear feet of compacted utility trench backfill. ▪ Seismic design shall be designed in accordance with 2016 CBC guidelines and recommendations provided in the seismic design parameters table on pages 15-16 in Technical Appendix D. ▪ Shallow foundation of the Project site shall be designed in accordance with 2016 CBC guidelines and recommendations provided in the shallow foundation design parameters table on page 19 in Technical Appendix D. The base of all foundation excavations shall be free of water and loose soil, prior to placing concrete. Concrete shall be placed soon after excavating to reduce bearing soil disturbance. Care shall be taken to prevent wetting or drying of the bearing materials during construction. Excessively wet or dry material or any loose/disturbed		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		material in the bottom of the footing excavations shall be removed/reconditioned before foundation concrete is placed. Over-excavation for structure fill placement below footings shall be conducted as shown on page 20 in Technical Appendix D. ▪ Structures with unbalanced backfill levels on opposite sides shall be designed for earth pressures at least equal to values indicated in the lateral earth pressure design parameters table on page 21 in Technical Appendix D. Backfill placed against structures shall consist of granular soils or low plasticity cohesive soils. Granular backfill must extend out and up from the base of the wall at an angle of at least 45 and 60 degrees from vertical for the active and passive cases, respectively. Backfill behind retaining walls shall consist of a soil of sufficient granularity that the backfill will properly drain. Surface drainage shall be provided to prevent ponding of water behind walls. A drainage system consisting of either or both of the following shall be installed behind all retaining walls: a 4-inch diameter perforated PVC (Schedule 40) pipe or equivalent at the base of the stem encased in 2 cubic feet of granular drain material per linear foot of pipe or synthetic drains such as Enkadrain, Miradrain, Hydraway 300 or equivalent. Perforations in the PVS shall be 3/8 inch in diameter and shall be placed facing down. Granular drain material shall be wrapped with filter cloth to prevent clogging of the drains with fines. Walls shall be waterproofed to prevent nuisance seepage and damage.		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		▪ Floor slabs shall bear on compacted fills or competent native soils. For slabs bearing on compacted fill, the top 12 inches of soil shall be compacted to 95 percent relative compaction. Finish-graded surfaces shall be rolled to provide smooth and dense surfaces. Slabs to receive moisture-sensitive coverings shall be provided with a vapor retarder/barrier. The vapor retarder/barrier shall be designed and constructed according to the American Concrete Institute 302.1R, Concrete Floor and Slab Construction, which addresses moisture vapor retarder/barrier construction. At a minimum, the vapor retarder/barrier shall comply with ASTM E1745 and have a nominal thickness of at least 10 mils. The vapor retarder/barrier shall be properly sealed, per the manufacturer's recommendations, and protected from punctures and other damage. The vapor barrier shall be placed directly on the compacted soil with a minimum 4-inch thick layer of dry sand on top of the vapor barrier. ▪ Presented on page 24 in Technical Appendix D are preliminary pavement sections for a range of traffic indices and an assumed Resistance-Value (R-Value) of 37 and 32 for asphalt concrete (AC) pavement. R-Value testing of the subgrade soils shall be performed during precise grading operations to verify the actual R-Value. The project Civil Engineer or Traffic Engineer shall select traffic indices that are appropriate for the anticipated pavement usage and level of maintenance desired through the pavement life. Final pavement structural sections will be dependent on the R-value of the subgrade materials and the traffic index for the specific street or area being addressed. The pavement sections are subject to the review and approval of the County of		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		Riverside. Pavement subgrade soils shall be at or near optimum moisture content and shall be compacted to a minimum of 95 percent of the maximum dry density as determined by ASTM D1557 and should conform with the specification listed in Section 26 of the Standard Specifications for the State of California Department of Transportation (Caltrans) or Section 200-2 of the Standard Specifications for Public Works Construction (Green Book). The AC shall conform to Section 26 of the Caltrans Standard Specifications or Section 203-6 of the Green Book. ▪ Pavements shall be sloped to provide rapid drainage of surface water. The pavement subgrade shall be graded to provide positive drainage within the granular base section. Appropriate sub-drainage or connection to a suitable daylight outlet shall be provided to remove water from the granular subbase. ▪ The geotechnical engineer shall provide preventive maintenance to slow the rate of pavement deterioration and to preserve the pavement investment. Maintenance consists of both localized maintenance (e.g., crack and joint sealing and patching) and global maintenance (e.g., surface sealing). ▪ The geotechnical engineer shall provide the following recommendations in the design and layout of pavements: o Final grade adjacent to paved areas shall slope down from the edges at a minimum 2 percent. o Subgrade and pavement surfaces shall have a minimum 2 percent slope to promote proper surface drainage. o Install below pavement drainage systems surrounding	Project Applicant/ Building & Safety Division Project Applicant/	Prior to issuance of building permits During grading and construction

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		areas anticipated for frequent wetting. o Install joint sealant and seal cracks immediately. o Seal all landscaped areas in or adjacent to pavements to reduce moisture migration to subgrade soils. o Place compacted, low permeability backfill against the exterior side of curb and gutter. o Place curb, gutter, and/or sidewalk directly on clay subgrade soils rather than on unbound granular base course materials. **CRDR 4.5-1** The Project is required to comply with the provisions of City Municipal Code Chapters 15.02 and 15.04, which incorporate the 2016 California Building Standards Code (California Code of Regulations, Title 24). **CRDR 4.5-2** The Project shall comply with all applicable provisions of Chapter 14.08 of the City of Lake Elsinore Municipal Code related to stormwater runoff. **CRDR 4.5-3** The Project is required to comply with the provisions of SCAQMD Rule 403 by addressing blowing dust from the Project's construction activities. **CRDR 4.5-4** The Project is required to comply with the provisions of the Project's National Pollution Discharge Elimination System (NPDES) permit, and the Project's Storm Water Pollution Prevention Plan (SWPPP). Compliance with the NPDES permit and the SWPPP would identify and implement an effective combination of erosion control and sediment control	Building & Safety and Engineering Divisions Project Applicant, Project Grading Contractor/ Engineering Division, SCAQMD Project Applicant, Project Grading Contractor/ Engineering Division, RWQCB	activities and long-term operation During grading and construction activities During grading and construction activities and long-term operation

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		measures (i.e., Best Management Practices) to reduce or eliminate discharge to surface water from storm water and non-storm water discharges.		
4.6 Greenhouse Gas Emissions				
Threshold a): The proposed Project would be consistent with or otherwise would not conflict with the Lake Elsinore CAP, which demonstrates that City-wide GHG emissions would be reduced to 1990 levels by 2020 and 33% below 1990 emission levels by 2030. With mitigation, regulatory requirements, and Project design features, the Project would achieve an additional reduction of approximately 15% beyond the CAP requirements, which would satisfy the additional 7% needed to meet the SB 32 reduction target. Because the Project is consistent with the City's CAP and would demonstrate an additional 15% reduction through implementation of mitigation, regulatory requirements, and Project design features by 2030, the Project would be consistent with the statewide reduction targets for GHG emissions as established by SB 32. Therefore, with regulatory requirements, Project design features, and mitigation measures, the Project's GHG emissions would be consistent with the state's GHG reduction targets and impacts would be reduced to less-than-significant levels. **Threshold b):** The Project would be fully consistent with the City of Lake Elsinore CAP, and therefore would be consistent with the GHG reduction targets established by AB 32. Additionally, the Project would not conflict with the CARB Scoping Plan. Furthermore, with implementation of regulatory requirements, Project design features, and mitigation measures, the Project would exceed the GHG reduction target established by SB 32 to reduce emissions to 40% below 1990 levels by 2030. Accordingly, Project impacts due to a conflict with a plan, policy, or regulation adopted to	Less than Significant with Mitigation Less than Significant with Mitigation	**MM 4.6-1** Prior to the issuance of building permits, the City of Lake Elsinore shall review the building plans to ensure that the following requirements have been or will be met: ▪ The Project Applicant shall provide evidence that the buildings have been designed to achieve efficiency exceeding current 2016 California Building Code Title 24 requirements by at least 15 percent for both residential and non-residential uses. ▪ All primary use buildings and structures shall be designed to accommodate photovoltaic (PV) solar arrays taking into consideration limitations imposed by other rooftop equipment, roof warranties, building and fire code requirements, and other physical or legal limitations. The electrical system and infrastructure must be clearly labeled with noticeable and permanent signage which informs future tenant/purchasers of the existence of this infrastructure. ▪ To reduce water demands and associated energy use, a Water Conservation Strategy shall be implemented that demonstrates a minimum 20% reduction in outdoor water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). Future building permit applications shall incorporate the following: o The landscaping palette shall emphasize drought-tolerant plants consistent with provisions of the City of Lake Elsinore requirements;	Project Applicant/ Planning Division, Building & Safety Division	Prior to issuance of building permits

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
reduce GHG emissions would be reduced to less-than-significant levels.		o Irrigation plans shall demonstrate use of water-efficient irrigation techniques consistent with City of Lake Elsinore requirements. ▪ Project building plans shall incorporate the following: o U.S. EPA Certified WaterSense labeled or equivalent faucets, high-efficiency toilets HETs), and water-conserving shower heads. o All appliances shall be energy star appliances (refrigerator, dish washer, and washing machine). **MM 4.6-2** Prior to the issuance of building permits, the City of Lake Elsinore shall review Project building plans to ensure that all outdoor lighting consists of solar or light-emitting diodes (LEDs), where feasible. Use of any other type of lighting, if required for operational or safety reasons, shall be minimized to the extent feasible. **MM 4.6-3** Prior to issuance of occupancy permits for any proposed commercial uses on site, the City of Lake Elsinore shall ensure that at least 10% of the required parking spaces are reserved for fuel-efficient vehicles (i.e., vehicles bearing Clean Air Vehicle stickers from expired High Occupancy Vehicle lane programs. **MM 4.6-4** Prior to the issuance of occupancy permits for any proposed commercial uses on site, the Project Applicant shall prepare a Commute Trip Reduction Program that requires 20% of employees to be offered telecommuting or other trip reduction techniques, consistent with Measure T-4.1 of the Lake Elsinore Climate Action Plan (CAP). The Commute Trip Reduction Program also shall require future tenants to provide information, training, and incentives to future employees to encourage participation.	Project Applicant/ Building & Safety Division Project Applicant/ Building & Safety Division Project Applicant/ Building & Safety Division, Planning Division	Prior to issuance of building permits Prior to issuance of occupancy permits for any proposed commercial uses on site Prior to the issuance of occupancy permits for any proposed commercial uses on site

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		CRDR 4.6-1 The Project complies with all applicable provisions of the City of Lake Elsinore Climate Action Plan (December 13, 2011), including applicable requirements identified in Table 4.10-5 of the Project's EIR.	Project Applicant/ Building & Safety Division, Planning Division	Prior to issuance of building permits
		CRDR 4.6-2 The Project is designed to provide pedestrian connections along selected roads and trails within the development to provide access to the various uses and activity centers within the Project. Facilitating pedestrian access encourages people to walk instead of drive. The Project would not impose barriers to pedestrian access and interconnectivity.	Project Applicant/ Planning Division	Prior to Specific Plan approval and prior to issuance of occupancy permits
		CRDR 4.6-3 The Project is designed to accommodate a mix of uses (i.e., residential, commercial, and recreational land uses) which would serve to reduce travel distances and regional vehicle miles traveled (VMT) by consolidating trips and reducing requirements for multiple trips. The Project would minimize the need for external trips by including services/facilities for uses such as day care, banking/ATM, restaurants, vehicle refueling, health care, personal services (e.g., salons, dry cleaning, etc.) and/or shopping uses.	Project Applicant/ Planning Division	Prior to Specific Plan approval and prior to issuance of building permits
		CRDR 4.6-4 The Project is required to comply with SCAQMD Rule 445, which prohibits the use of wood burning stoves and fireplaces in new development.	Project Applicant/ Building & Safety Division, SCAQMD	Prior to building permit issuance
		CRDR 4.6-5 The Project is required to comply with applicable provisions of the 2016 California Green Building Standards Code (or any updated code that may be in existence at the time of issuance of building permits), as implemented by the City's Municipal Code. These requirements include, but are not limited		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		to, the following: ▪ Prior to issuance of occupancy permits, the City of Lake Elsinore shall ensure that commercial uses on site accommodate the required number of Electric Vehicle (EV) charging stations as required by the 2016 Green Building Standards Code Section 5.106.5.3 (Electric vehicle (EV) charging).	Project Applicant/ Building & Safety Division	Prior to issuance of occupancy permits for proposed commercial uses
		▪ Prior to issuance of grading, demolition, or building permits, the Project Applicant shall prepare, and the City of Lake Elsinore shall review and approve, a Construction Waste Management Plan, in conformance with the 2016 Green Building Standards Code Section 5.408 (Construction Waste Reduction, Disposal and Recycling). The Construction Waste Management Plan shall demonstrate that a minimum of 65 percent of the nonhazardous construction and demolition waste will be recycled and/or salvaged, except as otherwise allowed by Section 5.408.	Project Applicant/ Building & Safety Division	Prior to issuance of grading, demolition, or building permits
4.7 Hazards and Hazardous Materials				
Threshold a): Under existing conditions, no hazards were found on the Project site. During Project construction and operation, mandatory compliance with federal, state, and local regulations would ensure that the Project as proposed would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials.	Less than Significant	**CRDR 4.7-1** The Project shall comply with California Health and Safety Code § 25507, which requires a Hazardous Materials Business Emergency Plan (HMBEP). The HMBEP requires the disclosure of the inventory of hazardous materials and provides procedures to follow in the event of an emergency situation (such as a fire or hazardous spill). Oversight for this plan is provided by the Riverside County Department of Environmental Health (RCDEH) and would be revised annually and renewed every three years.	Project Applicant/ Riverside County Department of Environmental Health (RCDEH)	Prior to issuance of occupancy permits for uses subject to California Health & Safety Code § 25507
Threshold b): Under existing conditions, no hazards were found on the Project site. During Project construction and operation, mandatory compliance with federal, state, and local regulations would ensure that the Project as proposed would not create a significant hazard to the public or the	Less than Significant	**CRDR 4.7-2** The Project shall comply with Section 2540.7, Gasoline Dispensing and Service Stations, of the California Occupational Safety and Health Regulations.	Project Applicant/ RCDEH	Prior to issuance of occupancy permits for the gas

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
environment through accident conditions involving the release of hazardous materials. Thus, the Project would not create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials in the environment.				station and during long-term operation of the gas station
Threshold c): The Project site is located immediately adjacent to the Temescal Canyon High School. The only component of the Project that would have the potential to emit hazardous emissions or handle hazardous materials on-site would be the proposed gas station. The proposed gas station would handle hazardous materials within one-quarter mile of a school; however, the gas station's hazardous emissions would be below the cancer-related hazardous risk threshold established by SCAQMD and would be subject to regulatory requirements and routine inspections. The remaining proposed uses for the Project site are not associated with the transport, use, or disposal of significant quantities of hazardous materials. Thus, the Project's impact due to emitting hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school would be less than significant.	Less than Significant	**CRDR 4.7-3** The Project shall comply with Chapter 38, Liquefied Petroleum Gases, of the California Fire Code and the RCDEH.	Project Applicant/ RCDEH	Prior to issuance of occupancy permits for the gas station and during long-term operation of the gas station
		CRDR 4.7-4 The Project shall comply with Title 22, Division 4.5 of the California Code of Regulations, which requires residents and employees 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.	Project Applicant/ Riverside County Department of Waste Resources (RCDWR)	During long-term operation of the Project
		CRDR 4.7-5 The Project shall comply with Title 22, Division 4.5, Chapter 11 of the California Code of Regulations which requires fluorescent lamps, batteries, and mercury thermostats be recycled or taken to a Household Hazardous Waste Collection Facility.	Project Applicant/ RCDWR	During long-term operation of the Project
Threshold d): The Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code § 65962.5. Accordingly, no impact would occur.	No Impact			
Threshold e): The Project site is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest public airport is the March Air Reserve Base, located approximately 12 miles northeast of the Project site, and the Project is not located within the AIA of the March Air Reserve Base. The nearest airport to the	Less than Significant	**CRDR 4.7-6** The Project shall comply with the requirements of the Nichols Ranch Specific Plan. Compliance with the Nichols Ranch Specific Plan standards include but are not limited to improvements to surrounding roadway, compliance with standards related to fuel modification zones, maintenance of fuel modification zones, landscape, and fire protection features which would be assured by the City's future review of implementing	Project Applicant/ Planning Division, Building & Safety Division, Engineering Division	Prior to issuance of building and/or occupancy permits

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
proposed Project is Skylark Field, a private use airport located 5.7 miles southeast of the Project site. The Project is not within the AIA for Skylark Field. As such, the proposed Project would not expose people residing or working in the area to safety hazards associated with public airports, and impacts would be less than significant.		building permits for compliance with the Nichols Ranch Specific Plan. **CRDR 4.7-7** In conformance with the requirements of the Nichols Ranch Specific Plan, and as a component of future building permit applications, the Building Official (or his/her designee) shall verify that all of the recommendations given in the Project's Fire Protection Plan (Technical Appendix G) with respect to fuel management zones have been incorporated into the building permit application(s). The fuel management zones shall consist of following zones, as conceptually depicted on Figure II-10, of the Nichols Ranch Specific Plan: ▪ Zone 1: Zone 1 would consist of a 10-foot setback between buildings and trees. Zone 1 would generally be located within the rear yard and side years of the homes within residential Planning Areas that are in close proximity to Stovepipe Creek. ▪ Zone 2: Zone 2 would consist of landscaping and manufactured slopes that would be irrigated and fire resistant. Zone 2 would generally be located in the landscaping areas outside of homeowner lots, starting from the lot parcel line extending outwards, parks, roadway landscaping, and manufactured slopes. ▪ Zone 3: Zone 3 would consist of thinning treatment to ensure that areas are free of any dead and dying combustible vegetation. Zone 3 would generally be located within the detention basins and manufactured slopes within Planning Area 13. ▪ Special Fire Protection Features: Special Fire Protection Features would be required for a few homes within residential Planning Areas 1, 2, and 5 because they do not meet the minimum 100-foot fuel treatment setback. For any home or building that is located less than 100 feet from Stovepipe Creek or the natural open	Project Applicant/ Planning Division, Building & Safety Division, Fire Department	Prior to issuance of building permits
Threshold f): The Project would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. No emergency facilities exist on the Project site, and the site does not serve as an emergency evacuation route and the Project would be required to maintain access during construction. Thus, impacts would be less than significant.	Less than Significant			
Thresholds g) and h): According to the City of Lake Elsinore General Plan Update EIR, the Project site is identified as having a "High" and "Very High" susceptibility to wildfires. Nichols Road, El Toro Road, Wood Mesa Court, and I-15 would provide buffers around the Project site. A buffer distance of between 30-60 feet as provided by these roads and buffer as provided by I-15 would reduce the site's potential for fire hazards. In addition, the Project would be subject to mandatory compliance with the recommendations of the FPP as required by the Nichols Ranch Specific Plan, which requires implementation of fuel modification zones and other fire hazard design features on the Project site. Furthermore, the Project site would be developed in a manner consistent with jurisdictional requirements for fire protection and would generally decrease the fire hazard in the local area. As such, impacts regarding wildland fires would be less than significant.	Less than Significant			

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		space located north of Planning Area 2 and Nichols Road, a 6-foot tall wall would be required to limit any actual radiant fire that may start in the creek or open space areas. No combustible landscaping would be allowed within five feet of the structure and no trees would be allowed on these residential lots. Additional construction standards would be required for these homes as described in the FPP. **CRDR 4.7-8** As a component of future building permit applications, the Building Official (or his/her designee) shall verify that all of the recommendations given in the Project's Fire Protection Plan (Technical Appendix G) with respect to construction requirements have been incorporated into the building permit application(s). The construction requirements include the following: ▪ For areas with less than 100 feet of overall fuel treatment the following building enhancements will be required. Refer to Section 2.4 of the FPP for detailed specific flame lengths for these areas: o For all surfaces facing open space, during the construction process these lots shall be constructed with an underlay of exterior gypsum sheathing 5/8-inch thickness. The product shall be Type X for use in a fire rated wall assembly. Stucco shall be applied over the gypsum wall assembly. o Appendages and projections attached to exterior fire-resistive walls, shall be constructed to maintain the same fire-resistant standards as the exterior walls of the structure. o If the roof profile allows a space between the roof covering and roof decking, the roof area will have one layer of minimum 72-pound (32.4 kg) mineral-surfaced,	Project Applicant/ Building & Safety Division, Fire Department	Prior to issuance of building permits

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		non-perforated cap sheet complying with ASTM D 3909 installed over the combustible decking. o Fire sprinklers shall be installed in the attics. Fire sprinklers will require a four head calculation for the sprinkler design. The four-head calculation must have a minimum .05 density design, QR and intermediate temperature heads; the heads may be of a small orifice type such as 3/8 or 7 /16. Listed domestic demand shutoff valves may be used to try to minimize upgrading meter sizes where possible. o Copper piping is required in the attics; chlorinated polyvinyl chloride (CPVC) will only be permitted in the attic if listed heads are used to protect piping in accordance with their listing. Lots shall have a 6-foot masonry fire wall, which may have up to 3 feet of rated glass to provide for a view. This will block the defensible space area around the home from the creek area. o Lots 14, 15, 16, 23 and 24 within five (5) feet of the structure envelope no combustible landscaping will be allowed, no trees will be allowed on the parcel. The exception will be the front of the structure facing the access. o Lot 14, 15, 16, 23 and 24 have the greatest exposure to an off-shore wind driven fire and shall have two (2) sprinkler heads extended to the under-eave area. The heads should be installed at equal distance on eave areas facing open space. This will protect the structure envelope in future years against burning combustible material near and around structure envelope. ▪ All structures within the development site shall meet all wildland/interface standards to the satisfaction of the Riverside County Fire Department (RCFD). Design and construction shall meet the requirements listed in the		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		2016 Edition of the Fire and Building Codes, with special adherence to Chapter 7A, and the 2016 Edition of the California Residential Code section R337, with other local amendments/ordnances adopted by RVCFD. Other applicable codes include the 2013 International Wildland-Urban Interface Code (IWUIC). For a description of the current construction requirements as of the date of this report (see Appendix E of EIR Technical Appendix G). ▪ All accessory structures such as decks, balconies, patios, covers, gazebos and fences shall be built from non-combustible or ignition resistant materials. The homeowner(s) are not restricted from having concrete patios, concrete walkways or swimming pools within the Vegetation Management Zones in compliance with other codes. Refer to Appendix D of EIR Technical Appendix G for photos and descriptions of non-combustible decks, patio covers, and railings for these accessory structures. Construction or building permits shall not be issued until the fire code official inspects and approves required vegetation clearance, fire apparatus access and water supply for the construction site. The issuance of building permits with regard to these requirements shall be in accordance with RVCFD. Prior to the delivery of combustible building construction materials to the project site the following conditions shall be completed to the satisfaction of the RVCFD: ▪ All wet and dry utilities shall be installed and approved by the appropriate inspecting department or agency. ▪ Clearance of Zone 1, 2 and 3 vegetation management shall be provided prior to combustible material arriving on the site and shall be maintained throughout the duration of construction. Fire code officials may require		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		additional vegetation management and/or defensible space when warranted. ▪ Additional requirements as listed in the development will be adhere to: o Mobile stationary or portable powered operated equipment in the HFA shall not be used without the RVCFD written approval. Specific fire protection measures that may be required to mitigate the hazard include, but are not limited to: ▪ A standby water tender, equipped with a pump, fire hose and nozzle. ▪ Pre-wetting of the site to avoid the production of sparks between blades, tracks and rocks. ▪ Conducting a fire watch for a minimum of one-hour following the cessation of operations each day ▪ For welding cutting or grinding work, clear away all combustible material from the area around such operations for a minimum distance of 10 feet. A hot-work permit may be required prior to commencing work. ▪ Maintain a serviceable round point shovel with an overall length of not less than forty-six (46) inches and a five (5) gallon backpack water pump-type fire extinguisher fully equipped and ready for use at the immediate area during the operation. ▪ All homes will require NFPA 13D Residential Sprinklers, engineered to the satisfaction of RVCFD. Those lot listed in Section 5, requiring special mitigation measures shall have under eave sprinklers on the exterior of the structure. ▪ Fire access roads shall meet the requirements of the RVCFD, and shall be a paved surface capable of supporting loads of 80,000 lbs gross vehicle weight.		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		Access to all portions of the building must be within 150 feet of the available fire department access. Fire access roads shall be maintained for clear access of emergency vehicles. The proposed development requires primary and secondary access at the time of construction. ▪ Any gates to be installed shall meet RVCFD Standards and shall be approved by RVCFD prior to fabrication and installation. A 'Knox' override key switch must be installed outside the gate in an approved, readily visible, and unobstructed location at or near the gate to provide emergency access.		
4.8 Historic and Archaeological Resources				
Threshold a): Implementation of the Project would impact historical resources on the Project site that may be uncovered during grading activities. Compliance with the Applicable City Regulations and Design Requirements, as well as Mitigation Measures MM 4.8-1 through MM 4.8-7, would ensure that a qualified Project Archaeologist and Tribal Monitors present on-site during ground-disturbing activities and would ensure that any archaeological resources that may be uncovered are appropriately treated as recommended by the Project Archaeologist in consultation with the Tribal Monitors. **Threshold b):** Implementation of the Project would impact archaeological resources on the Project site that may be uncovered during grading activities. Compliance with the Applicable City Regulations and Design Requirements, as well as Mitigation Measures MM 4.8-1 through MM 4.8-7 would ensure that a qualified Project Archaeologist and Tribal Monitors are present on-site during ground disturbing activities and would ensure that any archaeological resources that may be uncovered are appropriately treated as recommended by the Project Archaeologist in consultation with the Tribal Monitors.	Less than Significant with Mitigation Less than Significant with Mitigation	**MM 4.8-1** Unanticipated Resources. The developer/permit holder or any successor in interest shall comply with the following for the life of this permit. If during ground disturbance activities, unanticipated cultural resources are discovered, the following procedures shall be followed: 1. All ground disturbance activities within 100 feet of the discovered cultural resource shall be halted until a meeting is convened between the developer, the Project Archaeologist, the Native American tribal representative(s) from consulting tribes (or other appropriate ethnic/cultural group representative), and the Community Development Director or their designee to discuss the significance of the find. 2. The developer shall call the Community Development Director or their designee immediately upon discovery of the cultural resource to convene the meeting. 3. At the meeting with the aforementioned parties, the significance of the discoveries shall be discussed and a decision is to be made, with the concurrence of the Community Development Director or their designee, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resource.	Project Applicant, Project Grading Contractor, Project Archaeologist/ Planning Division, Tribal Monitor(s)	During grading activities

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
Threshold c): The Project site does not contain a cemetery and no known cemeteries are located within the immediate site vicinity. In the unlikely event that human remains are discovered during Project grading or other ground-disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 et. seq. Mandatory compliance with State law would ensure that human remains, if encountered, are appropriately treated and would preclude the potential for significant impacts to human remains. Nonetheless, Mitigation Measure MM 4.8-6 has been imposed on the Project to ensure compliance with California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 et. seq.	Less than Significant	4. Further ground disturbance shall not resume within the area of the discovery until a meeting has been convened with the aforementioned parties and a decision is made, with the concurrence of the Community Development Director or their designee, as to the appropriate mitigation measures. **MM 4.8-2** Archaeologist/CRMP. Prior to issuance of grading permits, the applicant/developer shall provide evidence to the Community Development Department that a Secretary of Interior Standards qualified and certified Registered Professional Archaeologist (RPA) has been contracted to implement a Cultural Resource Monitoring Program (CRMP) that addresses the details of all activities that must be completed and procedures that must be followed regarding cultural resources associated with this project. The CRMP document shall be provided to the Community Development Director or their designee for review and approval prior to issuance of the grading permit. The CRMP provides procedures to be followed and are to ensure that impacts on cultural resources will not occur without procedures that would reduce the impacts to less than significant. These measures shall include, but shall not be limited to, the following: o Archaeological Monitor: An adequate number of qualified monitors shall be present to ensure that all earth-moving activities are observed and shall be on-site during all grading activities for areas to be monitored including off-site improvements. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined by the Project Archaeologist, in consultation with the Tribal monitor. o Cultural Sensitivity Training: The Project Archaeologist and a representative designated by the consulting Tribe(s) shall	Project Applicant, Project Archaeologist/ Planning Division, Tribal Monitor(s)	Prior to issuance of a grading permit, during grading activities, and prior to grading final

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		attend the pre-grading meeting with the contractors to provide Cultural Sensitivity Training for all Construction Personnel. Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event unanticipated cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. This is a mandatory training and all construction personnel must attend prior to beginning work on the project site. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report. o Unanticipated Resources: In the event that previously unidentified potentially significant cultural resources are discovered, the Archaeological and/or Tribal Monitor(s) shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant cultural resources. The Project Archaeologist, in consultation with the Tribal monitor(s) shall determine the significance of the discovered resources. The Community Development Director or their designee must concur with the evaluation before construction activities will be allowed to resume in the affected area. Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. o Cultural Resources Disposition: In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries:		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the Community Development Department: 1. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources. 2. Relocation of the resources on the Project property. The measures for relocation shall include, at least, the following: Measures and provisions to protect the future reburial area from any future impacts by means of a deed restriction or other form of protection (e.g., conservation easement) in order to demonstrate avoidance in perpetuity. Relocation shall not occur until all legally required cataloging and basic recordation have been completed, with an exception that sacred items, burial goods and Native American human remains are excluded. Any reburial process shall be culturally appropriate. Listing of contents and location of the reburial shall be included in the confidential Phase IV report. The Phase IV Report shall be filed with the City under a confidential cover and not subject to Public Records Request. 3. If relocation is not agreed upon by the Consulting Tribes then the resources shall be curated at a culturally appropriate manner at a Riverside County		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines. The collection and associated records shall be transferred, including title, and are to be accompanied by payment of the fees necessary for permanent curation. Evidence of curation in the form of a letter from the curation facility stating that subject archaeological materials have been received and that all fees have been paid, shall be provided by the landowner to the City. There shall be no destructive or invasive testing on sacred items, burial goods and Native American human remains. Results concerning finds of any inadvertent discoveries shall be included in the Phase IV monitoring report. o Phase IV Report: A final archaeological report shall be prepared by the Project archaeologist and submitted to the Community Development Director or their designee prior to grading final. The report shall follow County of Riverside requirements and shall include at a minimum: a discussion of the monitoring methods and techniques used; the results of the monitoring program including any artifacts recovered; an inventory of any resources recovered; updated DPR forms for all sites affected by the development; final disposition of the resources including GPS data; artifact catalog and any additional recommendations. A final copy shall be submitted to the City, Project Applicant, the Eastern Information Center (EIC), and the Tribe. **MM 4.8-3** Cultural Resources Disposition: In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following	Project Applicant, Project Archaeologist/	If inadvertent discoveries occur during the course

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		procedures shall be carried out for final disposition of the discoveries: One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the Community Development Department: a) Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources. b) Relocation of the resources on the Project property. The measures for relocation shall include, at least, the following: Measures and provisions to protect the future reburial area from any future impacts by means of a deed restriction or other form of protection (e.g., conservation easement) in order to demonstrate avoidance in perpetuity. Relocation shall not occur until all legally required cataloging and basic recordation have been completed, with an exception that sacred items, burial goods and Native American human remains are excluded. Any reburial process shall be culturally appropriate. Listing of contents and location of the reburial shall be included in the confidential Phase IV report. The Phase IV Report shall be filed with the City under a confidential cover and not subject to Public Records Request. c) If relocation is not agreed upon by the Consulting Tribes then the resources shall be curated at a culturally appropriate manner at a Riverside County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines. The collection and associated records	Planning Division, Tribal Monitor(s)	of grading

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		shall be transferred, including title, and are to be accompanied by payment of the fees necessary for permanent curation. Evidence of curation in the form of a letter from the curation facility stating that subject archaeological materials have been received and that all fees have been paid, shall be provided by the landowner to the City. There shall be no destructive or invasive testing on sacred items, burial goods and Native American human remains. Results concerning finds of any inadvertent discoveries shall be included in the Phase IV monitoring report. **MM 4.8-4** Tribal Monitoring. Prior to the issuance of a grading permit, the applicant shall contact the consulting Native American Tribe(s) that have requested monitoring through consultation with the City during the AB 52 and/or the SB 18 process ("Monitoring Tribes"). The applicant shall coordinate with the Tribe(s) to develop individual Tribal Monitoring Agreement(s). A copy of the signed agreement(s) shall be provided to the City of Lake Elsinore Community Development Department, Planning Division prior to the issuance of a grading permit. The Agreement shall address the treatment of any known tribal cultural resources (TCRs) including the project's approved mitigation measures and conditions of approval; the designation, responsibilities, and participation of professional Tribal Monitors during grading, excavation and ground disturbing activities; project grading and development scheduling; terms of compensation for the monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains/burial goods discovered on the site per the Tribe(s) customs and traditions and the City's mitigation measures/conditions of approval. The Tribal Monitor will have the authority to stop and redirect grading in the immediate area of a find in order to evaluate the find and determine the appropriate next steps, in consultation with the Project Archaeologist.	Project Applicant, Project Archaeologist/ Planning Division, Monitoring Tribes	Prior to the issuance of grading permits and during grading activities

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		MM 4.8-5 Phase IV Report. Upon completion of the implementation phase, a Phase IV Cultural Resources Monitoring Report shall be submitted that complies with the Riverside County Planning Department's requirements for such reports for all ground disturbing activities associated with this grading permit. The report shall follow the County of Riverside Planning Department Cultural Resources (Archaeological) Investigations Standard Scopes of Work posted on the County website. The report shall include results of any feature relocation or residue analysis required as well as evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting.	Project Applicant, Project Archaeologist/ Planning Division, Monitoring Tribes	Following completion of the implementation phase
		MM 4.8-6 Discovery of Human Remains. In the event that human remains (or remains that may be human) are discovered at the project site during grading or earthmoving, the construction contractors, project archaeologist and/or designated Native American Monitor shall immediately stop all activities within 100 feet of the find. The project applicant shall then inform the Riverside County Coroner and the City of Lake Elsinore Community Development Department immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b). Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains and that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. If human remains are determined to be Native American, the applicant shall comply with the state law relating to the disposition of Native American burials that fall within the jurisdiction of the NAHC (PRC Section 5097). The coroner shall contact the NAHC within 24 hours and the NAHC will make the determination of most likely descendant(s). The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains	Project Applicant, Project Archaeologist/ Planning Division, Tribal Monitor(s)	During grading and ground-disturbing activities

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		as provided in Public Resources Code Section 5097.98. In the event that the applicant and the MLD are in disagreement regarding the disposition of the remains. State law will apply and the mediation process will occur with the NAHC, if requested (see PRC Section 5097.98(e) and 5097.94(k)). According to the California Health and Safety Code, six or more human burial at one location constitutes a cemetery (Section 81 00), and disturbance of Native American cemeteries is a felony (Section 7052). **MM 4.8-7** Non-Disclosure of Reburial Location. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code 6254(r), parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254(r).	Project Applicant, Project Archaeologist/ Planning Division, Tribal Monitor(s)	During grading and ground-disturbing activities and throughout the life of the Project
4.9 Hydrology and Water Quality				
Threshold a): With implementation of the BMPs from the SWPPP and the Project-specific WQMP, included as an applicable City Regulation below, as well as implementation of the Project's drainage plan that includes two (2) drainage basins, included as an applicable City Regulation below, the Project would result in less-than-significant impacts with respect to water quality.	Less than Significant	**CRDR 4.9-1** The Project is required to comply with the provisions of the Project's NPDES permit, and the Project's SWPPP. Compliance with the NPDES permit and the SWPPP would identify and implement an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) to reduce or eliminate discharge to surface water from storm water and non-storm water discharges.	Project Applicant, Project Construction Manager/ Building & Safety Division, Engineering Division	During grading and construction activities
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. Groundwater recharge would occur in on-site drainage basins and	Less than Significant	**CRDR 4.9-2** The Project shall be required to comply with the provisions of the Project's Drainage Study and the provisions of the proposed Specific Plan No. 2018-01. Compliance with these	Project Applicant/ Building & Safety	Prior to Final Map and prior to building or grading

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
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):** Implementation of the BMPs from the Project-specific SWPPP and the on-site drainage basins, included as applicable City Regulations, would ensure that construction and operation of the Project would not result in substantial erosion or siltation on- or off-site or contribute runoff storm water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Accordingly, the Project's impacts with respect to Thresholds c and e would be less than significant. With implementation of the Project's proposed drainage plan (including the two [2] proposed drainage basins) included as an applicable City Regulation, the Project would result in the reduction of peak storm water discharge flows compared to existing conditions. Because the proposed Project has been designed to attenuate post-development runoff from the site, Project-related runoff would not substantially increase the rate or amount of surface runoff in downstream areas in a manner that would result in flooding on- or off-site. A less-than-significant impact would occur. The FEMA FIRM for the Project site indicates that the majority of the Project site is not located within a special flood hazard area, except for Stovepipe Creek which is located within a special flood hazard area. The Project	Less than Significant	provisions would be assured by the City's future review of the Final Map and implementing grading and building permits for compliance with the provisions that require the development of two (2) drainage basins in order to properly attenuate Project-related drainage flows. These provisions would serve to reduce and/or avoid impacts related to hydrology and water quality. **CRDR 4.9-3** The Project was reviewed for compliance with General Plan Policy 5.1 and Implementation Program through the preparation of the Project's WQMP. The Project was found to be consistent with General Plan Policy 5.1 and Implementation Program as stated below. ▪ Policy 5.1: Continue to ensure that new construction in floodways and floodplains conforms to all applicable provisions of the National Flood Insurance Program in order to protect buildings and property from flooding. ▪ Implementation Program: Through the project review and the CEQA processes the City shall assess new development and reuse applications for potential flood hazards, and shall require compliance with FEMA Special Flood Hazard Areas where appropriate. **CRDR 4.9-4** The Project shall comply with EIR Mitigation Measure MM 4.4-1, which is presented in EIR Subsection 4.4, Geology and Soils, and incorporates all of the requirements listed in the Project's Geotechnical Evaluation (EIR Technical Appendix D). **CRDR 4.9-5** The Project shall comply with City of Lake Elsinore Municipal Code Chapter 14.08, Stormwater/Urban Runoff Management and Discharge Controls, which intends to protect and enhance the water quality of City watercourses, water bodies, groundwater, and wetlands.	Division, Engineering Division Project Applicant/ Building & Safety Division, Engineering Division As specified above for Mitigation Measure MM 4.4-1 Project Applicant/ Engineering Division	permit issuance Prior to Project approval As specified above for Mitigation Measure MM 4.4-1 During grading, construction, and long-term operational activities

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
proposes minor modifications to the flood plain limits and the Project Applicant would be required to obtain a CLOMR and LOMR from FEMA to modify the mapped floodplain boundaries. Following the modification of the floodplain boundaries on-site, no development would occur within the revised flood zones. Thus, with implementation of regulatory requirements the Project would not place housing or structures within a 100-year flood hazard area and would not impede or redirect flood flows. Accordingly, the Project's potential to contribute to an impact associated with placing housing or structures within a 100-year flood zone would be less than significant.		**CRDR 4.9-6** The Project shall comply with City of Lake Elsinore Municipal Code Chapter 15.64, Flood Damage Prevention, which includes flood construction requirements to minimize flood hazards. **CRDR 4.9-7** Prior to issuance of grading permits, the Project Applicant shall obtain a Conditional Letter of Map Revision (CLOMR) from FEMA to modify the floodplain boundaries as shown in FEMA FIRM No. 06065C2928G, dated August 28, 2008. Prior to issuance of building permits, the Project Applicant shall obtain a Letter of Map Revision (LOMR) to reflect the modified flood plain limits resulting from Project implementation.	Project Applicant/ Building & Safety Division Project Applicant/ Building & Safety Division, Engineering Division FEMA	Prior to Project approval and prior to grading permit issuance Prior to issuance of grading permits
Threshold d): Development as proposed by the Project would not occur within any areas that are mapped by FEMA as occurring within a floodplain. As such, the Project would not result in the release of pollutants due to Project inundation. The Project site is located approximately 1.7 miles north of a levee associated with Lake Elsinore, and 4.7 miles northwest of the Railroad Canyon Dam. According to the City of Lake Elsinore General Plan EIR, the Project site is located outside of dam inundation zones. Furthermore, compliance with the City of Lake Elsinore General Plan "Policy and Implementation Plan" applicable to dam inundation included as an applicable City Regulation as well as the construction of the two (2) drainage basins on-site included as an applicable City Regulation would ensure that the Project does not result in the release of pollutants due to any potential dam inundation hazards associated with future development, and impacts would be less than significant. Based on the 1.8-mile distance and change in topography between Lake Elsinore (the nearest large body of water) and the Project site, the Project would not be subject to inundation by seiches associated with the body of water. Impacts associated with inundation by seiche	Less than Significant			

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
would be less than significant. Additionally, due to the approximately 25-mile distance of the Project site from the Pacific Ocean, there is no potential for a tsunami to affect the Project site, and no impact would occur. **Threshold e):** The proposed Project would require an NPDES Permit, issuance of a WDR by the RWQCB, and Water Quality Certification, which would ensure the Project does not conflict with the Basin Plan. Additionally, the Project site is not located within any sustainable groundwater management plans, and the Project would not affect water quality or the amount of water discharged to local aquifers. Impacts would be less than significant.	Less than Significant			
4.10 Land Use and Planning				
Threshold a): The Project would not physically disrupt or divide any established communities, and no impact would occur. **Threshold b):** Although the Project would change the site's existing General Plan land use and zoning classifications, the Project would not result in a significant environmental effect due to an inconsistency with the site's existing or proposed zoning. Furthermore, the Project would be consistent with the General Plan and SCAG RTP/SCS goals. Impacts due to a conflict with the land use designations and policies of the General Plan and other planning documents would be less than significant.	No impact Less than Significant	**CRDR 4.10-1** The Project Applicant shall make payment of Western Riverside County MSHCP fees pursuant to City of Lake Elsinore Municipal Code Chapter 16.85 for the southern 27.1 acres. Fees shall be paid in compliance with Municipal Code Chapter 16.85. **CRDR 4.10-2** The Project Applicant shall make payment of SKR HCP fees pursuant to City of Lake Elsinore Municipal Code Chapter 19.04. Fees shall be paid in compliance with Municipal Code Chapter 19.04. **CRDR 4.10-3** To ensure compliance with the Western Riverside County MSHCP, the following shall be required: ▪ As part of its review of implementing discretionary applications (e.g., building permits), the City of Lake Elsinore shall assure that landscaping plans do not include the use of invasive plant species listed in Volume I, Table 6-2 of the MSHCP or in Table IV-2, Prohibited Plant List, of the Nichols Ranch Specific Plan.	Project Applicant/ Planning Division Project Applicant/ Planning Division Project Applicant/ Building & Safety Division, Engineering Division	Prior to issuance of building permits Prior to issuance of grading permits Prior to issuance of grading or building permits

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		▪ Prior to approval of grading permits, the Project's construction contractor shall develop and implement a Storm Water Pollution Prevention Program (SWPPP) to address runoff and potential water quality degradation during construction. ▪ All construction plans (i.e., grading permits, building permits, etc.) shall include the following note, compliance with which shall be assured by the construction contractor: "*During any nighttime construction activities, all lighting shall direct lighting away from the preserved on-site drainage and associated habitat.*"		
4.11 Noise				
Threshold a): Implementation of Mitigation Measures MM 4.10-1 through MM 4.10-3 would reduce the construction noise levels at the impacted receiver locations to satisfy the 60 dBA Lmax residential and 70 dBA Lmax semi-residential significance thresholds during temporary Project construction activities. Therefore, with implementation of the required mitigation, the Project's noise impact due to Project construction would be reduced to less-than-significant levels. With implementation of Mitigation Measure MM 4.10-4, the future on-site exterior noise levels would range from 54.8 to 59.9 dBA CNEL at the outdoor living areas of single-family residential homes, which would ensure that the City of Lake Elsinore 60 dBA CNEL exterior noise level standards for residential land use is satisfied at all residential lots within the Project. Thus, with implementation of Mitigation Measure MM 4.10-4, Project impacts due to exterior noise levels that exceed the City's standards would be reduced to less-than-significant levels. With standard windows and/or glass doors with a minimum	Less than Significant with Mitigation	**MM 4.11-1** Prior to the issuance of grading permits affecting areas on site that are located within 700 feet of the existing residential uses located east of El Toro Road/Wood Mesa Court, and prior to issuance of building permits for Phase 1 of the proposed Project, the City of Lake Elsinore shall ensure that the grading plans and building plans (as appropriate) include the following notes. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Lake Elsinore staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors. ▪ "*During construction activities that could expose nearby sensitive receptors (i.e., existing residential uses located along El Toro Road/Wood Mesa Court) to excessive construction-related noise, minimum 10-foot high temporary noise barriers shall be erected at the eastern limits of construction activities, as shown on Figure 4.10-8, Construction Noise Mitigation Measures, of the Nichols Ranch Specific Plan Environmental Impact Report (SCH No. 2018051051). Construction activities that could expose nearby sensitive receptors to*	Project Applicant/ Building & Safety Division, Engineering Division	Prior to issuance of grading permits and during Project construction activities

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
sound transmission class (STC) rating of 27 (as required by Mitigation Measure MM 4.10-5), and with construction of the noise barriers required by Mitigation Measure MM 4.10-4, the interior noise levels for Lots 35 to 60, 79 to 100, and 110 to 113 of Tentative Tract Map No. 37305 would satisfy the City of Lake Elsinore 45 dBA CNEL interior noise level standard. Therefore, with implementation of the required mitigation, impacts due to residential interior noise levels that exceed the City's standards would be reduced to less-than-significant levels. Hotel first through fourth floor windows would require upgraded STC ratings of 32 for all windows and/or glass doors facing I-15, as required by Mitigation Measure MM 4.10-5. The interior noise analysis shows that with the recommended interior noise mitigation measures, the Project would satisfy the City of Lake Elsinore 45dBA CNEL interior noise level standard. However, because precise building and site plans for the hotel use are not currently available, Mitigation Measure MM 4.10-6 has been imposed to require a final noise study that demonstrates that the hotel use would meet the City's interior noise standard of 45 dBA CNEL and/or that includes additional or modified mitigation to ensure the standard can be met. Accordingly, with implementation of the required mitigation, interior noise impacts associated with the proposed hotel use would be reduced to less-than-significant levels. Implementation of Mitigation Measure MM 4.10-7 would prohibit nighttime operation of the car wash at the proposed gas station. The mitigated Project operational noise levels would range from 25.5 to 38.6 dBA Leq without the car wash activities, which would satisfy the exterior noise level standards at all nearby sensitive receiver locations with		*excessive noise levels include any activities associated with the following construction phases that occur within the buffer distances described below*: o *Site preparation activities within 250 feet of the existing residential homes located along El Toro Road/Wood Mesa Court;* o *Mass and fine grading activities within 700 feet of the existing residential homes located along El Toro Road/Wood Mesa Court;* o *Building construction activities within 300 feet of the existing residential homes located along El Toro Road/Wood Mesa Court;* o *Paving activities within 500 feet of the existing residential homes located along El Toro Road/Wood Mesa Court; and* o *Architectural coating activities within 250 feet of the existing residential homes located along El Toro Road/Wood Mesa Court.* *The noise control barriers shall remain in place during any construction activities for the above-described construction phases within the buffer distance shown. The noise control barriers shall have a solid face from top to bottom. The noise control barriers must meet the minimum height and be constructed as follows:* o *The temporary noise barriers shall provide a minimum transmission loss of 20 dBA (per the Federal Highway Administration Noise Barrier Design Handbook). The noise* o *barriers shall be constructed using an acoustical blanket (e.g., vinyl acoustic curtains or quilted blankets) attached to the construction site perimeter fence or equivalent temporary fence posts;* o *The noise barrier must be maintained and any damage promptly repaired. Gaps, holes, or weaknesses in the*		

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
implementation of Mitigation Measure MM 4.10-7. Therefore, the Project's operational noise levels would not exceed City standards at nearby sensitive receptors following mitigation and the Project's impacts would therefore be reduced to less-than-significant levels. **Threshold b):** Mitigation Measure MM 4.10-2 prohibits the use of construction equipment greater than or equal to 80,000 pounds within 300 feet of nearby sensitive receptor locations, and would serve to reduce the Project's vibration impacts affecting nearby sensitive receptors. Mitigated Construction Equipment Vibration Levels, the mitigated vibration levels for loaded trucks and large mobile equipment would be reduced to approximately 0.002 in/sec RMS and would be reduced below the 0.01 in/sec RMS threshold at all receiver locations. Therefore, Project construction-related vibration levels would be reduced to less-than-significant levels with implementation of Mitigation Measure MM 4.10-2. **Threshold c):** The closest airport is Skylark Field which is located approximately 5.7 miles southeast of the Project site. The Project site is not located within the AIA of the closest airport, Skylark Airport, and is not subject to substantial noise levels associated with airport operations. Further, the Project site is not located within an airport land use plan or within 2 miles of a public airport. The Project site would not be exposed to aircraft-related noise exceeding 55 dBA CNEL, which is considered "clearly acceptable" by the Riverside County ALUCP for residential and commercial development. Accordingly, the Project would not result in the exposure of people residing or working at the Project site to excessive airport- or aircraft-related noise, and no impact would occur.	Less than Significant with Mitigation No Impact	*barrier or openings between the barrier and the ground shall be promptly repaired; and* o *The noise control barrier and associated elements shall be completely removed and the site appropriately restored upon the conclusion of the construction activity.* **MM 4.11-2** Prior to the issuance of grading or building permits affecting the portions of the site located south of Stovepipe Creek, the City of Lake Elsinore shall ensure that the grading or building plans include the following note. Project contractors shall be required to ensure compliance with the note and permit periodic inspection of the construction site by City of Lake Elsinore staff or its designee to confirm compliance. This note also shall be specified in bid documents issued to prospective construction contractors. ▪ *During all phases of construction within on-site areas located south of Stovepipe Creek, large loaded trucks and mobile equipment greater than or equal to 80,000 pounds shall be prohibited. Instead, smaller, rubber-tired mobile equipment (less than 80,000 pounds) or equivalent alternative equipment shall be used in these areas. As an exception, equipment heavier than 80,000 pounds may be utilized for the area shown on Figure 4.10-8, Construction Noise Mitigation Measures, of the Nichols Ranch Specific Plan Environmental Impact Report (SCH No. 2018051051) as being located at a distance greater than 300 feet from Sensitive Receiver Locations R1 through R6. In such a case, orange construction fencing shall be erected delineating those areas within 300 feet of Sensitive Receiver Locations R1 through R6 to ensure that equipment heavier than 80,000 pounds does not encroach into the required 300-foot buffer zone.*	Project Applicant/ Building & Safety Division, Engineering Division	Prior to issuance of grading permits and during all phases of construction within on-site areas located south of Stovepipe Creek

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		MM 4.11-3 Prior to the issuance of any grading permits or building permits, the City of Lake Elsinore shall ensure that the grading plans and building plans include the following notes. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Lake Elsinore staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors. ▪ *During all Project site construction, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards.* ▪ *The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receivers nearest the Project site.* ▪ *The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receivers nearest the Project site (i.e., to the northwest or northern center) during all Project construction.* ▪ *The construction contractor shall design delivery routes to minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise.*	Project Applicant, Project Construction Manager/ Building & Safety Division, Engineering Division	Prior to issuance of grading or building permits and during all construction activities
		MM 4.11-4 Prior to the issuance of occupancy permits for Lots 35 to 60 or Lots 80 to 83 of Tentative Tract Map No. 37305, the City of Lake Elsinore shall ensure that noise-attenuation barriers have been constructed in the locations and at the heights shown on Figure 4.10-9, On-Site Traffic Noise Mitigation Measures, of the Nichols Ranch Specific Plan Environmental Impact Report (SCH No. 2018051051). As shown on Figure 4.10-	Project Applicant/ Building & Safety Division, Planning Division	Prior to issuance of occupancy permits for Lots 35 to 60 and Lots 80 to 83 of Tentative Tract Map No. 37305

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		9, eight-foot tall noise-attenuation barriers shall be constructed along Nichols Road (i.e., at the northern lot lines of Lots 35 to 60 and Lots 80 to 81) and the western lot line of Lot 81, and six-foot tall noise-attenuation barriers shall be constructed at the western lot lines of Lots 82 and 83. 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. When 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, and a minimum transmission loss of 20 dBA. The noise barrier shall be constructed using the following 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 capable of providing a minimum transmission loss of 20 dBA; ▪ Earthen berm; or ▪ Any combination of these construction materials 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. **MM 4.11-5** Prior to the issuance of building permits for Lots 35 to 60, Lots 79 to 100, or Lots 110 to 113 of Tentative Tract	Project Applicant/ Building & Safety	Prior to the issuance of building permits

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		Map No. 37305, and prior to issuance of building permits for the proposed hotel use, the City of Lake Elsinore shall ensure that the following noise abatement measures are included in the building plans: ▪ Windows & Glass Doors: All windows and/or glass doors shall be well-fitted, well weather-stripped assemblies and shall have a minimum, standard sound transmission class (STC) ratings as follows: o Minimum STC ratings of 27 for all windows and/or glass doors at residential lots 35 to 60, 79 to 100, and 110 to 113. o Minimum upgraded STC ratings of 32 for all hotel building windows and/or glass doors facing I-15. ▪ Doors: All exterior doors shall be well weather-stripped and have minimum STC ratings of 27. Well-sealed perimeter gaps around the doors are essential to achieve the optimal STC rating. ▪ Walls: At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal. ▪ Residential Roofs: Roof sheathing of wood construction shall be per manufacturer's specifications or caulked plywood of at least one-half inch thick. Ceilings shall be per manufacturer's specifications or well-sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space. ▪ Ventilation: Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use and still receive circulated air. A forced air circulation system (e.g. air conditioning) or active ventilation system (e.g. fresh air	Division	for Lots 35 to 60, Lots 79 to 100, or Lots 110 to 113 of Tentative Tract Map No. 37305, and prior to issuance of building permits for the proposed hotel use

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		supply) shall be provided which satisfies the requirements of the Uniform Building Code. **MM 4.11-6** Prior to issuance of building permits for the proposed hotel use, a final noise study shall be prepared to finalize the mitigation measures identified in Mitigation Measure MM 4.10-5 using the precise grading plans and actual building design specifications, and shall include modified or supplemental mitigation, if necessary, to meet the City of Lake Elsinore 45 dBA CNEL interior noise level standard for hotel uses. **MM 4.11-7** As a condition of the occupancy permit for the proposed gas station use, operating hours for the car wash shall be specified as permitted between 7:00 a.m. to 10:00 p.m. and prohibited between 10:00 p.m. to 7:00 a.m. Permanent, durable, weather-proof signs shall be posted at the gas station in the location of the car wash entry drive clearly indicating the car wash hours of operation as 7:00 a.m. to 10:00 p.m. The City of Lake Elsinore shall verify that the signs are posted prior to the issuance of the gas station occupancy permit. The City's Code Enforcement Division shall be responsible for enforcing the hours of operation. **CRDR 4.11-1** Future residents and tenants of the proposed Project would be subject to applicable provisions of Chapter 11.176, Noise Control, of the Lake Elsinore Municipal Code, which was adopted to control unnecessary, excessive, and annoying noise and vibration in the City.	Project Applicant/ Building & Safety Division Project Applicant, Car Wash Operator/ Planning Division, Code Enforcement Division Future Project Residents/ Code Enforcement Division	Prior to issuance of building permits for the proposed hotel use Prior to issuance of occupancy permits for the proposed gas station use Throughout the life of the proposed Project
4.12 Paleontological Resources				
Threshold a): The Project site has a "Low Potential" to yield nonrenewable paleontological resources. There were no surface-exposed fossils or fossiliferous sedimentary units found during the field surveys conducted on site. In addition, the metamorphic and late Quaternary young alluvial fan	Less than Significant	Impacts would be less than significant; therefore, mitigation is not required.	N/A	N/A

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
sediments across the entire Project site indicates a low likelihood that any fossiliferous deposit would be present within the Project area and its surrounding areas. Thus, the Project would not impact any known paleontological resource or unique geological feature. Impacts would be less than significant.				
4.13 Population and Housing				
Threshold a): Implementation of the Project would exceed local and regional projections. However, impacts associated with the Project's proposed increases in population on-site have been evaluated throughout this EIR, and mitigation measures have been imposed where necessary to reduce impacts to the maximum feasible extent. Therefore, Project impacts due to direct and indirect population growth would be less than significant. **Threshold b):** The Project would not result in the displacement of people or housing that could result in or require the construction of replacement housing; rather, the Project's development of 168 residential units would further augment the housing supply in the region. Thus, no impact associated with inducing housing demand would occur.	Less than Significant No Impact	Impacts to Population and Housing as a result of Project implementation would be less than significant and mitigation is not required.	N/A	N/A
4.14 Public Services				
Threshold a): With payment of mandatory DIF fees, the proposed Project's potential direct and cumulatively-considerable impacts to the RCFD would be reduced to less-than-significant levels, and the Project would not result in or require the construction of new fire protection facilities that could result in a significant impact to the environment. **Threshold b):** With payment of mandatory DIF fees, the proposed Project's potential direct and cumulatively-considerable impacts to the RCSD would be reduced to less-than-significant levels, and the Project would not result in or	Less than Significant Less than Significant	**CRDR 4.14-1** The Project would be required to conform to all mandatory local, state, and federal laws, ordinances, and standards relating to fire safety. Among other items, these requirements include conformance with the Uniform Building Code Section 1503, which requires that all buildings be constructed with fire retardant roofing material, as well as standard Riverside County Fire Department conditions of approval (COAs) for specific plans, which prohibit flag lots and require alternative/secondary access routes to neighborhoods. The alternative/secondary access routes would be required to be maintained throughout construction and buildout of the	Project Applicant/ Riverside County Fire Department	Prior to issuance of building permits

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
require the construction of new police protection facilities that could result in a significant impact to the environment.		proposed Project.		
Threshold c): The Project would generate approximately 95 students, which would not be accommodated within LEUSD's existing capacity. Although the LEUSD would need to construct new school facilities to meet the growing demand within this part of Lake Elsinore, environmental effects of such school facilities and any associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded school facilities. Furthermore, the payment of mandatory school impact fees would ensure that the Project would not result in significant direct or cumulatively-considerable impacts to the ability of the LEUSD to provide for school services. The Project would not require the construction of new school facilities that could result in a significant impact to the environment.	Less than Significant	**CRDR 4.14-2** The Project would be required to adhere to City of Lake Elsinore Municipal Code Chapter 16.74, which requires payment of a development impact fee (DIF) to assist the City in providing for fire protection facilities, including fire stations. Payment of the DIF fee would ensure that funds are available for capital improvements, such as land/equipment purchases and fire station construction.	Project Applicant/ Building & Safety Division	Prior to issuance of building permits
		CRDR 4.14-3 The Project would be required to adhere to City of Lake Elsinore Municipal Code Chapter 16.74, which requires payment of a development impact fee (DIF) to assist the City in providing for sheriff protection facilities, including sheriff stations. Payment of the DIF fee would ensure that funds are available for additional sheriff personnel as well as capital improvements, such as land/equipment purchases and sheriff station construction.	Project Applicant/ Building & Safety Division	Prior to issuance of building permits
Threshold d): With construction of public parkland on-site as required by the City of Lake Elsinore's Park and Recreation Master Plan, the proposed Project's direct and cumulatively-considerable park impacts to the City of Lake Elsinore would be reduced to less-than-significant levels, and the Project would not result in or require the construction of new parkland that could result in a significant impact to the environment.	Less than Significant	**CRDR 4.14-4** The Project is required to comply with City of Lake Elsinore Municipal Code Chapter 3.36, which requires mandatory payment of school impact fees pursuant to Public Education Code § 17072.10-18.	Project Applicant/ Building & Safety Division	Prior to issuance of building permits
		CRDR 4.14-5 The Project would be required to comply with the City of Lake Elsinore's Parks and Recreation Master Plan, which sets forth a parkland standard of 5.0 acres per 1,000 residents, specifies parkland dedication requirements, and imposes in-lieu park impact fees to address potential parkland deficiencies.	Project Applicant/ Planning Division	Prior to Project approval and as part of site development
Threshold e): Although the Project would contribute to a need for new or expanded library facilities, environmental effects of such library facilities and associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded library facilities. However, the Project would be required to	Less than Significant	**CRDR 4.14-6** The Project would be required to adhere to City of Lake Elsinore Municipal Code Chapter 16.74, which requires payment of a development impact fee (DIF) to assist the City in providing for library facilities. Payment of the DIF fee would	Project Applicant/ Building & Safety Division	Prior to issuance of building permits

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
contribute DIF fees, which would be used in part to provide for library space and/or new book volumes. Accordingly, with payment of DIF fees, Project impacts to library services and facilities are evaluated as less than significant on both a direct and cumulatively-considerable basis.		ensure that funds are available for capital improvements, such as land/equipment purchases and library construction.		
4.15 Recreation				
Threshold a): The Project would provide a total of 8.3 acres of public parkland on-site, while only 3.1 acres are required by the City of Lake Elsinore Parks and Recreation Plan; thus, the Project would exceed the City of Lake Elsinore parkland requirement by 5.2 acres. Given the excess amount of parkland planned within the Project area, it is unlikely that future Project residents would utilize parkland resources outside of the Project boundaries to the point that physical deterioration of such facilities would occur or would be accelerated. Moreover, it is likely that any incremental increase in the use of existing recreational uses as a result of the Project would be off-set by existing City residents utilizing proposed recreational facilities on-site. Thus, the Project's impacts to existing parks and recreation facilities in the region would be less than significant.	Less than Significant	**CRDR 4.15-1** The Project shall be required to comply with the City of Lake Elsinore Parks and Recreation Plan, which sets forth a parkland standard of 5.0 acres per 1,000 residents. **CRDR 4.15-2** The Project shall be required to construct a 6.5-acre linear park and a 1.8-acre neighborhood park consistent with the Nichols Ranch Specific Plan. Construction of the 6.5-acre linear park and a 1.8-acre neighborhood park would serve the parkland needs of the Project's population. **CRDR 4.15-3** The Project shall be required to comply with City of Lake Elsinore Municipal Code Chapter 16.12.	Project Applicant/ Planning Division Project Applicant/ Planning Division, Building & Safety Division Project Applicant/ Planning Division, Building & Safety Division	Prior to Project approval As required by the Nichols Ranch Specific Plan Phasing Plan (NRSP Figure II-11) As required by the Nichols Ranch Specific Plan Phasing Plan (NRSP Figure II-11)
Threshold b): A 6.5-acre linear park, a 1.8-acre neighborhood park, trails, and a Class II bicycle lane per the City's General Plan are proposed on the Project site. Effects associated with the physical construction of these facilities are addressed under the relevant issue areas identified within this EIR (e.g., air quality, biological resources, cultural resources etc.). As concluded throughout this EIR, the Project's direct and cumulative impacts associated with construction of the Project would be less than significant or would be reduced to the maximum feasible extent with the implementation of mitigation measures.	Less than Significant	**CRDR 4.15-4** The Project shall be required to comply with City of Lake Elsinore Municipal Code Chapter 16.34.	Project Applicant/ Planning Division, Building & Safety Division	As required by Municipal Code Chapter 16.34

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
4.16 Transportation and Traffic				
Threshold a): Each phase of the proposed Project would result in direct and cumulatively-considerable impacts to study area intersections, traffic signal warrants, off-ramp queuing locations, freeway segments, and freeway junction merge/diverge locations. Project direct impacts would be reduced to less-than-significant levels with implementation of the required mitigation. Unavoidable impacts would result from one or more of the following factors: 1) improvements required to achieve an acceptable Level of Service (LOS) are funded by a local or regional funding program (i.e., DIF or TUMF), but it cannot be assured that the improvements would be in place prior to the facilities experiencing a deficient LOS; 2) although fair-share monetary contributions have been identified for the Project's cumulatively-considerable impacts, a funding program does not currently exist for the facility and it cannot be assured that required improvements would be in place prior to the facility experiencing a deficient LOS; and/or 3) the affected facility is under the jurisdiction of another agency (e.g., Caltrans), and no funding programs exist beyond regional programs (e.g., TUMF) to implement improvements needed to achieve an acceptable LOS. A summary of the Project's unavoidable impacts to transportation/traffic is presented in EIR Table 4.16-34 through 4.16-38. Additionally, the proposed Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities), and impacts would be less than significant.	Significant and Unavoidable	**MM 4.16-1** Prior to the issuance of grading permits or improvement plans affecting Nichols Road and/or El Toro Road/Wood Mesa Court, the Project Applicant shall prepare and the City of Lake Elsinore 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 improvement plans and also shall be specified in bid documents issued to prospective construction contractors. **MM 4.16-2** Prior to the issuance of certificates of occupancy for Phase 1 of the proposed development, the Project Applicant shall make a fair-share monetary contribution to the City of Lake Elsinore for the following improvements to the intersection of Lake Street at Nichols Rd. (#1): ▪ Construct a second northbound through lane; ▪ Construct a second southbound through lane; ▪ Construct an eastbound left-turn lane; and ▪ Construct a westbound left turn lane. The Project's fair share of the above-listed improvements is 0.3% for Phase 1 of the proposed Project. **MM 4.16-3** Prior to the issuance of certificates of occupancy for Phase 1 of the proposed development, the Project Applicant shall make a fair-share monetary contribution to the City of Lake Elsinore for the following improvement to the intersection of Gunnerson Street/Strickland Avenue at Riverside Drive (SR-74) (#5): ▪ Install a traffic signal.	Project Applicant/ Building & Safety Division, Traffic Engineering Division Project Applicant/ Building & Safety Division, Traffic Engineering Division Project Applicant/ Building & Safety Division, Traffic Engineering Division	Prior to issuance of grading permits or improvement plans affecting Nichols Road or El Toro Road/Wood Mesa Court Prior to issuance of certificate of occupancy for Phase 1 Prior to issuance of certificate of occupancy for Phase 1
Threshold b): The Project would result in direct and cumulatively-considerable impacts to CMP facilities. Unavoidable impacts to Congestion Management Program (CMP) facilities would result from one or more of the	Significant and Unavoidable			

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
following factors: 1) improvements required to achieve an acceptable Level of Service (LOS) are funded by a local or regional funding program (i.e., DIF or TUMF), but it cannot be assured that the improvements would be in place prior to the facilities experiencing a deficient LOS; and/or 2) the affected facility is under the jurisdiction of another agency (e.g., Caltrans), and no funding programs exist beyond regional programs (e.g., TUMF) to implement improvements needed to achieve an acceptable LOS. A summary of the Project's unavoidable impacts to CMP facilities is presented in 4.16-34 through 4.16-38.		The Project's fair share of the above-listed improvements is 0.2% for Phase 1 of the proposed Project. **MM 4.16-4** Prior to issuance of certificates of occupancy for Phase 1 of the proposed development, the Project Applicant shall construct the following improvement at the intersection of Collier Av. At Nichols Rd. (#6): ▪ Convert the intersection to all-way stop (AWS) control.	Project Applicant/ Building & Safety Division, Traffic Engineering Division	Prior to issuance of certificate of occupancy for Phase 1
Threshold c): The proposed Project would not create or substantially increase safety hazards due to a geometric design feature or incompatible use, and impacts would be less than significant.	Less than Significant	**MM 4.16-5** Prior to the issuance of certificates of occupancy for Phase 1 of the proposed development, the Project Applicant shall construct the following improvement to the intersection of El Toro Rd. at Tereticornis Av. (#17): ▪ Convert the intersection to all-way stop (AWS) control.	Project Applicant/ Building & Safety Division, Traffic Engineering Division	Prior to issuance of certificate of occupancy for Phase 1
Threshold d): Implementation of Mitigation Measure MM 4.15-1 would require the Project Applicant to prepare a temporary traffic control plan that complies with the applicable requirements of the California Manual on Uniform Traffic Control Devices. Implementation of the traffic control plan would ensure that adverse effects to emergency access in the local area during the Project's construction phase are reduced to less-than-significant levels.	Less than Significant with Mitigation	**MM 4.16-6** Prior to the issuance of certificates of occupancy for Phase 1 of the proposed development, the Project Applicant shall use reasonable efforts to make a fair-share monetary contribution to the County of Riverside, to be held in trust, for the following improvements to the intersection of El Toro Rd. at Carmella Ct. (#18): ▪ Convert the intersection to all-way stop (AWS) control; and ▪ Remove a portion of on-street parking to provide a southbound right-turn lane. The County of Riverside shall establish a fair-share funding program for these improvements and shall only use the funds paid by the Project Applicant for the purpose of implementing these improvements. If within five years of the date of collection	Project Applicant/ Building & Safety Division, Traffic Engineering Division	Prior to issuance of certificate of occupancy for Phase 1

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		of the Project Applicant's fair-share fee payment, the County of Riverside has not established a fair-share funding program for the required improvements, then the City of Lake Elsinore shall return the funds to the Project Applicant. The Project's fair share of the above-listed improvements is 22.7% for Phase 1 of the proposed Project. **MM 4.16-7** Prior to the issuance of certificates of occupancy for Phase 2 of the proposed development, the Project Applicant shall make a fair-share monetary contribution to the City of Lake Elsinore for the following improvements to the intersection of Lake Street at Nichols Rd. (#1): ▪ Construct a second northbound through lane; ▪ Construct a second southbound through lane; ▪ Construct an eastbound left-turn lane; and ▪ Construct a westbound left turn lane. The Project's fair share of the above-listed improvement is 1.2% for Phase 2 of the proposed Project, of which 0.3% shall be paid as part of Phase 1 pursuant to Mitigation Measure MM 4.15-2 and 0.9% shall be paid as part of Phase 2 development pursuant to this mitigation measure. **MM 4.16-8** Prior to the issuance of certificates of occupancy for Phase 2 of the proposed development, the Project Applicant shall make a fair-share monetary contribution to the City of Lake Elsinore for the following improvement to the intersection of Gunnerson Street/Strickland Avenue at Riverside Drive (SR-74) (#5): ▪ Install a traffic signal. The Project's fair share of the above-listed improvements is 0.6%	Project Applicant/ Building & Safety Division, Traffic Engineering Division Project Applicant/ Building & Safety Division, Traffic Engineering Division	Prior to issuance of certificate of occupancy for Phase 2 Prior to issuance of certificate of occupancy for Phase 2

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		for Phase 2 of the proposed Project (in addition to the 0.2% required by Mitigation Measure MM 4.15-3 for Phase 1). **MM 4.16-9** Prior to the issuance of certificates of occupancy for Phase 2 of the proposed development, the Project Applicant shall make a fair-share monetary contribution to the City of Lake Elsinore for the following improvement to the intersection of Collier Avenue at Nichols Road (#6): ▪ Install a traffic signal. The Project's fair share of the above-listed improvements is 9.6% for Phase 2 of the proposed Project. **MM 4.16-10** Prior to the issuance of certificates of occupancy for Phase 2 of the proposed development, the Project Applicant shall use reasonable efforts to make a fair-share monetary contribution to the County of Riverside, to be held in trust, for the following improvements to the intersection of El Toro Rd. at Carmella Ct. (#18): ▪ Convert the intersection to all-way stop (AWS) control; and ▪ Remove a portion of on-street parking to provide a southbound right-turn lane. The County of Riverside shall establish a fair-share funding program for these improvements and shall only use the funds paid by the Project Applicant for the purpose of implementing these improvements. If within five years of the date of collection of the Project Applicant's fair-share fee payment, the County of Riverside has not established a fair-share funding program for the required improvements, then the County of Riverside shall return the funds to the Project Applicant. The Project's fair share of the	Project Applicant/ Building & Safety Division, Traffic Engineering Division Project Applicant/ Building & Safety Division, Traffic Engineering Division	Prior to issuance of certificate of occupancy for Phase 2 Prior to issuance of certificate of occupancy for Phase 2

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		above-listed improvements is 49.0% for Phase 2 of the proposed Project, of which 22.7% shall be paid as part of Phase 1 pursuant to Mitigation Measure MM 4.15-6 and 26.3% shall be paid as part of Phase 2 development pursuant to this mitigation measure. **MM 4.16-11** Prior to the issuance of certificates of occupancy for Phase 3 of the proposed development, the Project Applicant shall make a fair-share monetary contribution to the City of Lake Elsinore for the following improvements to the intersection of Lake Street at Nichols Rd. (#1): ▪ Construct a second northbound through lane; ▪ Construct a second southbound through lane; ▪ Construct an eastbound left-turn lane; ▪ Construct a westbound left turn lane; ▪ Construct a southbound right-turn lane; and ▪ Construct an eastbound right-turn lane. The Project's fair share of the above-listed improvement is 6.8% for Phase 3 of the proposed Project. For the first four improvements listed above, 0.3% shall be paid as part of Phase 1 pursuant to Mitigation Measure MM 4.15-2, 0.9% shall be paid as part of Phase 2 development pursuant to Mitigation Measure MM 4.15-7, and 5.6% shall be paid as part of Phase 3 development pursuant to this mitigation measure. For the fifth and sixth improvements listed above, the Project Applicant shall contribute the full 6.8% towards the cost of the required improvements. **MM 4.16-12** Prior to the issuance of certificates of occupancy for Phase 3 of the proposed development, the Project Applicant shall make a fair-share monetary contribution to the City of Lake Elsinore for the following improvement to the intersection of Alberhill Ranch Rd. at Nichols Rd. (#3):	Project Applicant/ Building & Safety Division, Traffic Engineering Division Project Applicant/ Building & Safety Division, Traffic Engineering Division	Prior to issuance of certificate of occupancy for Phase 3 Prior to issuance of certificate of occupancy for Phase 3

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		▪ Install a traffic signal. The Project's fair share of the above-listed improvement is 17.7% for Phase 3 of the proposed Project. **MM 4.16-13** Prior to the issuance of certificates of occupancy for Phase 3 of the proposed development, the Project Applicant shall construct the following improvement to the intersection of Lakeshore Dr. at Riverside Dr. (#4): ▪ Restripe the WB right turn lane to a WB shared through-right turn lane **MM 4.16-14** Prior to the issuance of certificates of occupancy for Phase 3 (buildout) of the proposed development, the Project Applicant shall make a fair-share monetary contribution to the City of Lake Elsinore for the following improvement to the intersection of Gunnerson Street/Strickland Avenue at Riverside Drive (SR-74) (#5): ▪ Install a traffic signal. The Project's fair share of the above-listed improvements is 4.4% for Phase 3 of the proposed Project (in addition to the 0.2% required by Mitigation Measure MM 4.15-3 for Phase 1 and the 0.6% required by Mitigation Measure MM 4.15-8 for Phase 2). **MM 4.16-15** Prior to the issuance of certificates of occupancy for Phase 3 (buildout) of the proposed development, the Project Applicant shall make a fair-share monetary contribution to the City of Lake Elsinore for the following improvement to the intersection of Collier Avenue at Nichols Road (#6):	Project Applicant/ Building & Safety Division, Traffic Engineering Division Project Applicant/ Building & Safety Division, Traffic Engineering Division Project Applicant/ Building & Safety Division, Traffic Engineering Division	Prior to issuance of certificate of occupancy for Phase 3 Prior to issuance of certificate of occupancy for Phase 3 Prior to issuance of certificate of occupancy for Phase 3

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		▪ Install a traffic signal. The Project's fair share of the above-listed improvements is 23.2% for Phase 3 of the proposed Project (in addition to the 9.6% required by Mitigation Measure MM 4.15-9 for Phase 2). **MM 4.16-16** Prior to the issuance of certificates of occupancy for Phase 3 (buildout) of the proposed development, the Project Applicant shall construct the following improvement to the intersection of the I-15 SB Ramps & Nichols Road (#9) with appropriate fee credits: ▪ Install a traffic signal. ▪ Add a SB left turn lane **MM 4.16-17** Prior to the issuance of certificates of occupancy for Phase 3 (buildout) of the proposed Project, the Project Applicant shall use reasonable efforts to make a fair-share monetary contribution to the County of Riverside, to be held in trust, for the following improvement to the intersection of El Toro Road at Carmela Court (#18): ▪ Convert the intersection to all-way stop (AWS) control; ▪ Remove a portion of on-street parking to provide a southbound right-turn lane; ▪ Implementation of a traffic guard at this intersection during the AM peak hour only during the peak AM period when students arrive at the Temescal Canyon High School; and ▪ Remove a portion of on-street parking to provide a northbound left-turn lane The County of Riverside shall establish a fair-share funding	Project Applicant/ Building & Safety Division, Traffic Engineering Division Project Applicant/ Building & Safety Division, Traffic Engineering Division	Prior to issuance of certificate of occupancy for Phase 3 Prior to issuance of certificate of occupancy for Phase 3

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
		program for these improvements and shall only use the funds paid by the Project Applicant for the purpose of implementing these improvements. If within five years of the date of collection of the Project Applicant's fair-share fee payment, the County of Riverside has not established a fair-share funding program for the required improvements, then the County of Riverside shall return the funds to the Project Applicant. The Project's fair share of the above-listed improvements is 62.8%. For the first two improvements listed above, 22.7% shall be paid as part of Phase 1 pursuant to Mitigation Measure MM 4.15-6, 26.3% shall be paid as part of Phase 2 development pursuant to Mitigation Measure MM 4.15-10, and 13.8% shall be paid as part of Phase 3 development pursuant to this mitigation measure. For the third and fourth improvements listed above, the Project shall contribute the full 62.8% towards the costs of the required improvements. For the traffic guard, the fair share amount shall either be based on 62.8% of the total cost to establish a non-wasting endowment to pay for the required traffic guard on an on-going basis, or a fair-share annual payment to the County of Riverside shall be made by the Project's homeowners' association for the cost of the required traffic guard. **CRDR 4.16-1** Prior to issuance of certificates of occupancy for each phase of the proposed development, the Project Applicant shall pay fees in accordance with Title 16, Chapter 16.74 (Development Impact Fees) of the City of Lake Elsinore Municipal Code. **CRDR 4.16-2** Prior to issuance of certificates of occupancy for each phase of the proposed development, the Project Applicant shall pay fees in accordance with Title 16, Chapter 16.83 (Western Riverside County Transportation Uniform Mitigation Fee Program) of the City of Lake Elsinore Municipal Code.	Project Applicant/ Building & Safety Division, Planning Division Project Applicant/ Building & Safety Division, Planning Division	Prior to issuance of certificates of occupancy for each phase Prior to issuance of certificates of occupancy for each phase

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
4.17 Tribal Cultural Resources				
Threshold a): Implementation of Mitigation Measures MM 4.8-1 through MM 4.8-7 would ensure that grading and other ground-disturbing activities during construction are monitored by a qualified archaeologist as well as tribal monitors. The mitigation further requires the proper treatment of any resources that may be uncovered, and the avoidance of disturbance in areas where potential resources are uncovered. With implementation of the required mitigation, the Project would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and impacts would be reduced to less-than-significant levels.	Less than Significant with Mitigation	Mitigation Measures MM 4.8-1 through MM 4.8-7 shall apply (refer to Subsection 4.8, *Historic and Archaeological Resources*). No additional mitigation is required.	As Required by Mitigation Measures MM 4.8-1 through MM 4.8-7	As required by Mitigation Measures MM 4.8-1 through MM 4.8-7
4.18 Utilities and Service Systems				
Thresholds a and c): Although the Project would require the construction of new water conveyance facilities, impacts associated with the construction of water facilities would be less than significant with implementation of the mitigation measures identified throughout this EIR. Wastewater treatment services would be provided by the EVMWD, which has existing and projected capacity to serve existing and planned development within its service area, including the proposed Project. Thus, the Project would not result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Additionally, the Project would not result in a determination by the EVMWD that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitment. Additionally, the Project would construct two	Less than Significant	**CRDR 4.18-1** The Project shall comply with the provisions of Lake Elsinore Municipal Code Title 14, Chapter 14.12 (Construction and Demolition Waste Management), which requires the preparation and implementation of a Waste Recycling Program in order to verify Project-level compliance with the provisions of Assembly Bill 341. **CRDR 4.18-2** The Project shall comply with Lake Elsinore Municipal Code Title 16, Chapter 16.34, Section 16.34.040 (Requirements for Building Permit Issuance), which requires that prior to the issuance of a building permit, utilities such as water and sewer, when requiring extensions to serve any parcel to be developed, shall be constructed by the owner's licensed contractor and that parcels shall be deemed served by City water and sewer if the distance in feet from the closest property line to the facility to be extended shall be 200 times the number of lots	Project Applicant, Project Construction Manager/ RCDWR, Planning Division Project Applicant/ Building & Safety Division, Elsinore Valley Municipal Water District (EVMWD)	During all Project construction and demolition activities Prior to issuance of building permits

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
detention basins on site and associated drainage infrastructure, although there are no impacts to the environment that would result that are not already addressed throughout this EIR. Likewise, construction of the Project's electrical, natural gas, and telecommunications facilities are inherent to the Project's construction phase, and there are no impacts associated with these facilities that have not already been addressed by this EIR. Therefore, impacts would be less than significant.		to be developed. **CRDR 4.18-3** The Project shall comply with Lake Elsinore Municipal Code Title 16, Chapter 16.52 (Improvements – Water Facilities), which requires that all required water storage and distribution facilities shall be installed by the land divider to serve each lot within the land division and shall be of such size and design to adequately satisfy the domestic and fire demands, and further requires that all water facilities shall be installed in accordance with City standards.	Project Applicant/ Building & Safety Division, EVMWD	Prior to issuance of occupancy permits
Threshold b): The UWMP bases its growth assumptions, in part, based on the land use designations of General Plans within the EVMWD's service area, and the proposed Project would generate substantially less demand for potable water than development of the site with commercial uses, as assumed in the UWMP. Because the EVMWD projects that it will have sufficient water supplies even during single and multiple dry years to meet the projected demand within its district through year 2040, and because the Project would result in less demand for potable water than is accounted for by the UWMP, it can be concluded that the EVMWD would have sufficient water supplies to serve the Project and other cumulative developments based on existing entitlements and resources. Additionally, the Project would not require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Therefore, impacts associated with the Project's water demand would be less than significant.	Less than Significant	**CRDR 4.18-4** The Project shall comply with Lake Elsinore Municipal Code Title 16, Chapter 16.52 (Improvements – Sanitary Sewer Facilities), which requires that all sewer facilities shall be installed in accordance with the City standards and that the sewer facilities shall be of such size and design to adequately serve each lot within the land division and all existing or future tributary areas. **CRDR 4.18-5** The Project shall comply with Lake Elsinore Municipal Code Title 19, Chapter 19.08 (Water Efficient Landscaping Requirements), which is intended to implement the requirements necessary to meet the State of California Efficiency in Landscaping Act and the California Code of Regulations Title 23, Division 2, Chapter 2.7. The purpose and intent of this Chapter is also to: ▪ establish provisions for water management practices and water waste prevention; ▪ establish a structure for planning, designing, installing, maintaining, and managing water efficient landscapes in new construction and rehabilitated projects; ▪ reduce the water demands from landscapes without a decline in landscape quality or quantity;	Project Applicant/ Building & Safety Division, EVMWD Project Applicant/ Building & Safety Division	Prior to issuance of occupancy permits Prior to issuance of occupancy permits
Threshold d): During both construction and operation of the Project, the amount of solid waste generated by the Project would represent a nominal increase in the existing available disposal capacity of the Perris TS/MRF, the El Sobrante	Less than Significant			

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/ Monitoring Parties	Implementation Stage
Landfill, the Badlands Landfill, and the Lamb Canyon Landfill. Thus, the Project would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs and impacts would be less than significant. **Threshold e):** Existing landfills that serve the Project site are required to comply with federal, state, and local statues and regulations related to solid waste. Compliance with federal, state, and local statutes and regulations would reduce the amount of solid waste generated by the Project and diverted to landfills, which in turn would aid in the extension of the life of affected disposal sites. The Project would comply with all applicable solid waste statutes and regulations; as such, impacts would be less than significant.	Less than Significant	▪ retain flexibility and encourage creativity through appropriate design; ▪ assure the attainment of water efficient landscape goals by requiring that landscapes not exceed a maximum water demand of 70 percent of their reference evapotranspiration (ETo) or any lower percentage as may be required by water purveyor policy or state legislation, whichever is stricter; ▪ eliminate water waste from overspray and/or runoff; and ▪ achieve water conservation by raising the public awareness of the need to conserve water through education and motivation to embrace an effective water demand management program. **CRDR 4.18-6** The Project shall comply with the provisions of Assembly Bill 1826 (AB 1826), which requires businesses that generate 8 cubic yards or more of organic waste per week to arrange for organic waste recycling services. The threshold amount of organic waste generated requiring compliance by businesses is reduced in subsequent years. Businesses subject to AB 1826 shall take at least one of the following actions in order to divert organic waste from disposal: ▪ Source separate organic material from all other recyclables and donate or self-haul to a permitted organic waste processing facility. ▪ Enter into a contract or work agreement with gardening or landscaping service provider or refuse hauler to ensure the waste generated from those services meet the requirements of AB 1826.	Project Applicant/ Code Enforcement Division	During the life of the Project

1.0 INTRODUCTION

1.1 PROJECT SCOPE

This Environmental Impact Report (EIR) addresses the proposed Nichols Ranch Specific Plan ("Project" or "proposed Project") located in the City of Lake Elsinore (City), California. The Project is located south of Nichols Road, east of Interstate 15 (I-15), west of El Toro Road/Wood Mesa Court, and north of the Temescal Canyon High School (TCHS). The Project Applicant proposes to develop an approximately 72.5-acre site with 168 single-family dwelling units on approximately 31.1 acres; 14.5 acres of commercial retail; parks and recreational uses on 8.7 acres; drainage basins on 5.5 acres; open space on 1.6 acres; floodways on 5.6 acres; and backbone roadways on 5.3 acres. Section 3.0, *Project Description*, provides a detailed description of the discretionary approvals required to implement the Project (i.e., General Plan Amendment, Specific Plan, Specific Plan Amendment, Tentative Tract Map, and Change of Zone), ministerial (i.e., non-discretionary) approvals that would be required after approval of the Project's discretionary actions (e.g. grading permits, building permits, etc.), as well as an overview of the Project's construction and operational characteristics.

1.2 PURPOSE AND LEGAL AUTHORITY

This EIR was prepared in full compliance with the California Environmental Quality Act (Public Resources Code § 21000 *et. seq.* ("CEQA"), as amended, and the CEQA State Guidelines (Title 14 California Code of Regulations § 15000 *et seq.*) ("CEQA Guidelines"), as most recently amended in December 2018. According to CEQA Guidelines § 15002(a), the basic purposes of CEQA are to:

1. Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.

2. Identify the ways that significant environmental impacts can be avoided or significantly reduced.

3. Prevent significant, avoidable significant impacts 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.

The public agency with the principal responsibility for carrying out or approving a project or the first public agency to make a discretionary decision to proceed with a proposed project should ordinarily act as the "Lead Agency" pursuant to CEQA Guidelines §§ 15050-15051. The City of Lake Elsinore is the Lead Agency for the proposed Project evaluated in this EIR.

Under CEQA, if a Lead Agency determines that there is substantial evidence in light of the whole record that a project may have a significant effect on the environment, the agency must prepare an Environmental Impact Report (EIR) (CEQA Guidelines § 15064(a)(1)). The purpose of an EIR is to inform public agency decision-makers and the public of the potentially significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project (CEQA Guidelines § 15121(a)).

This EIR is an informational document that represents the independent judgment of the City of Lake Elsinore (as the Lead Agency) for use by the City of Lake Elsinore decision-makers, responsible and trustee agencies, and members of the general public to evaluate the physical environmental effects that could result from constructing and operating the proposed Project. The City of Lake Elsinore has reviewed and, as necessary, directed revisions to all submitted drafts, technical studies, and reports supporting this EIR for consistency with City policies and requirements to ensure that this EIR reflects its own independent judgment. Governmental approvals requested from the City of Lake Elsinore by the Project Applicant include:

1. Planning Application No. 2017-29 (PA 2017-29);

2. General Plan Amendment No. 2018-01 (GPA 2018-01);

3. Specific Plan No. 2018-01 (SP 2018-01, "Nichols Ranch Specific Plan (NRSP)");

4. Specific Plan Amendment (SPA 2017-03; "Amendment No. 3.1 to the Alberhill Ranch Specific Plan");

5. Zone Change No. 2018-01 (ZC 2018-01); and

6. Tentative Tract Map No. 37305 (TTM 37305).

Other related discretionary and administrative actions that are required to construct and operate the Project described in this EIR are listed in Section 3.0, *Project Description*. This document complies with all criteria, standards, and procedures of CEQA §§ 21000 *et seq.* and CEQA Guidelines §§ 15000 *et seq.*

As a first step in the CEQA compliance process, an Initial Study was prepared by the City of Lake Elsinore 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. As stated in 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." This EIR represents the independent judgment of the City of Lake Elsinore (as the Lead Agency) and evaluates the physical environmental effects that could result from constructing and operating the proposed Project. Acting as Lead Agency, the City of Lake Elsinore will consider the following issues regarding the proposed Project: a) evaluation of this EIR to determine if the physical environmental impacts are adequately disclosed; b) assessment of the adequacy and feasibility of identified mitigation measures and the potential addition, modification to, or deletion of mitigation measures, standard conditions of approval, or Project design features; c) consideration of alternatives to the Project that would reduce or eliminate significant environmental effects of the Project; and, if necessary, d) consideration of Project benefits that override the Project's unavoidable and unmitigable significant effects on the environment.

Accordingly, and in conformance with CEQA Guidelines § 15121(a), the purposes of this 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.

Before taking action to approve the Project, the City of Lake Elsinore (serving as the Lead Agency) has the obligation to: (1) ensure 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 Lake Elsinore's independent judgment; (4) ensure that all significant effects on the environment are avoided 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 §§ 15090-15093).

The roles and responsibilities of the City of Lake Elsinore Planning Commission and City Council for Project-related approvals are as follows.

The Planning Commission: The Planning Commission will recommend to the City Council regarding if the following applications should be approved, modified, or denied: Planning Application No. 2017-29; General Plan Amendment No. 2018-01, Specific Plan No. 2018-01, Specific Plan Amendment No. 2017-03, Zone Change No. 2018-01, and Tentative Tract Map No. 37305, and will recommend to the City Council whether to certify the Final EIR (EIR) with or without modifications.

The City Council: The City Council will decide whether to approve, modify, or deny Planning Application No. 2017-29; General Plan Amendment No. 2018-01, Specific Plan No. 2018-01, Specific Plan Amendment No. 2017-03, Zone Change No. 2018-01, and Tentative Tract Map No. 37305. Project-related approvals will be subject to noticed, public hearings held before the City Council, which will include the information contained in the EIR, and the associated administrative record. Upon approval or conditional approval of the Project and certification of this EIR by the City Council, the City would conduct administrative level reviews and grant the permits and approvals needed to implement the Project.

This EIR and all supporting technical appendices are available at the City of Lake Elsinore Planning Division, 130 South Main Street, Lake Elsinore, CA 92530 during the City's regular business hours, or can be requested in electronic form by contacting the City Planning Division.

1.3 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 Nichols Ranch Specific Plan Project, as proposed, and all of the activities associated with its implementation including planning, construction, and ongoing operations. The Project site consists of an approximately 72.5-acre property located south of Nichols Road, east of I-15, west of El Toro Road/Wood Mesa Court, and north of TCHS. The Project proposes to establish a new specific plan, the Nichols Ranch Specific Plan (NRSP) that would apply to the 72.5-acre Project site.

The Project Applicant proposes the following discretionary actions, which are under consideration by the City of Lake Elsinore; these actions are considered "discretionary" because the City of Lake Elsinore Planning Commission and/or City Council would have the authority to approve, modify, or deny the Project Applicant's development proposal:

- **General Plan Amendment No. 2018-01 (GPA 2018-01)** proposes to amend the City of Lake Elsinore General Plan land use designation that applies to the southern 27.1 acres of the Project site from "General Commercial" to "Specific Plan." With adoption of GPA 2018-01, land use and development on the Project site would be regulated by the NRSP.
- **Specific Plan No. 2018-01 (SP 2018-01; "Nichols Ranch Specific Plan")** includes a land use plan that identifies 15 separate planning areas and provides development standards and design guidelines for architectural design and landscape architecture for each of the proposed land uses. The proposed land uses include 168 single-family dwelling units; 14.5 acres of general commercial that would accommodate a 130-room hotel, 6,000 s.f. of fast-food restaurant uses with drive-through window use, 5,500 s.f. of fast-food restaurant uses without drive-through window use, 9,400 s.f. of sit-down restaurant uses, 4,400 s.f. of commercial retail uses, an 8,000 s.f. health and fitness club, a gas station (including a market and car wash) with 16 fueling stations, and 43,000 s.f. of office uses; two (2) recreational parks on 8.7 acres; 1.6 acres of open space; 5.5 acres for drainage basins; floodways on 5.6 acres; and 5.3 acres of backbone roadways.
- **Specific Plan Amendment No. 2017-03 (SPA 2017-03)** proposes Amendment No. 3.1 to the Alberhill Ranch Specific Plan, which would remove the northern 45.4 acres of the Project site that are currently located within the Alberhill Ranch Specific Plan. With approval of the Project, development of the northern 45.4 acres of the Project site would be regulated by the Nichols Ranch Specific Plan (NRSP) instead of by the Alberhill Ranch Specific Plan.
- **Zone Change No. 2018-01 (ZC 2018-01)** proposes to change the zoning designation on the southern 27.1 acres of the Project site from "Commercial Mixed Use (CMU)" to "Nichols Ranch Specific Plan." ZC 2018-01 also would change the zoning designation of the northern 45.4 acres of the Project site from "Alberhill Ranch Specific Plan" to "Nichols Ranch Specific Plan." Additionally, ZC 2018-01 would establish allowable uses and development standards for the 72.5-acre site.
- **Tentative Tract Map No. 37305 (TTM 37305)** proposes to subdivide an approximately 72.5-acre site to implement the following land uses proposed by the NRSP: 168 residential lots on approximately 22.74 acres; a commercial retail lot on 14.43 acres; a sewer lift station lot on 0.13 acre; a park site lot on 6.49 acres; two (2) water quality/detention basin lots on 5.45 acres; nine (9) landscape lots on 1.45 acres; three (3) open space/landscape lots on 3.04 acres; two (2) open space lots on 6.49 acres; and public streets on 12.28 acres. TTM 37305 also identifies cross-sections for Nichols Road as well as internal roadways and identifies the improvements that would be constructed as part of the Project. These circulation improvements include the realignment and construction of a segment of Nichols Road (off-site) along the Project's frontage, construction of the western half of Wood Mesa Court (on-site), a bridge over Stovepipe Creek (on site), and on-site local roadways. TTM 37305 also would allow for the installation of on-site infrastructure improvements, such as water, sewer, and storm drain lines.

Provided below is a list of known discretionary and ministerial actions needed to implement the proposed Project. The EIR covers all federal, State, and local government approvals, which may be needed to construct or implement the Project, whether explicitly noted below or not.

❑ City of Lake Elsinore Planning Commission

1. Recommendation to the City Council regarding certification of this EIR.
2. Recommendation to the City Council regarding adoption of GPA 2018-01 by ordinance.
3. Recommendation to the City Council regarding adoption of SP 2018-01 by ordinance.
4. Recommendation to the City Council regarding adoption of SPA 2017-03 by ordinance.
5. Recommendation to the City Council regarding approval of ZC 2018-01 by ordinance.
6. Recommendation to the City Council regarding approval of TTM 37305 by resolution.

❑ City of Lake Elsinore City Council

1. Certify this EIR and make appropriate CEQA findings.
2. Adoption of GPA 2018-01 by ordinance.
3. Adoption of SP 2018-01 by ordinance.
4. Adoption of SPA 2017-03 by ordinance.
5. Approval of ZC 2018-01 by ordinance.
6. Approval of TTM 37305 by resolution.

❑ Subsequent Project Approvals

Subsequent approvals associated with the proposed Project and covered by this EIR may include, but are not limited to, the following:

1. Design Reviews and/or conditional use permits by the City of Lake Elsinore approving development of specific uses permitted or conditionally permitted by the approved zoning.
2. Tentative map(s) (including tentative map revisions) and/or final maps by the City of Lake Elsinore, to allow implementation of the Specific Plan.
3. Grading permits, road improvements, and drainage improvements by the City of Lake Elsinore and Riverside County Flood Control and Water Conservation District (RCFCWCD), to allow implementation of the Project.
4. Water and sewer system approvals by the Elsinore Valley Municipal Water District (EVMWD) to construct the necessary infrastructure to provide domestic and reclaimed water service.
5. National Pollutant Discharge Elimination System (NPDES) Permit and Clean Water Act Section 401 Water Quality Certification and/or Report of Waste Discharge issued by the Regional Water Quality

Control Board regarding water quality and the prevention of siltation, erosion, or water quality degradation.

6. Encroachment permits by the City to allow access within City rights-of-way, for construction of various roadway/circulation and utility improvements.
7. Clean Water Act Section 404 permits by the U.S. Army Corps of Engineers (ACOE) for impacts to waters of the United States.
8. Clean Water Act Section 401 permits by the Regional Water Quality Control Board (RWQCB) for impacts to jurisdictional waters.
9. 1602 Streambed Alteration permit pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code for impacts to California Department of Fish and Wildlife (CDFW) jurisdictional areas.
10. Conditional Letter of Map Revision (CLOMR) and Final Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA) for minor revisions to the flood zones on site.

1.4 RESPONSIBLE AND TRUSTEE AGENCIES

CEQA § 21104 requires that all EIRs be reviewed by 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.

The CEQA Guidelines require that the applicable Responsible and Trustee Agencies review EIRs. For the purposes of the proposed Project, the Santa Ana Regional Water Quality Control Board (RWQCB), Federal Emergency Management Agency (FEMA), ~~and~~ Riverside County Flood Control and Water Conservation District (RCFCWCD), and South Coast Air Quality Management District (SCAQMD) are Responsible Agencies and the California Department of Fish and Wildlife (CDFW) is a Trustee Agency.

1.5 CEQA PROCESS OVERVIEW

The CEQA (Public Resources Code, §§ 21000- 21177) requires that all public agencies within the State of California, having land use approval over project activities that have the potential to affect the quality of the environment, shall regulate such activities so that impacts to the environment can be prevented to the extent feasible. Such activity is reviewed and monitored through the CEQA process, as provided in the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, §§ 15000-15387). CEQA distinguishes varied levels of documentation and public review based on a project's anticipated level of effect on the environment.

When it is determined through preliminary review that a project may likely have one or more significant effects upon the environment, then an EIR must be prepared. The "scope" of the EIR may be determined through preparation of an Initial Study and a public scoping process. The EIR should consider both the potential

project-specific (direct and indirect) and cumulative environmental impacts that could result from the implementation of the proposed project.

Pursuant to CEQA Guidelines § 15121, EIRs are primarily informational documents intended to inform the City decision-makers and the general public of the potentially significant effects of the proposed Project. The EIR should disclose all known potentially significant impacts; identify feasible means to minimize or mitigate those effects; and, consider a number of feasible alternatives to the project that might further reduce significant impacts while still attaining the project objectives. The decision-makers must consider the information in an EIR before taking action on the proposed Project. The EIR may constitute substantial evidence in the record to support the agency's action on the Project.

The EIR is prepared by or under the direction of the Lead Agency, which for the proposed Project is the City of Lake Elsinore. The City of Lake Elsinore is the public agency that has the primary responsibility for approving or carrying out the Project. Further, Responsible and Trustee Agencies, which are public agencies that have a level of discretionary approval over some component of the proposed Project, may rely upon the EIR prepared by the City of Lake Elsinore.

An EIR is prepared in two key stages. First, a Draft EIR is prepared and distributed for public and agency review. Once comments on the Draft EIR are received, responses to those comments and any additional relevant project information are prepared and compiled in a Final EIR. Both of these documents (i.e., the Draft EIR and the Final EIR), along with any related technical appendices, represent the complete record of the EIR. Throughout this document, the terms Final EIR or Draft EIR may be used interchangeably since both are part of the ultimate EIR record; however, "Draft EIR" may be used specifically when referring to information provided specifically in the volume made available for the CEQA-required 45-day public review period.

In accordance with CEQA Guidelines § 15087, this Draft EIR will be made available for review by the public and public agencies for a minimum period of 45 days to provide comments "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (CEQA Guidelines § 152049(a)). Responses to written comments received during the public review period will be included in the Final EIR. During the decision-making process, the Project and its design features, objectives, merits, environmental consequences, and socioeconomic factors, among other information contained in the Project's administrative record will be considered by City of Lake Elsinore decision-makers. If the Final EIR is certified and the Project approved, the City of Lake Elsinore and other public agencies with permitting authority over all, or portions, of the Project would be able to rely on the Final EIR as part of their permitting processes to evaluate the environmental effects of the Project as they pertain to the approval or denial of applicable permits.

1.6 EIR Scope, Format, and Content

1.6.1 EIR Scope

As a first step in complying with the procedural requirements of CEQA, an Initial Study was prepared by the City of Lake Elsinore 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 Governor's Office of Planning and Research (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 Responsible Agencies, Trustee Agencies, and other interested parties on May 25, 2018 for a 30-day public review period which ended on June 24, 2018. The NOP was distributed for public review to solicit responses to help the City identify the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR. Comments on the NOP were received from the following individuals and agencies:

- California Department of Transportation (CalTrans)
- Agua Caliente Band of Cahuilla Indians
- Southern California Association of Governments (SCAG)
- South Coast Air Quality Management District (SCAQMD)
- Riverside County Transportation Commission (RCTC)
- Riverside County Transportation Department
- Ruth Elaine Olson (Local Resident)

In addition, a publicly-noticed EIR Scoping Meeting was held at the Lake Elsinore Cultural Arts Center, located at 183 North Main Street, Lake Elsinore, CA 92530 on June 14, 2018, which provided members of the general public an additional opportunity to comment on the scope of environmental issues to be addressed in this EIR.

As a result of the Initial Study and in consideration of all comments received by the City on the NOP, Section 4.0 of this EIR evaluates the Project's potential to cause adverse effects to the following environmental issue areas:

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

Growth Inducement is discussed in Section 5.0, *Other CEQA Considerations* of this EIR. The Initial Study, NOP, public review distribution list, and written comments received by the City during the NOP public review period are provided in *Technical Appendix A* to this EIR. Please refer to Table 1-1, *Summary of NOP Comments*~~*Summary of NOP Comments*~~ for summarized comments received during NOP public review period.

Substantive issues raised in response to the NOP are summarized below in Table 1-1. The purpose of this table is to present the primary environmental issues of concern raised by public agencies and the general public

during the NOP review period. The table is not intended to list every comment received by the City during the NOP review period. All applicable environmental comments received in responses to the NOP are addressed in this EIR.

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.

Table 1-1 Summary of NOP Comments

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT(S) ADDRESSED
California Department of Transportation (CalTrans)	July 26, 2018	- Caltrans requests a Traffic Impact Study (TIS) to accurately evaluate the extent of potential impacts to the operational characteristics of the existing highway. - Caltrans encourages the provision of multimodal transportation options, including new opportunities for bus service, to reduce regional traffic. - Caltrans notes that the Project would not result in adverse impacts to Caltrans facilities. - Caltrans requests a copy of the Storm Water Pollution Prevention Plan (SWPPP) for review. - Caltrans requests an encroachment permit, if necessary, for any work performed within the State right-of-way.	EIR Subsection 4.16, *Transportation and Traffic*
Agua Caliente Band of Cahuilla Indians	June 6, 2018	- Agua Caliente Band of Cahuilla Indians Tribal Historic Preservation Office's cultural registry indicates the Project is not located within the Tribe's Traditional Use Area and does not request further consultation regarding the Project's potential effects to cultural and/or tribal cultural resources.	EIR Subsection 4.17, *Tribal Cultural Resources*
Southern California Association of Governments (SCAG)	June 22, 2018	- SCAG recommends providing a consistency analysis with the *2016 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS)*. - SCAG requests an analysis of Project consistency with SCAG projected demographics and growth forecasts.	EIR Subsections 4.2, *Air Quality*, and 4.9, *Land Use and Planning*

Table 1-1 Summary of NOP Comments

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT(S) ADDRESSED
		- SCAG recommends review of the mitigation measures identified in the Final Program Environmental Impact Report for the *2016 RTP/SCS.*	
South Coast Air Quality Management District (SCAQMD)	June 5, 2018	- SCAQMD recommends the City use the CEQA Air Quality Handbook (1993) when preparing the air quality analysis. - SCAQMD recommends the City use the CalEEMod land use emissions software when preparing the air quality analysis. - SCAQMD indicates the City 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. - SCAQMD requests that the City quantify 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). - The SCAQMD also recommends the City perform a mobile source health risk assessment in the event the proposed Project generates or attracts vehicular trips. - In the event that significant adverse air quality impacts are identified in association with the Project, SCAQMD identifies consulting several sources for mitigation measures.	EIR Subsection 4.2, *Air Quality*
Riverside County Transportation Commission (RCTC)	June 20, 2018	- RCTC advises that future development along I-15 corridor is planned to develop two (2) express lanes on I-15 through the City of Lake Elsinore.	EIR Subsection 4.16, *Transportation and Traffic*

Table 1-1 Summary of NOP Comments

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT(S) ADDRESSED
Riverside County Transportation and Land Management Agency (RCTLMA), Transportation Department	June 25, 2018	- Riverside County requests the City and project proponent to coordinate improvements on Nichols Road with the County project, which includes the proposed curb-line of Nichols Road and secondary access on El Toro Road and Dexter Avenue. - Riverside County requests the Project's traffic study adhere to the County's Traffic Study Guidelines.	EIR Subsection 4.16, *Transportation and Traffic*
Ruth Elain Olson (Local Resident)	n.d.	- Requests the following improvements: • Wood Mesa Court put through to Nichols Road • Sidewalks constructed from Central to Nichols - Identifies potential Air Quality concerns for nearby elderly residents	EIR Subsection 4.2, *Air Quality*; and 4.16, *Transportation and Traffic*

1.6.2 CONTENT AND ORGANIZATION OF THIS EIR

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, Section 21000 *et. seq.* and California Code of Regulations, Title 14, Chapter 5). Additionally, on December 28, 2018, the Office of Administrative Law (OAL) approved updates to the CEQA Guidelines, which among other changes resulted in revisions to Appendix G to the CEQA Guidelines, including changes to thresholds of significance and issues requiring analysis. This EIR incorporates revisions to the CEQA Guidelines and Appendix G thereto. As summarized in Table 1-2, *Location of CEQA Required Topics*~~*Location of CEQA Required Topics*~~, this EIR addresses all of the substantive requirements of CEQA, as implemented through the updated CEQA Guidelines. The issue of energy, which was added to Appendix G, is evaluated in EIR Subsection 4.4. Additionally, the issue of wildfire, which also was added as a new topic to Appendix G, is evaluated as part of EIR Subsection 4.7, *Hazards and Hazardous Materials*, while the issue of paleontological resources and unique geologic features is addressed in EIR Subsection 4.12, *Paleontological Resources*.

Table 1-2 Location of CEQA Required Topics

CEQA REQUIRED TOPIC	CEQA GUIDELINES REFERENCE	LOCATION IN THIS DEIR
Table of Contents	§ 15122	Table of Contents
Summary	§ 15123	Section S.0
Project Description	§ 15124	Section 3.0

CEQA Required Topic	CEQA Guidelines Reference	Location in this DEIR
Environmental Setting	§ 15125	Section 2.0
Consideration and Discussion of Environmental Impacts	§ 15126	Section 4.0 & Section 6.0
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
Analysis of the Project's Energy Conservation Measures	§ 151265(c), Appendix F	Subsection 4.4
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 5.4
Organizations and Persons Consulted	§ 15129	Section 7.0 & Technical Appendices
Discussion of Cumulative Impacts	§ 15130	Section 4.0
Wildfire Hazards	Appendix G, Subsection XX	Subsection 4.7
Paleontological Resources and Unique Geologic Features	Appendix G, Subsection VII	Subsection 4.12

In accordance with the CEQA Statutes and the 2018 update to the CEQA Guidelines, this EIR is organized in the following manner:

- **Section S.0, Executive Summary,** provides an overview of the EIR document and CEQA process. The Project, including its objectives, is described, and the location and regional setting of the Project

site is documented. In addition, the Executive Summary discloses that there are no potential areas of controversy related to the Project, including those issues identified by other agencies and the public, and identifies potential alternatives to the proposed Project that would reduce or avoid significant impacts, as required by CEQA. Finally, the Executive Summary provides a summary of the Project's impacts, mitigation measures, and conclusions, in a table that forms the basis of the EIR's Mitigation, Monitoring and Reporting Program.

- **Section 1.0, Introduction,** provides introductory information about the CEQA process and the responsibilities of the City of Lake Elsinore, serving as the Lead Agency for this EIR; a brief description of the Project; the purpose of this EIR; applications proposed by the Project Applicant that would require discretionary City approvals; permits and approvals required by other agencies; and an overview of the EIR format and content.

- **Section 2.0, Environmental Setting,** describes the environmental setting, including an overview of the regional and local setting, and provides 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 on May 25, 2018. The setting discussion also addresses the relevant regional planning documents that apply to the Project site and vicinity.

- **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. This section provides a detailed description of the Project, including its purpose and main objectives; design features; landscaping; site drainage; utilities; grading and construction characteristics; and operational characteristics expected over the Project's lifetime. In addition, the discretionary actions required of the City of Lake Elsinore and other government agencies to implement the Project are discussed.

- **Section 4.0, Environmental Analysis,** provides an analysis of the potential direct, indirect, and cumulative impacts that may occur from implementing the proposed Project. The topics analyzed in this section include the topics summarized above under Section 1.6.1. Topics that were found to have no potential of being significantly impacted as part of the scoping process are discussed in Section 5.0, *Other CEQA Considerations*. 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 describe 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 implementing the proposed Project. Impacts are evaluated on a direct, indirect, and cumulative basis. Direct impacts are those that would occur directly as a result of the proposed Project. Indirect impacts represent secondary effects that would result from Project implementation.

Cumulative effects are defined in CEQA Guidelines § 15355 as "…two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."

The analyses in Section 4.0 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 are 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 where feasible. Mitigation measures must be fully enforceable, have an essential nexus to a legitimate governmental interest, and be "roughly proportional" to the impacts of the Project. The discussion then indicates whether the identified mitigation measures (if any feasible measures are identified) would reduce impacts to below a level of significance. In most cases, implementation of the mitigation measures would reduce the adverse environmental impacts 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 (SOC) would need to be adopted by the City of Lake Elsinore pursuant to CEQA Guidelines § 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 the preparation of this EIR.

- **Section 6.0, Project Alternatives,** describes and evaluates alternatives to the proposed Project that could reduce or avoid the Project's adverse environmental effects. CEQA does not require an EIR to consider every conceivable alternative to the Project but rather to consider a reasonable range of alternatives that will foster informed decision making and public participation. A range of four 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 during preparation of this EIR. Section 7.0 also lists the persons who authored or participated in preparing this EIR.

CEQA requires that an EIR contain, at a minimum, certain specified content. Table 1-2, *Location of CEQA Required Topics*~~*Location of CEQA Required Topics*~~, provides a quick reference in locating the CEQA-required sections within this document.

1.6.3 Use of this EIR

This EIR will be made available for review by the public and public agencies for a minimum period of 45 days to provide comments "on the sufficiency of the document in identifying and analyzing the possible impacts on

the environment and ways in which the significant effects of the project might be avoided or mitigated" (CEQA Guidelines § 152049(a)). Responses to written comments received during the public review period will be included in the Final EIR. During the decision-making process, the Project and its design features, objectives, merits, environmental consequences, and socioeconomic factors, among other information contained in the Project's administrative record, will be considered by Lake Elsinore decision-makers. If the Final EIR is certified and the Project approved, other public agencies with permitting authority over all, or portions, of the Project will be able to use the Final EIR as part of their permitting processes to evaluate the environmental effects of the Project as they pertain to the approval or denial of applicable permits.

1.7 Issues to be Resolved by the Decision-Making Body

The primary issues to be resolved by the decision-making body for the proposed Project involves the Project's significant and unavoidable impacts in the issue areas of air quality; biological resources; and transportation and traffic. These issues are addressed in EIR Subsections 4.1, 4.3, and 4.16, respectively. The City of Lake Elsinore City Council will need to evaluate whether the mitigation measures proposed to reduce the Project's unavoidable impacts adequately reduce Project impacts to the maximum feasible extent. The City Council also will make a determination as to whether the Project's benefits outweigh these adverse environmental effects in support of adopting a Statement of Overriding Considerations pursuant to CEQA Guidelines § 15093. Finally, the City Council will decide whether to approve one of the Project alternatives in lieu of the proposed Project, if it is determined that one of the alternatives is feasible and its approval would serve to substantially reduce or avoid significant environmental impacts.

1.8 Incorporation by Reference

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 "[p]lacement of highly technical and specialized analysis and data in the body of an EIR shall be avoided through the inclusion of supporting information and analyses as appendices to the main body of the EIR." 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." The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of this 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.

This EIR relies on a number of Project-specific technical appendices that are bound separately as Technical Appendices. The Technical Appendices are available for review at the City of Lake Elsinore Planning Division, 130 South Main Street, Lake Elsinore, CA 92530, during the City's regular business hours, or can be requested in electronic form by contacting the City Planning Division. The individual technical studies, reports, and supporting documentation that comprise the Technical Appendices are as follows:

A: Notice of Preparation, and Written Comments on the NOP
B: Air Quality Impact Analysis

C: Biological Technical Report
D: Geotechnical Report
E: Greenhouse Gas Emissions Report
F: Phase I Environmental Site Assessment
G: Fire Protection Plan
H: Cultural Resources Report
I1: Drainage Study
I2: Water Quality Management Plan
J: Noise Study
K: Paleontological Resources Assessment
L: Traffic Impact Analysis
M: Written Correspondence
N1: Water System Analysis
N2: Sewer System Evaluation

Other reference sources that are incorporated into this EIR by reference are listed in Section 7.0, *References*. In most cases, documents or websites not included in the EIR's Technical Appendices are cited by a link to the online location where the document/website can be viewed. References relied upon by this EIR will be available for public review during the CEQA-required public review period of the EIR.

2.0 Environmental Setting

2.1 Regional Setting and Location

The Project site is located in the northeastern portion of the City of Lake Elsinore, California. Lake Elsinore is located within Western Riverside County, which abuts San Bernardino County to the northeast, Orange County to the west, San Diego to the south, and Los Angeles County to the northwest. Figure 2-1, *Regional Map*, depicts the Project site's location within the regional vicinity. Riverside County is located in an urbanized area of southern California commonly referred to as the Inland Empire. The Inland Empire is an approximately 28,000 square mile region comprising Riverside County, San Bernardino County, and the eastern tip of Los Angeles County. The Southern Association of Governments (SCAG) estimates that the SCAG region will grow to 22 million people by the year 2040 – an increase of nearly four million people from the current population in the SCAG region (SCAG, 2016, p. 3). According to U.S. Census data, the 2010 population of Riverside County was 2,189,641 (USCB, 2016). SCAG forecast models predict that the population of Riverside County will grow to approximately 3,324,000 persons (an approximate 1.1 million persons increase) by the Year 2035 (SCAG, 2016).

As shown, the City of Lake Elsinore is located north of the City of Wildomar and west of the cities of Menifee and Canyon Lake, with areas to the north and west located within unincorporated Riverside County. Regional transportation facilities in the Project site's vicinity include I-15, abutting the Project site's western boundary; State Route 74 (SR-74), located approximately 0.6-mile to the south; Interstate 215 (I-215), located approximately 9.2 miles to the northeast; and State Route 91 (SR-91), located approximately 16.9 miles to the north.

2.2 Local Setting and Location

The Project site is located east of and adjacent to I-15, south of Nichols Road, and west of Wood Mesa Court/El Toro Road. Access to the site is currently provided by Nichols Road and El Toro Road/Wood Mesa Court. The Project site encompasses Assessor Parcel Number (APNs) 389-200-038, 389-210-008, 389-210-032, 389-210-034, and 389-210-036 as illustrated on Figure 2-2, *Vicinity Map*, and Figure 2-3, *USGS Topographical Map*. The Project site is located within Section 25, Township 5 South, and Range 5 West, and is located at 32° 42' 27" North Longitude and 117° 21' 1" West Latitude.

2.3 On-Site and Surrounding Land Uses and Development

As shown on Figure 2-4, *Aerial Photograph*, under existing conditions the Project site is mainly vacant. The northern 45.4 acres of the Project site are currently undergoing reclamation activities, pursuant to Amendment No. 2 to Reclamation Plan 2006-01 (Reclamation Plan 2006-01A2). Reclamation activities include grading and benching of slopes subject to mining, implementation of erosion control measures, and restoration of the site to a more natural appearance. Impacts associated with reclamation activities on the northern portions of the site were fully evaluated in a previously certified EIR for Surface Mining Permit No. 2015-01 and Amendment No. 2 to Reclamation Plan 2006-01A1 (SCH No. 2006051034), which is herein incorporated by reference pursuant to CEQA Guidelines § 15150 and is available for review at the City of Lake Elsinore

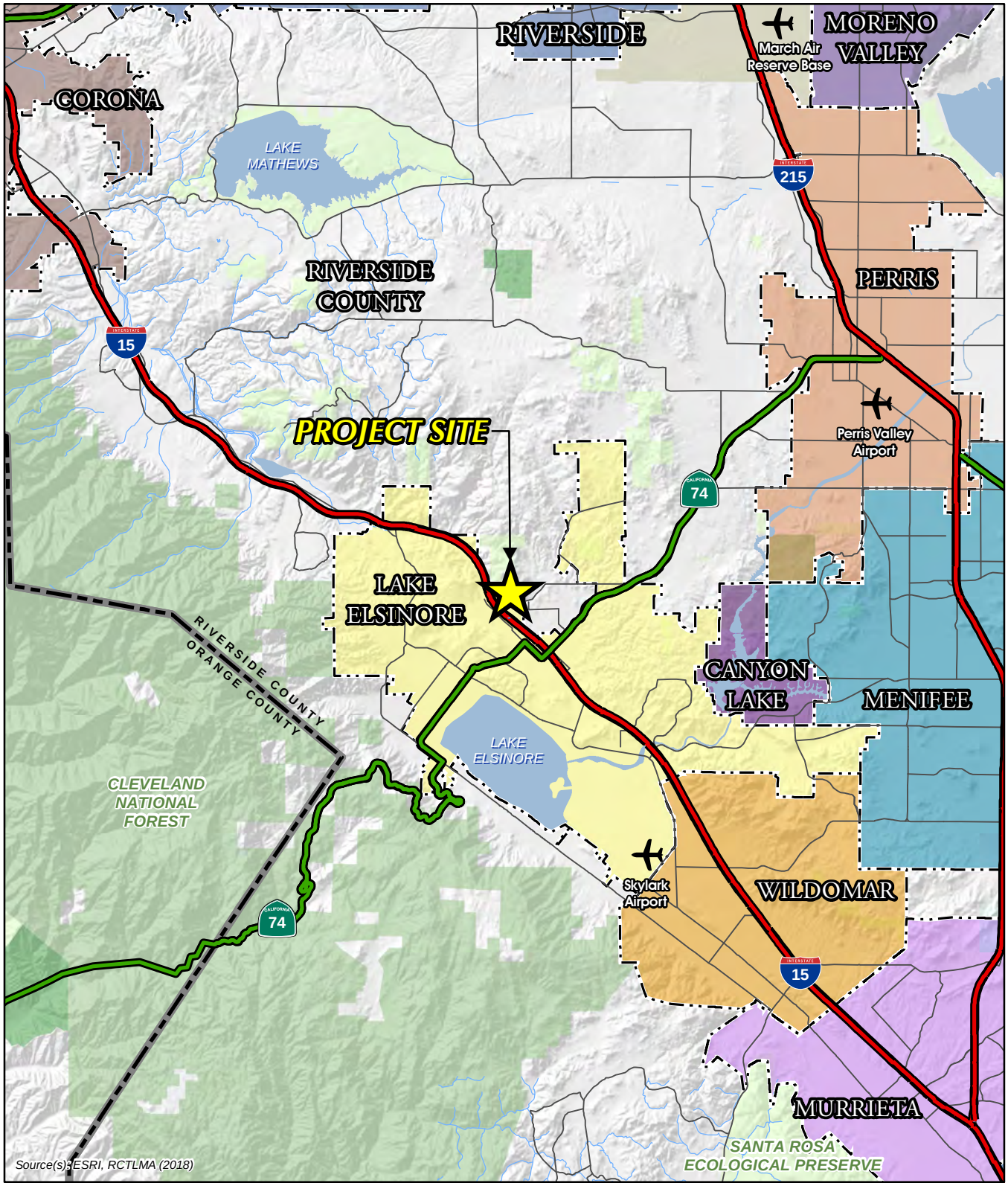


Figure 2-1

REGIONAL MAP

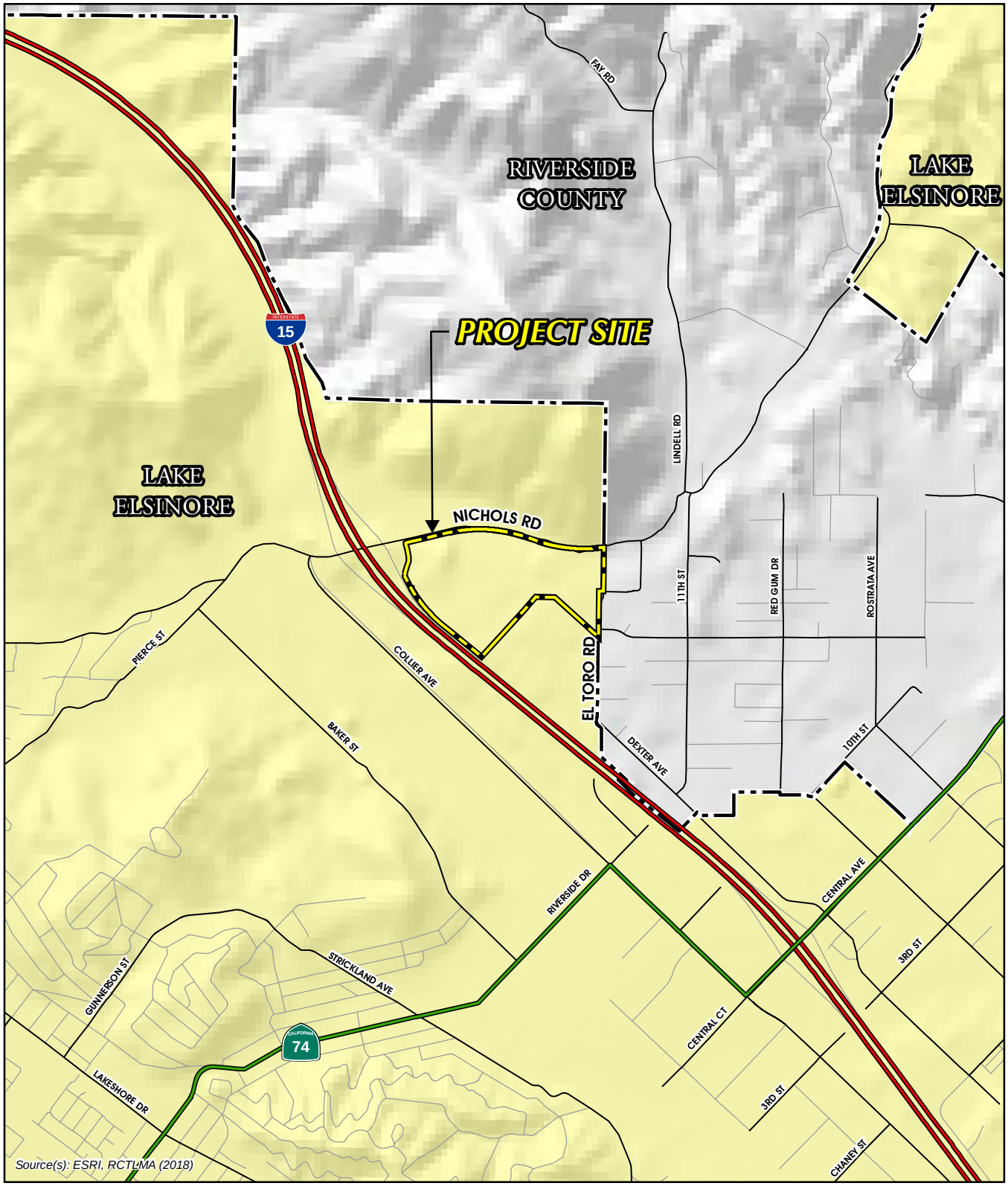


Figure 2-2

VICINITY MAP



Figure 2-3

0 500 1,000 2,000 Feet

USGS TOPOGRAPHICAL MAP



Figure 2-4

0 175 350 700 Feet

AERIAL PHOTOGRAPH

Community Development Department, located at 130 South Main Street in the City of Lake Elsinore. The southern 27.1 acres of the Project site is mainly vacant and undeveloped. The southwest portion of the site contains Stovepipe Creek, which traverses the site in a northeast-to-southwest orientation.

Surrounding land uses include vacant lands, residential, school, active mining operations, and commercial land uses. Immediately north of the Project site is Nichols Road, beyond which is an active mining operation and open space. To the west of the site is the I-15 freeway, beyond which is the Lake Elsinore Outlet Center. To the south of the site is the Temescal Canyon High School (TCHS). To the east of the site are single-family homes.

2.4 PLANNING CONTEXT

CEQA Guidelines § 15125(d) requires that EIRs identify the general plans and regional plans that are applicable to the Project under evaluation and recognize potential inconsistencies. Plans that are applicable to the Project evaluated herein are summarized below, with additional information provided in the applicable resource discussions in Section 4.0, *Environmental Analysis*.

2.4.1 CITY OF LAKE ELSINORE GENERAL PLAN

The City of Lake Elsinore's prevailing planning document is its General Plan, dated 2011. The General Plan contains elements on land use, transportation, park and recreational facilities, urban design, and housing, and provides policy direction for the City's 16 District Plans that cover specific, defined geographic areas within the City and its Sphere of Influence. Figure 2-5, *Existing General Plan Land Use Designations*, shows the land use designations assigned by the City of Lake Elsinore General Plan to the Project site and surrounding properties that are located within the City of Lake Elsinore. As shown, the City's General Plan designates the northern 45.4 acres of the Project site as "Specific Plan" (Alberhill Ranch Specific Plan, herein "ARSP") with an "Extractive Overlay." The Extractive Overlay provides for continued operations of extractive uses. The ARSP designates the northern 45.4 acres of the Project site for "Commercial – Specific Plan" land uses and allows for up to 380,000 s.f. of regional general commercial uses. The General Plan designates the southern 27.1 acres of the Project site as "General Commercial," which allow for retail, services, restaurants, professional and administrative offices, hotels and motels, mixed-use projects, public and quasi-public uses, and similar and compatible uses. As also shown on Figure 2-5, lands to the north of the Project site are designated as "Specific Plan;" areas to the west of the site are designated for "Public Institutional" and "Specific Plan" (Outlet Center Specific Plan) land uses; areas to the south are designated for "Public Institutional" land uses; and areas to the east, which are located within unincorporated Riverside County, are designated for "Low Density Residential" and "Hillside Residential" land uses. Refer to EIR Subsection 4.98, *Land Use and Planning*, for a more thorough discussion of the City's General Plan. (Lake Elsinore, 2011a, pp. 2-16 through 2-19 and Figure 2.1A; Lake Elsinore, 1997, p. 7)

2.4.2 ALBERHILL RANCH SPECIFIC PLAN

The 1,853.0-acre Alberhill Ranch Specific Plan (herein "ARSP") was adopted by the City of Lake Elsinore City Council on August 8, 1989, and includes a mix of residential, commercial, open space, recreational, and

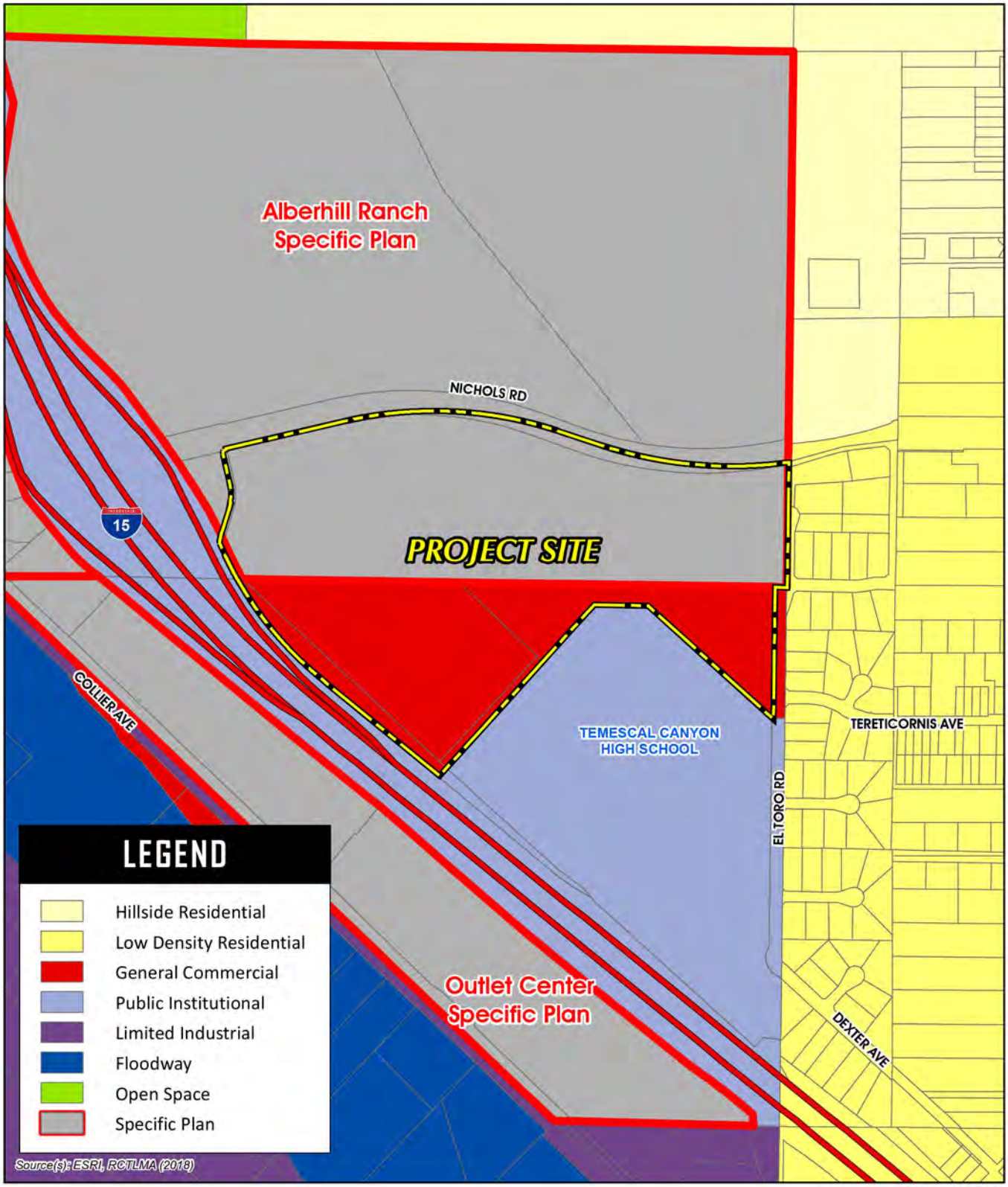


Figure 2-5

EXISTING GENERAL PLAN LAND USE DESIGNATIONS

school site land uses. Since the Specific Plan was adopted, it has been modified three (3) times. The currently-approved ARSP land use plan is depicted on Figure 2-6, *Existing Specific Plan Land Use Designations*. As shown, only the northern 45.4 acres of the Project are located within the ARSP and are designated as "Commercial – Specific Plan," which allows for up to 380,000 s.f. of regional general commercial uses.

2.4.3 City of Lake Elsinore Zoning Ordinance

The City of Lake Elsinore's Zoning Ordinance is intended to implement the City of Lake Elsinore's General Plan's land use plan. As shown on Figure 2-7, *Existing Zoning Designations*, the City's Zoning Ordinance designates the northern 45.4 acres of the Project site as "Alberhill Ranch Specific Plan," which pursuant to the ARSP allows for up to 380,000 s.f. regional general commercial uses. The southern 27.1 acres of the Project site are zoned for "Commercial Mixed Use (CMU)," which allows for "a mix of land uses in a compact, high quality, pedestrian-friendly, interactive pattern." (Lake Elsinore, 2014; Lake Elsinore, 2017, Chapter 17.134; Lake Elsinore, 1997, p. 7)

2.4.4 Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Plan (MSHCP) is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on conservation of species and their habitats in Western Riverside County. Only the southern 27.1 acres of the Project site is subject to the Western Riverside County MSHCP. Due to a Settlement Agreement and Memorandum of Understanding ("Agreement") between the County of Riverside and the prior owners of the northern 45.4 acres of the Project site, the northern 45.4 acres of the Project site are exempt from all provisions of the MSHCP (Riverside County, 2004). Nonetheless, proposed development of the northern 45.4 acres of the Project site is evaluated in this EIR to determine potential significant impacts due to potential conflicts with the MSHCP. In addition, the southern 27.1 acres of the Project site are subject to the MSHCP and occur within the northwestern portion of MSHCP Criteria Cell 4169. According to the MSHCP, conservation within Cell 4169 will range from 10%-20% of the Cell focusing in the southwestern portion of the Cell, indicating that the southern 27.1 acres of the Project site are not targeted for conservation by the MSHCP. Refer to EIR Subsection 4.3, *Biological Resources*, for a discussion of potential Project-related impacts to biological resources.

2.4.5 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

On April 7, 2016, the Southern California Association of Government's (SCAG) Regional Council adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. It outlines more than $556.5 billion in transportation system investments through 2040. The RTP/SCS was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. (SCAG, 2016)

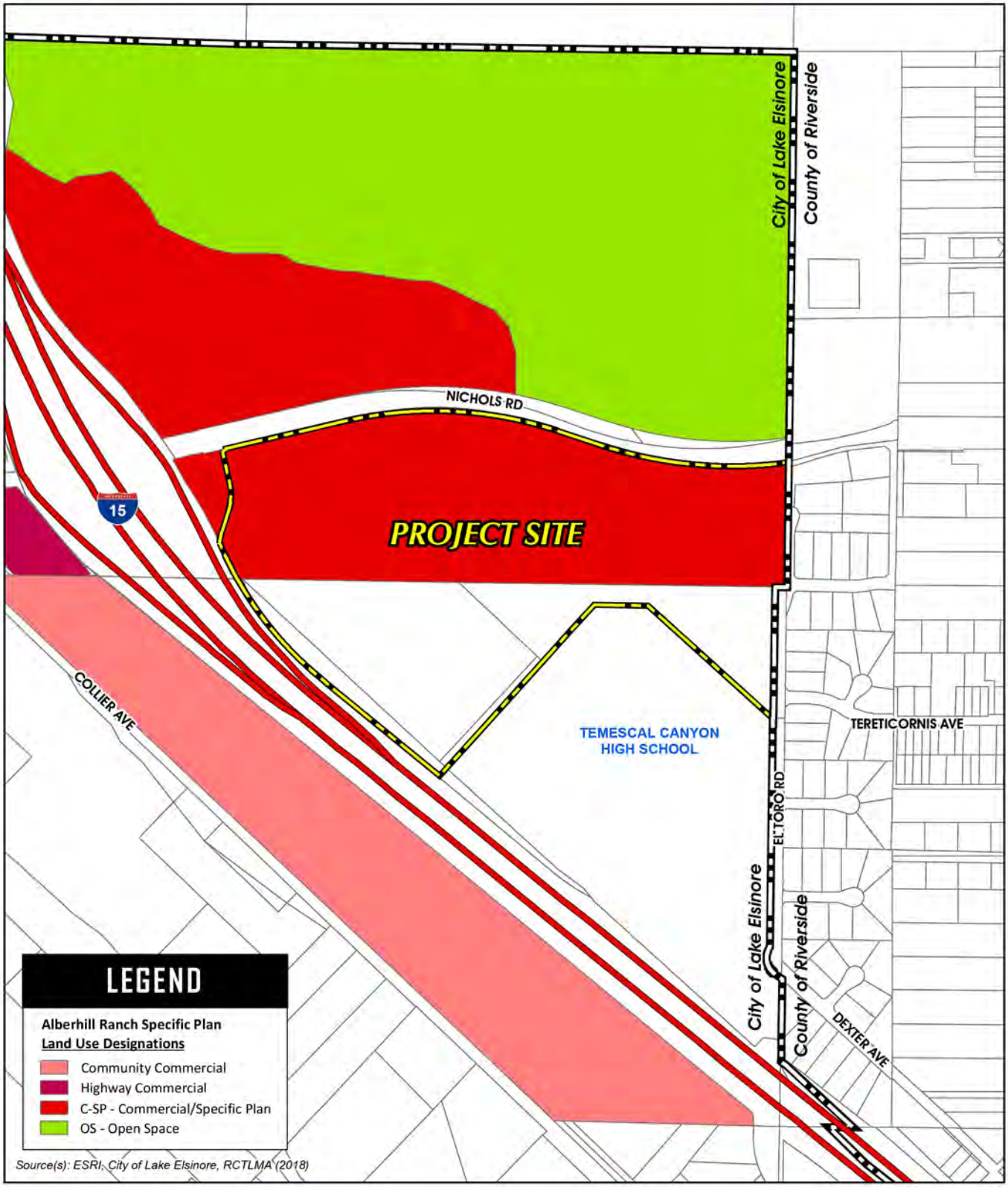


Figure 2-6

EXISTING SPECIFIC PLAN LAND USE DESIGNATIONS

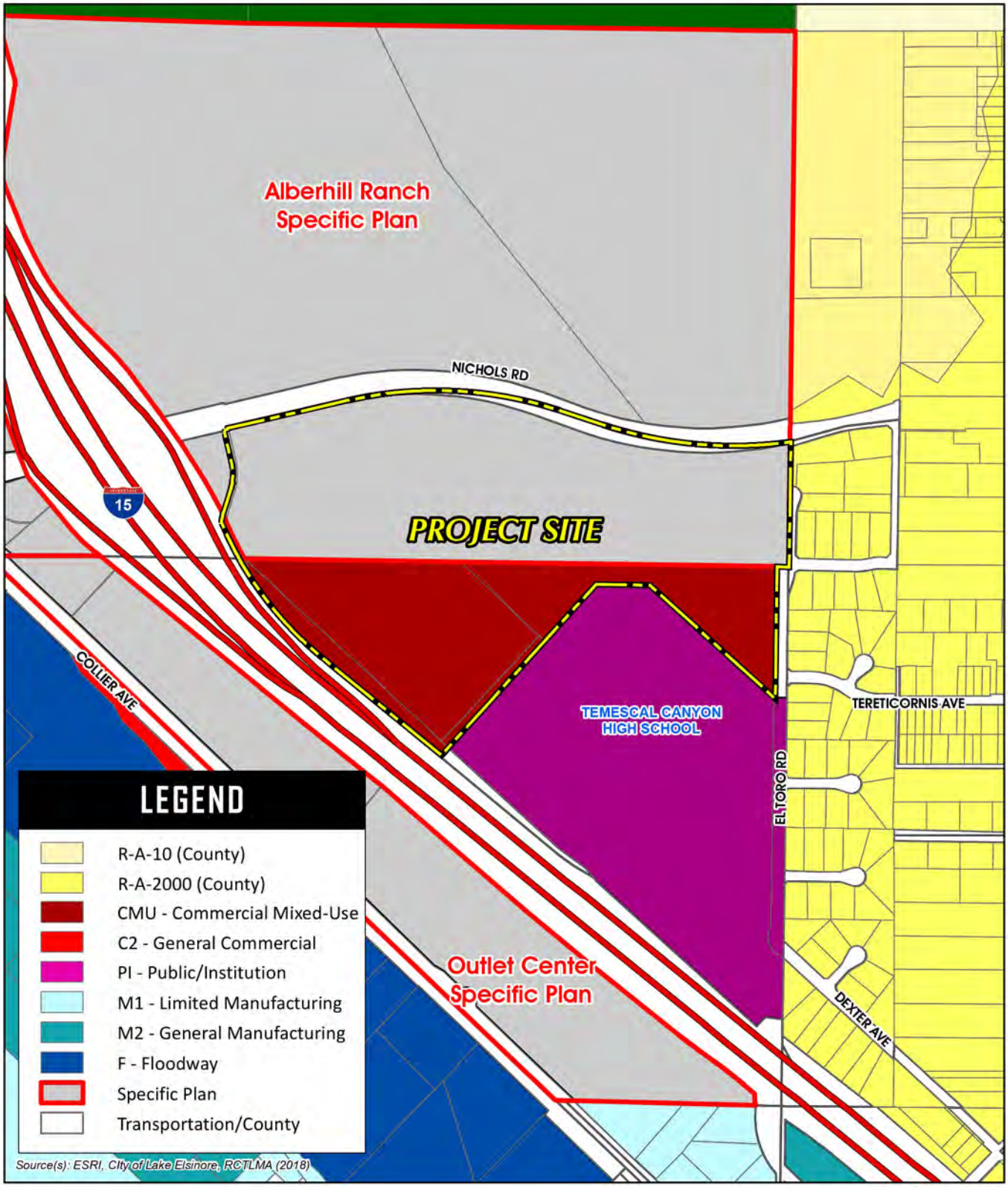


Figure 2-7

EXISTING ZONING DESIGNATIONS

2.4.6 South Coast Air Quality Management District Air Quality Management Plan (AQMP)

The South Coast Air Quality Management District (SCAQMD) adopted its most recent update to its Air Quality Management Plan in March 2017 (2016 AQMP). The 2016 AQMP seeks to achieve multiple goals in partnership with other entities promoting reductions in criteria pollutant, greenhouse gases, and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The most effective way to reduce air pollution impacts on the health of our nearly 17 million residents, including those in disproportionally impacted and environmental justice communities that are concentrated along our transportation corridors and goods movement facilities, is to reduce emissions from mobile sources, the principal contributor to our air quality challenges. For that reason, the SCAQMD worked closely engaged with the California Air Resources (CARB) and the U.S. EPA who have primary responsibility for these sources. The Plan recognized the critical importance of working with other agencies to develop new regulations, as well as secure funding and other incentives that encourage the accelerated transition of vehicles, buildings, and industrial facilities to cleaner technologies in a manner that benefits not only air quality, but also local businesses and the regional economy. These "win-win" scenarios will be key to implementation of this Plan with broad support from a wide range of stakeholders. The 2016 AQMP also includes transportation control measures developed by the Southern California Association of Governments (SCAG) from the 2016 Regional Transportation Plan/Sustainable Communities Strategy. Additionally, the 2016 AQMP includes the integrated strategies and measures needed to meet the National Ambient Air Quality Standards (NAAQS). The 2016 AQMP demonstrates attainment of the 1-hr and 8-hr ozone NAAQS as well as the latest 24-hr and annual $PM_{2.5}$ standards.

2.5 Existing Physical Site Conditions

For purposes of establishing the setting of an EIR, and pursuant to CEQA Guidelines § 15125, the physical condition of the environment as it existed at the time the EIR's NOP was released for public review normally is used to establish the existing conditions on the Project site. The NOP for this EIR was released for public review on May 25, 2018. Thus, for the southern 27.1 acres of the site that are not subject to reclamation activities, the site's physical environmental conditions ("existing conditions") are defined as those conditions that existed as of May 25, 2018. However, the northern 45.4 acres of the site will be subject to reclamation activities pursuant to the approved Reclamation Plan 2006-01A2. Pursuant to the requirements of the Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code Section 2710-2796), for sites that are subject to an approved reclamation plan, all reclamation activities must be completed prior to any new non-mining-related disturbance or development. Thus, for purposes of analysis within this EIR, the "existing condition" for the northern 45.4 acres of the site are those conditions that will exist upon completion of reclamation activities. The following subsections provide a description of the Project site's physical environmental condition ("existing conditions"). The site's existing (i.e., pre-reclamation) physical conditions are shown on Figure 2-4. More detailed information regarding the Project's site's environmental setting as it relates to a specific environmental issue area is provided in the various subsections of EIR Section 4.0, *Environmental Analysis*.

2.5.1 Land Use

Under existing conditions, the Project site is largely undeveloped and disturbed. The northern 45.4 acres of the Project site are currently undergoing reclamation activities, pursuant to Amendment No. 2 to Reclamation Plan 2006-01 (Reclamation Plan 2006-01A2). The southern 27.1 acres of the Project site are mainly vacant

and undeveloped. Additionally, the Project site is traversed by Stovepipe Creek, which generally crosses the site in a northeast-to-southwest orientation.

2.5.2 Topography

The topography of the Project site is relatively flat with elevations ranging from approximately 1,294 feet above mean sea level (amsl) in the southwestern portion of the site to approximately 1,370 feet amsl in the eastern portion of the site; however, following reclamation elevations on-site would range from approximately 1,294 to 1,323 feet amsl (Google Earth, 2016). Figure 2-3 depicts the Project site's topographic conditions.

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, the San Jacinto Mountains to the north and east, and San Diego County to the south. 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. 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. (Urban Crossroads, 2018a, p. 9)

Air quality within the SCAB is regulated by the South Coast Air Quality Management District (SCAQMD), and standards for air quality are documented in the SCAQMD's Air Quality Management Plan (AQMP), adopted in March 2017. (SCAQMD, 2017) The SCAQMD monitors levels of various criteria pollutants at 38 permanent monitoring stations and five single-pollutant source Lead (Pb) air monitoring sites throughout the air district. In 2015, the federal and State ambient air quality standards (NAAQS and CAAQS) were exceeded on one or more days for ozone, PM_{10}, and $PM_{2.5}$ at most monitoring locations. No areas of the SoCAB exceeded federal or State standards for NO_2, SO_2, CO, sulfates, or lead. (Urban Crossroads, 2018a, p. 14) Refer to EIR Subsections 4.2, *Air Quality*, and 4.5, *Greenhouse Gas Emissions*, for a more detailed discussion of the Project's site existing air quality and climate setting.

2.5.4 Biological Resources

As indicated above, the northern 45.4 acres of the Project site are undergoing reclamation activates pursuant to Reclamation Plan 2006-01A2 and is fully disturbed. The southern 27.1 acres of the site consist of relatively undisturbed land. Stovepipe Creek traverses the site in a northeast-southwest direction. Vegetation on the Project site includes non-native grassland, Riversidean sage scrub, disturbed Riversidean sage scrub, disturbed Riversidean sage scrub – *encelia* dominant, Riversidean alluvial fan sage scrub, ruderal, ornamental, open streambed, disturbed/developed, and ornamental vegetation. Based on biological surveys of the site and off-site improvement areas, only one sensitive plan species, Robinson's peppergrass, was observed just north of the Project site (north of Nichols Road); no other sensitive plant species were observed on site. Two special-

status animal species, coastal whiptail, and coast horned lizard, were observed at the Project site and both are species are California species of special concern. The coastal California gnatcatcher also was incidentally observed on site. Jurisdictional waters on site are limited to Stovepipe Creek and include 0.74 acres of Waters of the U.S. and 5.42 acres of Waters of the State. (VCS, 2018) Refer to EIR Subsection 4.3, *Biological Resources*, for a more detailed description of biological resources occurring on the Project site.

2.5.5 Cultural Resource Setting

From an archaeological perspective, regional prehistory within the Project area is defined by the Paleo- Indian Period (11,500 to 9,000 years ago), the Archaic Period (9,000 to 1,300 years ago), and the Late Prehistoric Period (approximately 1,300 years ago). Each of these periods in prehistory are discussed in EIR Subsection 4.7, *Historic and Archaeological Resources*. In summary, human habitation of Southern California dates back to approximately 11,500 years ago. Over a series of cultural periods, the area transitioned from a hunting and gathering society, to settlements of small groups of people, to large occupations near natural water sources, to formations of distinct ethnographic groups. The Late Prehistoric component in the area of western Riverside County was represented by the Luiseño with influences from the Gabrielino, and the Cahuilla Indians. (BFSA, 2018a, pp. 2.0-5 through 2.0-8) The Project site contains one (1) pre-historic resource site and one (1) historic resource site, which were determined not to be significant under CEQA. Refer to EIR Subsection 4.7, *Historic and Archaeological Resources*, and Subsection 4.16, *Tribal Cultural Resources*, for a more detailed discussion of the Project site's existing cultural resource and tribal cultural resource setting. (BFSA, 2018a, p. 5.0-1)

The Project site is not known to have historical significance to the region and does not contain any resources recognized by the National Register of Historic Places, California Registered Historic Landmarks Architecture, California Points of Historic Interest, or Riverside County Historical Landmarks (Riverside County, 2015b, Figure 4.9-2). Refer to EIR Subsection 4.7, *Historic and Archaeological Resources*, for a more detailed discussion of the Project site's existing cultural resource setting.

The Riverside County Land Information System (RCLIS) paleontological sensitivity map indicates the entire Project site has a "Low Potential/Sensitivity" to yield nonrenewable paleontological resources. (BFSA, 2018b, p. 2) Refer to EIR Subsection 4.11, *Paleontological Resources*, for a more detailed discussion of the site's paleontological context.

2.5.6 Geology and Soils

No active or inactive fault traces are known to traverse the site and no evidence of on-site faulting was observed during the investigation conducted for the Project site. This site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone or County of Riverside Fault Zone. The nearest active fault is the Elsinore Fault Zone located approximately 1.5 miles southwest from the Project site, and the San Jacinto Fault Zone, located approximately 18.5 miles northeast of the Project site. (RCIT, 2018; Lake Elsinore, 2011b, Figure 3.11-2) Similar to other properties throughout Southern California, the Project site is located within a seismically active region and is subject to ground shaking during seismic events.

A field exploration was conducted for the Project site, and the results determined the site subsurface materials consist of young alluvial deposits underlain by crystalline bedrock units including Mesozoic-age

metavolcanics. Specifically, the southern portion of the Project site is primarily underlain by silty sand, sand, sandy silt, and bedrock recovered as sandy gravel underlain by bedrock. (CHJ Consultants, 2018, p. 5) The northern portion of the Project site is undergoing reclamation in accordance with recommendations provided by CHJ Consultants in a previous report (CHJ Consultants, 2017). Refer to EIR Section 4.4, *Geology and Soils*, for a more detailed discussion of the Project's geological setting.

2.5.7 HYDROLOGY

The Project site is located in the Santa Ana River watershed, which drains an approximately 2,800-square-mile area and is the principal surface flow water body within the region. The Santa Ana River starts in Santa Ana Canyon in the southern San Bernardino Mountains and runs southwesterly across San Bernardino, Riverside, and Orange Counties, where it discharges into the Pacific Ocean at the City of Huntington Beach. The Project site and vicinity are within the Santa Ana Regional Water Quality Control Board (RWQCB). The Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Plan is the governing water quality plan for the region, which sets forth goals and objectives for protecting water quality within the region. (RWQCB, 2011)

Under existing conditions, the Project site and off-site areas tributary to the site comprise four separate drainage areas. Drainage A comprises 837.7 acres and includes a large area off-site to the north and northeast. Flows from Drainage A are conveyed through the site via Stovepipe Creek westerly towards an existing Caltrans 6'x14' RCB culvert. Drainage Area B is approximately 8.4 acres and comprises the southeastern portion of the site, with flows being conveyed to existing drainage facilities within El Toro Road. Drainage Area C encompasses the northwestern approximately 47.8 acres of the site and conveys flows towards the existing 24" Caltrans culverts along the Nichols Road/I-15 off-ramp. Drainage Area D encompasses 25.9 acres and occurs off-site, north of Nichols Road. Runoff from Drainage Area D is conveyed to existing drainage facilities within Nichols Road. (K&A, 2018a, p. 5)

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06065C2928G, dated August 28, 2008, the Project site is not within a mapped 100-year flood hazard area. The only portion of the Project site located within the 100-year flood hazard area is Stovepipe Creek, which traverses the Project site in a northeast-to-southeast orientation. Stovepipe Creek is located within 'Zone A' of the FEMA FIRM Map, which indicates that no base flood elevations have been determined, but that the area is within the special flood hazard areas subject to inundation by the 100-year flood. (FEMA, 2008)

Please refer to EIR Section 4.8, *Hydrology and Water Quality*, for additional discussion of the site's existing hydrologic conditions.

2.5.8 NOISE

Primary existing sources of noise in the Project site's vicinity include vehicle noise from I-15 and Nichols Road, both of which immediately abut the Project site. The background ambient noise levels in the Project area are characterized by transportation-related noise associated with the surrounding road network as well as active mining operations to the north of Nichols Road. Refer to EIR Subsection 4.10, *Noise*, for a more detailed discussion of the Project site's existing noise setting.

2.5.9 TRANSPORTATION

The major vehicular travel route in the Project area is Interstate 15 (I-15), located adjacent to the Project's western boundary. The Project site is bordered by Nichols Road to the north and El Toro Road/Wood Mesa Court to the east. Existing traffic on nearby roadways consists of both passenger vehicles and trucks accessing the TCHS as well as existing homes and businesses in the area.

There are currently no existing bus routes that serve the roadways within the study area in close proximity to the proposed Project. The closest transit lines run along the I-15 Freeway, Nichols Road to the west of the I-15 Freeway, Collier Avenue, Riverside Avenue (SR-74), and Central Avenue (SR-74). There is a regional trail planned along the east side of the I-15 Freeway and a community trail planned along Nichols Road within the site's immediate vicinity. Class II bike lanes are proposed for the portion of Nichols Road that abuts the Project site. (Urban Crossroads, 2018d, p. 51)

Refer to EIR Subsection 4.15, *Transportation and Traffic*, for a more detailed discussion of the Project's existing transportation setting.

2.5.10 UTILITIES AND SERVICE SYSTEMS

A. Water Service

Water service to the Project site is provided by the Elsinore Valley Municipal Water District (EVMWD). The EVMWD service area is composed of the Cities of Lake Elsinore and Canyon Lake, and portions of the City of Wildomar, Murrieta, and portions of unincorporated Riverside County and Orange counties. EVMWD's service area is divided into two divisions: the Elsinore Division and the Temescal Division. The Elsinore Division, in which the Project site is located, makes up the majority of the service area with approximately 42,700 accounts, encompassing an area of 96 square miles. (EVMWD, 2016, p. 3-2) EVMWD has three primary sources of potable water supply: (EVMWD, 2016, p. 6-1)

- Local groundwater pumped from District-owned wells (which accounts for approximately 33 percent of the supply from 1992-2013 years).
- Surface water from Canyon Lake Reservoir and treated by the Canyon Lake Water Treatment Plant (which accounts for approximately 10 percent of the supply from 1992-2013).
- Imported water purchased from Metropolitan Water District (MWD) through Western Municipal Water District (WMWD) (which accounts for approximately 57 percent of the supply from 1992-2013).

In addition, EVMWD has access to several additional water sources through its acquisition of the Temescal Water Company assets in 1989. These consist of groundwater from the Bunker Hill, Rialto-Colton, Riverside North, Bedford, Coldwater, and Lee Lake Basins, and surface water from Temescal Creek and several tributary creeks. (EVMWD, 2016, p. 6-1)

Existing potable water infrastructure in the Project area includes two existing reservoirs (El Toro 1 and El Toro 2), located 0.16 mile northeast of the Project site. 10- and 16-inch water lines convey potable water from the

reservoirs south within the El Toro Road right-of-way, which provides service to the residential community to the east of the Project site, the TCHS, and other areas to the south.

B. Sewer Service

Sewer service to the Project site also is provided by the EVMWD. Sewer flows from the Project site would be treated by the Regional Water Reclamation Facility (RWRF). The RWRF has an average flow capacity of 8.0 million gallons per day (MGD) and a peak flow capacity of 17.6 MGD. Treatment processes used in the RWRF include an influent lift station, headworks with bar screens and grit removal, oxidation ditches, clarifiers, filter influent lift stations, tertiary filters, ultraviolet (UV) disinfection, and biosolids dewatering. The wastewater effluent is treated with tertiary treatment and phosphorus removal to Title 22 requirements and then discharged to Temescal Wash and/or Lake Elsinore. Based on data provided by EVMWD, the annual average flow at the RWRF in 2015 was 6.5 mgd. EVMWD and Kennedy/Jenks consultants recently completed the Regional Wastewater Reclamation Facility Expansion Master Plan (Kennedy/Jenks, 2014), and the plant is planning to expand to 18.2 MGD by 2040. (EVMWD, 2016, pp. 6-16 and 6-17)

Existing sewer infrastructure in the Project area includes 8- to 12-inch sewer line within El Toro Road (south of Tereticornis Avenue) and 8- to 30-inch sewer lines within Collier Avenue. The sewer lines within El Toro Road convey flows southerly and across I-15 towards an existing 18-inch sewer main within Collier Avenue just south of the intersection with Riverside Drive. Flows within Collier Avenue are conveyed to an existing sewer lift station that is located in the southern portion of the Outlet Mall, along Collier Avenue. The sewer lift station conveys wastewater flows southerly via an existing 10-inch force main to the existing 18-inch gravity sewer located in Collier Avenue south of Riverside Drive.

C. Solid Waste Services

Solid waste collection services to the Project site would be provided by CR&R Waste Services under an exclusive franchise agreement with the City of Lake Elsinore (Lake Elsinore, 2017b). Solid waste in the Project area is disposed of at one of three landfill facilities in Riverside County: Badlands, Lamb Canyon, and/or El Sobrante.

D. Other Services

The Project site is located in the service territories of the Southern California Gas Company (natural gas) (CEC, 2015a), and Southern California Edison (electricity) (CEC, 2015b). Telephone service in the local area is provided by Verizon. Cable service in the area is provided by Time Warner, although there are alternative services available for the provision of cable and internet services.

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.

The 72.5-acre site that is the subject of this EIR ("Project site") is located in the northeastern portion of the City of Lake Elsinore. The Project site is located east of and adjacent to Interstate 15 (I-15), south of Nichols Road, west of Wood Mesa Court/El Toro Road, and north of the Temescal Canyon High School. The Project evaluated herein (Planning Application No. 2017-29 and related actions, the "Project") would involve development of the Project site with up to 168 residential homes on approximately 31.1 acres (5.1-5.8 dwelling units per acre); 14.5 acres of commercial uses, including a 130-room hotel, 6,000 s.f. of fast-food restaurant uses with drive-through window use, 5,500 s.f. of fast-food restaurant uses without drive-through window use, 9,400 s.f. of sit-down restaurant uses, 4,400 s.f. of commercial retail uses, an 8,000 s.f. health and fitness club, a gas station (including a market and car wash) with 16 fueling stations, and 43,000 s.f. of office uses; 8.3 acres of recreation uses; drainage basins on 5.5 acres; open space on 1.3 acres; and roadways on 5.3 acres. This EIR analyzes the physical effects associated with all components of the proposed Project, including planning, construction, and ongoing operation. The governmental approvals requested from the City of Lake Elsinore to implement the Project consist of the following:

1. Approval of Planning Application No. 2017-29;
2. Approval of General Plan Amendment No. 2018-01 (GPA 2018-01);
3. Adoption by Ordinance of Specific Plan No. 2018-01 (SP 2018-01);
4. Adoption by Ordinance of Specific Plan Amendment No. 2017-03 (SP 2017-03);
5. Approval of Zone Change No. 2018-01 (ZC 2018-01); and
6. Approval of Tentative Tract Map No. 37305 (TTM 37305).

The Project's applications, as submitted to the City of Lake Elsinore by the Project Applicant, are herein incorporated by reference pursuant to CEQA Guidelines § 15150 and are available for review at the City of Lake Elsinore Planning Division, 130 South Main Street, Lake Elsinore, CA 92530. All other discretionary and administrative approvals that would be required of the City of Lake Elsinore or other government agencies are also within the scope of the Project analyzed in this EIR.

3.1 STATEMENT OF OBJECTIVES

The underlying purposes of the proposed Project are to develop a single-family residential community with commercial areas, as well as comply to the greatest feasible extent with applicable City of Lake Elsinore

standards, codes, and policies. The following is a list of specific objectives that the proposed Project intends to achieve.

A. To efficiently develop an underutilized property with a complementary mix of land uses, including residential, commercial, recreational, and open space land uses.

B. To establish a master-planned community in a manner that is sensitive to the environment as well as visually and functionally compatible with surrounding existing and proposed land uses.

C. To develop a mixed-use community with a design that takes topographic, geologic, hydrologic, and environmental opportunities and constraints into consideration to minimize alterations to Stovepipe Creek, where practical.

D. To increase the available housing supply within the region by providing detached single-family homes in traditional subdivision layouts that will be marketable within the evolving economic profile of the City of Lake Elsinore and surrounding communities.

E. To construct commercial and hotel uses within proximity to regional transportation facilities that will provide for employment opportunity and that can attract tenants at competitive lease rates to help ensure that the uses are occupied and positively contribute to the local economy.

F. To provide a system of public and community facilities, including recreational facilities and trails, in an efficient and timely manner and meet the needs of Project residents and residents of surrounding communities.

G. To require project design elements such as architecture, landscaping, color, paving, walls, fencing, signage, entry treatments, and other similar design features that would ensure the community is developed in a manner that is aesthetically pleasing.

H. To establish development phasing that results in logical coordinated growth.

I. To develop the site with complementary mixed uses in a manner that preserves, to the extent feasible, natural drainages.

3.2 Project's Component Parts and Discretionary Approvals

The proposed Project consists of applications for a General Plan Amendment (GPA No. 2018-01), Specific Plan (SP No. 2018-01), Specific Plan Amendment (SPA No. 2017-03), Zone Change (ZC No. 2018-01), and a Tentative Tract Map (TTM No. 37305), which collectively are being processed under Planning Application No. 2017-29 to establish a master-planned, low-medium-density residential community (5.1 to 5.8 dwelling units per acre) with commercial uses on an approximately 72.5-acre site. Approval of these applications would allow for development of the subject property with up to 168 dwelling units on minimum 4,500 s.f. lots, 14.5 acres commercial uses, and 8.3 acres of recreational uses. A summary of the discretionary approvals 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. Project approvals also include Planning Application No. 2017-29, which is the master application under which the Project's remaining applications, as described below, are being processed.

3.2.1 General Plan Amendment No. 2018-01 (GPA No. 2018-01)

The City of Lake Elsinore General Plan assigns a land use designation to all properties inside the City's boundaries. Development is required by law to comply with the provisions of the City's General Plan. At the time the General Plan EIR was certified in 2011, the northern 45.4 acres of the Project site were located in within the City of Lake Elsinore, while the southern 27.1 acres were located within Riverside County. The southern 27.1 acres of the Project site were annexed along with other lands into the City of Lake Elsinore on November 10, 2016 (Annexation No. 83) (RLAFCO, 2016). Per the requirements of Government Code § 56375(e), there is a two-year prohibition on changing the land use on an area annexed into a city. Thus, the earliest the land use could be redesignated for the southern 27.1 acres of the Project site was November 10, 2018. General Plan Amendment No. 2018-2018-01 (GPA 2018-01) proposes to redesignate the southern 27.1 acres of the Project site from "General Commercial" to "Specific Plan" land uses. With approval of GPA 2018-01 and the Project's other discretionary applications, development of the entire 72.5-acre property would be governed by the proposed Nichols Ranch Specific Plan (SP No. 2018-01).

3.2.2 Alberhill Ranch Specific Plan Amendment No. 3.1 (SPA No. 2017-03)

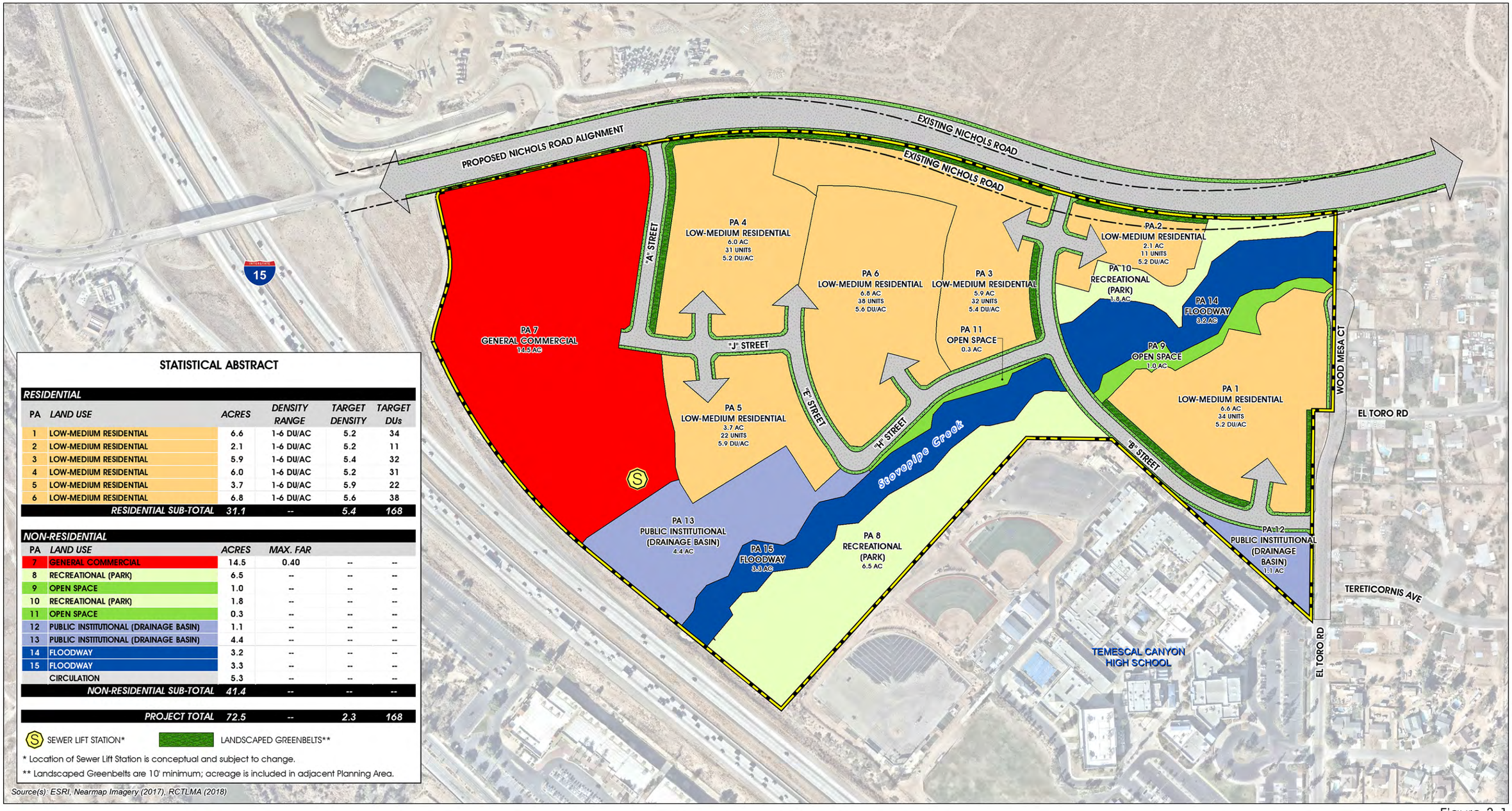
The Project proposes Amendment No. 3.1 to the Alberhill Ranch Specific Plan (ARSP), which would remove the northern 45.4 acres of the Project site that are currently located within the ARSP. With approval of the Project, development of the northern 45.4 acres of the Project site would be regulated by the NRSP instead of by the ARSP.

3.2.3 Nichols Ranch Specific Plan (SP No. 2018-01)

A. Proposed Land Uses

The NRSP proposes the development of the 72.5-acre Project site with 168 single-family residential homes on approximately 31.1 acres; 14.5 acres of commercial uses accommodating a 130-room hotel, 6,000 s.f. of fast-food restaurant uses with drive-through window use, 5,500 s.f. of fast-food restaurant uses without drive-through window use, 9,400 s.f. of sit-down restaurant uses, 4,400 s.f. of commercial retail uses, an 8,000 s.f. health and fitness club, a gas station (including market and car wash) with 16 fueling stations, and 43,000 s.f. of office uses; recreation uses on 8.3 acres; drainage basins on 5.5 acres; open space on 1.3 acres; and roadways on 5.3 acres, as depicted on Figure 3-1, *Proposed Specific Plan Land Use Plan*. Additionally, Table 3-1, *Specific Plan No. 2018-01 – Land Use Summary*. Specifically, the proposed land uses within the NRSP are as follows:

- **Low-Medium Density Residential:** The Project proposes a total of 168 single-family dwelling units on 31.1 acres within Planning Areas 1 through 6 with an overall density of 5.4 dwelling units per acre (du/ac). Planning Areas 1, 2, and 3 would allow for 77 single-family homes on 14.6 acres. Planning



STATISTICAL ABSTRACT

RESIDENTIAL

PA	*LAND USE*	*ACRES*	*DENSITY RANGE*	*TARGET DENSITY*	*TARGET DUs*
1	LOW-MEDIUM RESIDENTIAL	6.6	1-6 DU/AC	5.2	34
2	LOW-MEDIUM RESIDENTIAL	2.1	1-6 DU/AC	5.2	11
3	LOW-MEDIUM RESIDENTIAL	5.9	1-6 DU/AC	5.4	32
4	LOW-MEDIUM RESIDENTIAL	6.0	1-6 DU/AC	5.2	31
5	LOW-MEDIUM RESIDENTIAL	3.7	1-6 DU/AC	5.9	22
6	LOW-MEDIUM RESIDENTIAL	6.8	1-6 DU/AC	5.6	38
	RESIDENTIAL SUB-TOTAL	*31.1*	--	*5.4*	*168*

NON-RESIDENTIAL

PA	*LAND USE*	*ACRES*	*MAX. FAR*		
7	GENERAL COMMERCIAL	14.5	0.40	--	--
8	RECREATIONAL (PARK)	6.5	--	--	--
9	OPEN SPACE	1.0	--	--	--
10	RECREATIONAL (PARK)	1.8	--	--	--
11	OPEN SPACE	0.3	--	--	--
12	PUBLIC INSTITUTIONAL (DRAINAGE BASIN)	1.1	--	--	--
13	PUBLIC INSTITUTIONAL (DRAINAGE BASIN)	4.4	--	--	--
14	FLOODWAY	3.2	--	--	--
15	FLOODWAY	3.3	--	--	--
	CIRCULATION	5.3	--	--	--
	NON-RESIDENTIAL SUB-TOTAL	*41.4*	--	--	--

PROJECT TOTAL	*72.5*	--	*2.3*	*168*

(S) SEWER LIFT STATION* LANDSCAPED GREENBELTS**

* Location of Sewer Lift Station is conceptual and subject to change.

** Landscaped Greenbelts are 10' minimum; acreage is included in adjacent Planning Area.

Source(s): ESRI, Nearmap Imagery (2017), RCTLMA (2018)

0 75 150 300 Feet

Figure 3-1

PROPOSED SPECIFIC PLAN LAND USE PLAN

Table 3-1 Specific Plan No. 2018-01 – Land Use Summary

Planning Area	Land Use	Acres	Density Range	Target Density	Target DUs
Residential					
1	Low-Medium Residential	6.6	1-6 DU/AC	5.2	34
2	Low-Medium Residential	2.1	1-6 DU/AC	5.2	11
3	Low-Medium Residential	5.9	1-6 DU/AC	5.4	32
4	Low-Medium Residential	6.0	1-6 DU/AC	5.2	31
5	Low-Medium Residential	3.7	1-6 DU/AC	5.9	22
6	Low-Medium Residential	6.8	1-6 DU/AC	5.6	38
	Residential Sub-Total:	**31.1**	**--**	**5.4**	**168**
Non-Residential					
7	General Commercial*	14.5	--	--	--
8	Recreational (Park)	6.5	--	--	--
9	Open Space	1.0	--	--	--
10	Recreation (Park)	1.8	--	--	--
11	Open Space	0.3	--	--	--
12	Public Institutional (Drainage Basin)	1.1	--	--	--
13	Public Institutional (Drainage Basin)	4.4	--	--	--
14	Floodway	3.2	--	--	--
15	Floodway	3.3	--	--	--
--	Circulation	5.3	--	--	--
	Non-Residential Sub-Total:	**41.4**	**--**	**--**	**--**
	Project Total:	**72.5**	**--**	**2.3**	**168**

*Commercial land uses are allowed at a maximum Floor Area Ratio (FAR) of 0.40.

Areas 4, 5, and 6 would allow for 91 single-family homes on 16.5 acres. Access to the residential areas on-site would be accommodated from Nichols Road and El Toro Road via proposed streets A, B, E, H, and J.

- **General Commercial:** The western 14.5 acres of the site (Planning Area 7) are proposed for general commercial land uses, and would accommodate a 130-room hotel, 6,000 s.f. of fast-food restaurant uses with drive-through window use, 5,500 s.f. of fast-food restaurant uses without drive-through window use, 9,400 s.f. of sit-down restaurant uses, 4,400 s.f. of commercial retail uses, an 8,000 s.f. health and fitness club, a gas station (including a market and car wash) with 16 fueling stations, and 43,000 s.f. of office uses. A sewer lift station also would be accommodated in the southern portion of the commercial site. Access to the commercial site would occur from Nichols Road via Streets "A" and "J."
- **Recreational (Park):** Two park sites are proposed within Planning Areas 8 and 10 on a total of 8.3 acres and would accommodate both passive and active recreational uses. Access to both park sites would be provided via B Street and an internal cul-de-sac within adjacent Planning Area 2.

- **Open Space:** A total of 1.3 acres of open space are proposed within Planning Areas 9 and 11 along the northern and southern edges of Stovepipe Creek. These areas would serve as a buffer between Stovepipe Creek and adjacent residential uses. Aside from grading and fuel modification, no development is planned within Planning Areas 9 and 11.
- **Public Institutional (Drainage Basin):** Two drainage basins are proposed within Planning Areas 12 and 13 on a total of 5.5 acres. The drainage basin in Planning Areas 12 would detain and treat flows from the residential uses in Planning Area 1 and a portion of B Street. The drainage basin in Planning Area 13 would detain and treat flows from the residential uses in Planning Areas 2 through 6; Streets A, B (portion), E, H, and J; and a portion of the commercial uses in Planning Area 7.
- **Floodway:** A total of 6.5 acres of the site are planned to accommodate floodways within Planning Areas 14 and 15. These planning areas are intended to convey flows from off-site areas that are tributary to Stovepipe Creek, as well as flows from the proposed on-site recreational and open space areas in Planning Areas 8 through 10. Aside from a planned roadway crossing, no disturbance or development is planned within Planning Areas 14 and 15.
- **Circulation:** A total of approximately 5.3 acres of the Project site would be dedicated to on-site backbone roadways. Primary vehicular access would be provided via Nichols Road (an east-west oriented road located north of the Project site) and via El Toro Road (a north-south oriented road located east of and adjacent to the Project site), which are planned to connect with the various local roadways planned within the SP area.

B. Specific Plan Design Guidelines

The NRSP proposes to establish development standards and design guidelines to provide guidance for future development of the site. Development standards and design guidelines would ensure that development of individual neighborhoods and the commercial site within the NRSP area are consistent with and enhance the quality and development concept for the Project area and would ensure that development of the Project would be compatible with surrounding off-site land uses. Furthermore, the NRSP would establish a Phasing Plan to provide for appropriate phased development of the proposed land uses within the NRSP area.

The Design Guidelines propose elements that define the design concept, physical character, and visual theme of the proposed community. Principal components of the Design Guidelines are the Architectural Design Guidelines and Landscape Design Guidelines, as summarized below.

The Architectural Design Guidelines address site planning and architectural elements of the residential neighborhoods. Specific elements and considerations of the built environment addressed within the Architectural Design Guidelines include: site planning and building layout; building mass and scale; architectural theme and details; and building materials and color.

The Landscape Design Guidelines provide revised landscape principles and standards to ensure that plant materials, streetscapes, monumentation, community walls/fences, parks, trails, and other amenities are compatible with the community's design theme. Additionally, the Landscape Design Guidelines establish a

water-efficient plant palette and provides principles for the design of an efficient irrigation system to conserve water resources.

For a detailed description of the proposed design guidelines, please refer to the Design Guidelines Section (Section IV) of the NRSP. The NRSP is herein incorporated by reference pursuant to CEQA Guidelines § 15150 and available to the public for review at the City of Lake Elsinore Planning Division; 130 South Main Street; Lake Elsinore, CA 92530.

C. *Master Circulation Plan*

The NRSP proposes to establish a hierarchical circulation system, as illustrated on Figure 3-2, *Conceptual Vehicular Circulation Plan*, and Figure 3-3, *Roadway Cross-Sections*. Traffic is proposed to be conveyed by a hierarchical circulation system with roadway rights-of-way (ROW) ranging from 60 to 120 feet in width. The NRSP proposes the realignment of Nichols Road in order to accommodate future improvements to this roadway to an Urban Arterial standard (120 ft. ROW). In addition, the NRSP proposes the construction of a north/south connection between Nichols Road and the existing north/south-aligned portion of El Toro Road, which would create two new intersections at Nichols Road and El Toro Road. Provided below is a brief description of the Conceptual Vehicular Circulation Plan facilities.

- **Nichols Road (120-foot ROW)** is aligned in an east-west orientation along the northern Project boundary and a portion of the road would be realigned approximately 60 feet northerly of the currently planned alignment. Access to the Project site from Nichols Road is proposed via two entrances (Streets A and B). The City of Lake Elsinore General Plan Circulation Element calls for Nichols Road to be improved as an Urban Arterial with an ultimate right-of-way (ROW) of 120 feet. As planned by the NRSP, and in conformance with the General Plan, this roadway ultimately would include a ROW of 120 feet, with 82 feet of drive aisles, a 14-foot center median/left turn lane, 12-foot wide parkways with 6-foot curb-adjacent sidewalks on both sides of the road, and a 6-foot Class II bike lane in each direction. It should be noted that the Project only would construct half-width improvements to Nichols Road along the Project's frontage, and would provide for 48 feet of drive lanes, a six-foot wide curb-adjacent sidewalk within a 12-foot landscaped parkway, and an asphalt and concrete berm along the northern edge of the proposed improvements. As proposed by the Project, a transition from the half-width of the ultimate ROW to the two-lane roadway would be constructed between planned improvements along most of the Project's frontage and the existing improved section of roadway adjacent to Planning Areas 2 and 10. The Project would construct 30-feet of interim ROW within the southern half of the Nichols Road ROW. The Project would construct two 15-foot travel lanes, a 5-foot sidewalk on the southern side of the ROW, and a proposed interim rock channel, 1.5:1 ratio slope, and a proposed brow ditch. Improvements to the northern edge of Nichols Road and east of the site would occur by others in the future.
- **El Toro Road (60-foot ROW)** is aligned in a north/south orientation east of and adjacent to the Project site, and curves into an east-west alignment near the east-central Project boundary. The City of Lake Elsinore General Plan classifies this road as a Local Road with an ultimate ROW of 60 feet. The Project would construct improvements to the western edge of El Toro Road along the Project's frontage

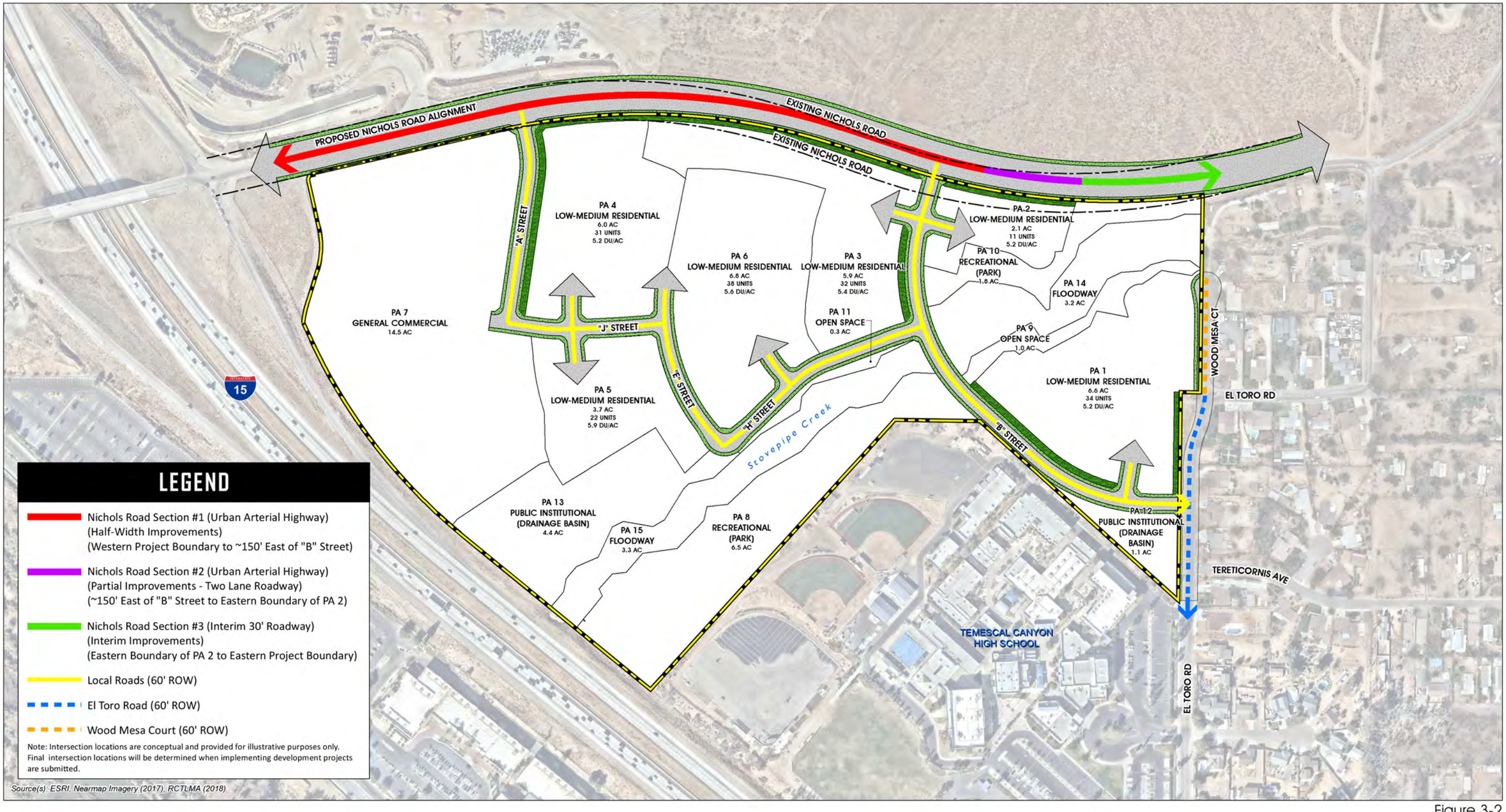
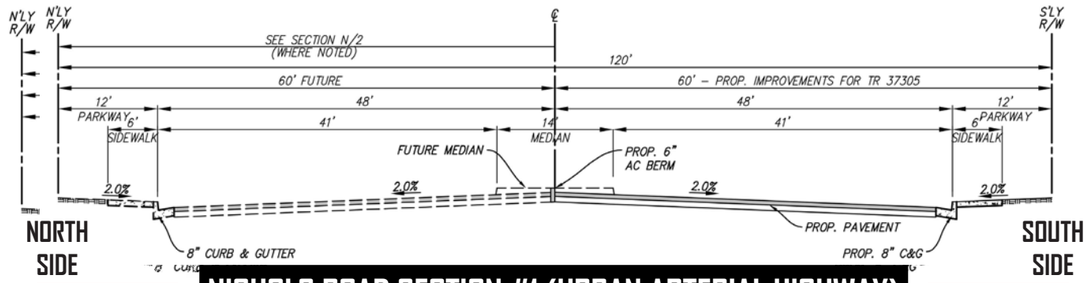


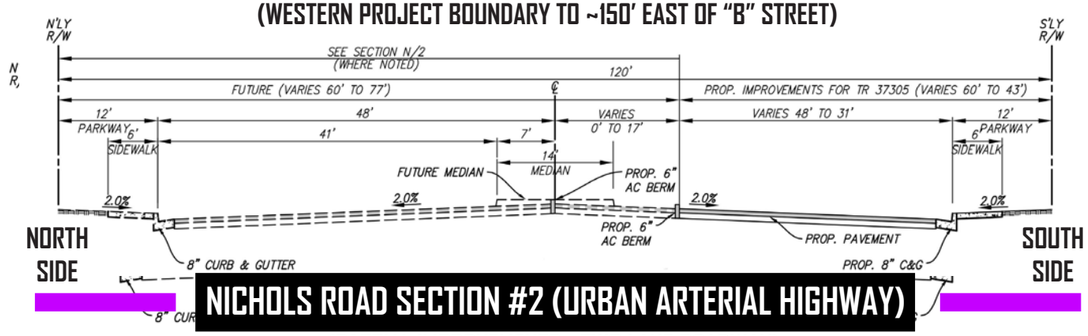
Figure 3-2

CONCEPTUAL VEHICULAR CIRCULATION PLAN



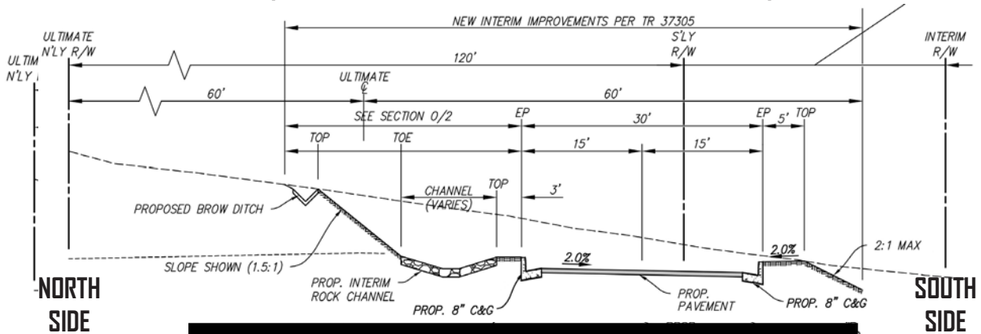
NICHOLS ROAD SECTION #1 (URBAN ARTERIAL HIGHWAY)

(HALF-WIDTH IMPROVEMENTS)
(WESTERN PROJECT BOUNDARY TO ~150' EAST OF "B" STREET)



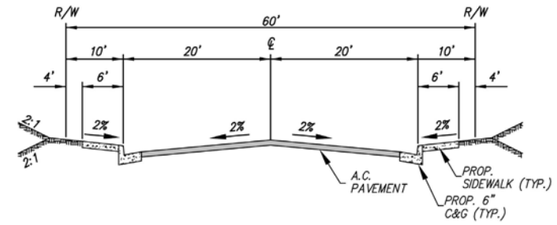
NICHOLS ROAD SECTION #2 (URBAN ARTERIAL HIGHWAY)

(PARTIAL IMPROVEMENTS - TWO LANE ROADWAY)
(~150' EAST OF "B" STREET TO EASTERN EDGE OF PA 2)

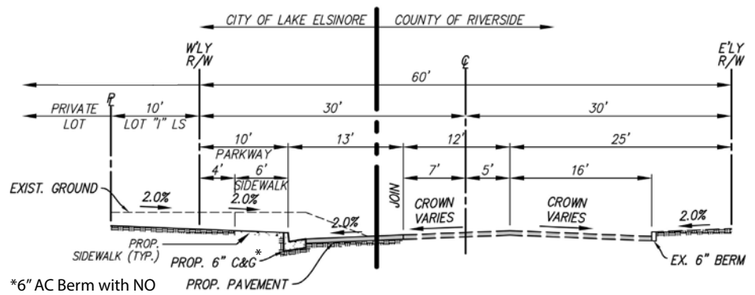


NICHOLS ROAD SECTION #3 (INTERIM 30' ROADWAY)

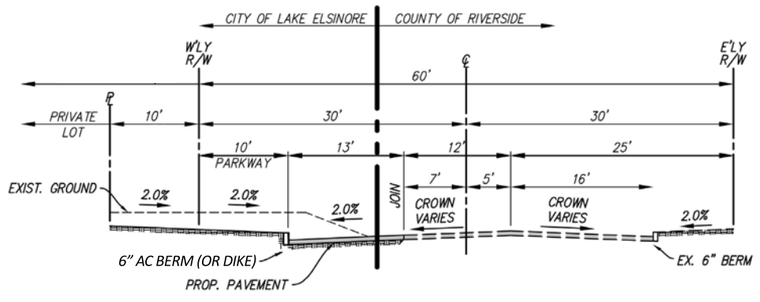
(INTERIM IMPROVEMENTS)
(EASTERN EDGE OF PA 2 TO EASTERN PROJECT BOUNDARY)



LOCAL ROADS (60' ROW)



EL TORO ROAD (60' ROW)



WOOD MESA CT (60' ROW)

Source(s): **K&A Engineering, Inc. (03-05-2018)**

Figure 3-3

NOT TO SCALE

ROADWAY CROSS-SECTIONS

to provide for a 10-foot landscaped parkway which includes a 6-foot wide sidewalk. The easterly side of El Toro Road is within the jurisdiction of Riverside County, and improvements to the eastern side of El Toro Road would occur at the discretion of Riverside County in the future.

- **Wood Mesa Court (60-foot ROW)** occurs along the eastern boundary of the Project site, north of the 90-degree curve in El Toro Road. Wood Mesa Court is not a General Plan Circulation Element Roadway. The Project proposes to improve the western edge of Wood Mesa Court, on-site, and would provide for construction to complete the remaining cul-de-sac bulb and a 10-foot wide parkway. It should be noted that no improvements are proposed to the portion of Wood Mesa Court that traverses Stovepipe Creek.
- **Local Roads (60-foot ROW)** are proposed throughout the Project site to provide access to the residential, commercial, and recreational uses proposed on-site. Streets A, B, E, H, and J would serve as the primary backbone local roadways, while additional local roadways would be constructed within the individual residential planning areas. Local Streets would be public facilities and would have a total ROW of 60 feet, with 40 feet of drive aisles and 10-foot parkways on each side with six-foot wide curb-adjacent sidewalks.

D. Proposed Drainage Plan

The conceptual drainage system for the proposed Project is illustrated on Figure 3-4, *Conceptual Master Drainage Plan*. As shown, the Project proposes to create three primary drainage areas. Drainage Area A would encompass residential Planning Areas 2, 3, 4, 5, and 6, and Streets B (portion), E, H, and J, and would convey runoff to the drainage basin proposed in Planning Area 13. Following water quality treatment, runoff from Drainage Area A would be conveyed to Stovepipe Creek and through the 6-foot x 14-foot culvert beneath I-15. Drainage Area B would encompass the residential uses in Planning Area 1 and a portion of B Street and would convey runoff to the drainage basin proposed in Planning Area 12. Following water quality treatment, flows from Planning Area 12 would be conveyed to existing storm water drainage facilities within El Toro Road. Drainage Area C would encompass most of the commercial site in Planning Area 7. Under interim conditions, prior to development of Planning Area 7 but following mass grading of the site, runoff would be discharged to the drainage basin in Planning Area 13. A local storm drain system would be installed as part of development for Planning Area 7. Following development of Planning Area 7, peak storm flows would be directed via the local storm drain system to the two 24-inch culverts under I-15, while the "first flush" water quality flows would be routed for treatment to the water quality basin within Planning Area 13. Drainage from the site ultimately would confluence west of I-15, and ultimately would discharge the Temescal Canyon Reach, and eventually to the Santa Ana River.

E. Proposed Water Plan

Domestic water service would be provided to the Project site by the Elsinore Valley Municipal Water District (EVMWD). The Project's future potable water demand would be met by EVMWD via an existing supply of water from the use of purchased or imported water, groundwater, and surface water. The extension of the potable water system would require the construction of transmission pipelines in order to provide an adequate level of service. The potable water system would provide a sufficient supply during peak periods including

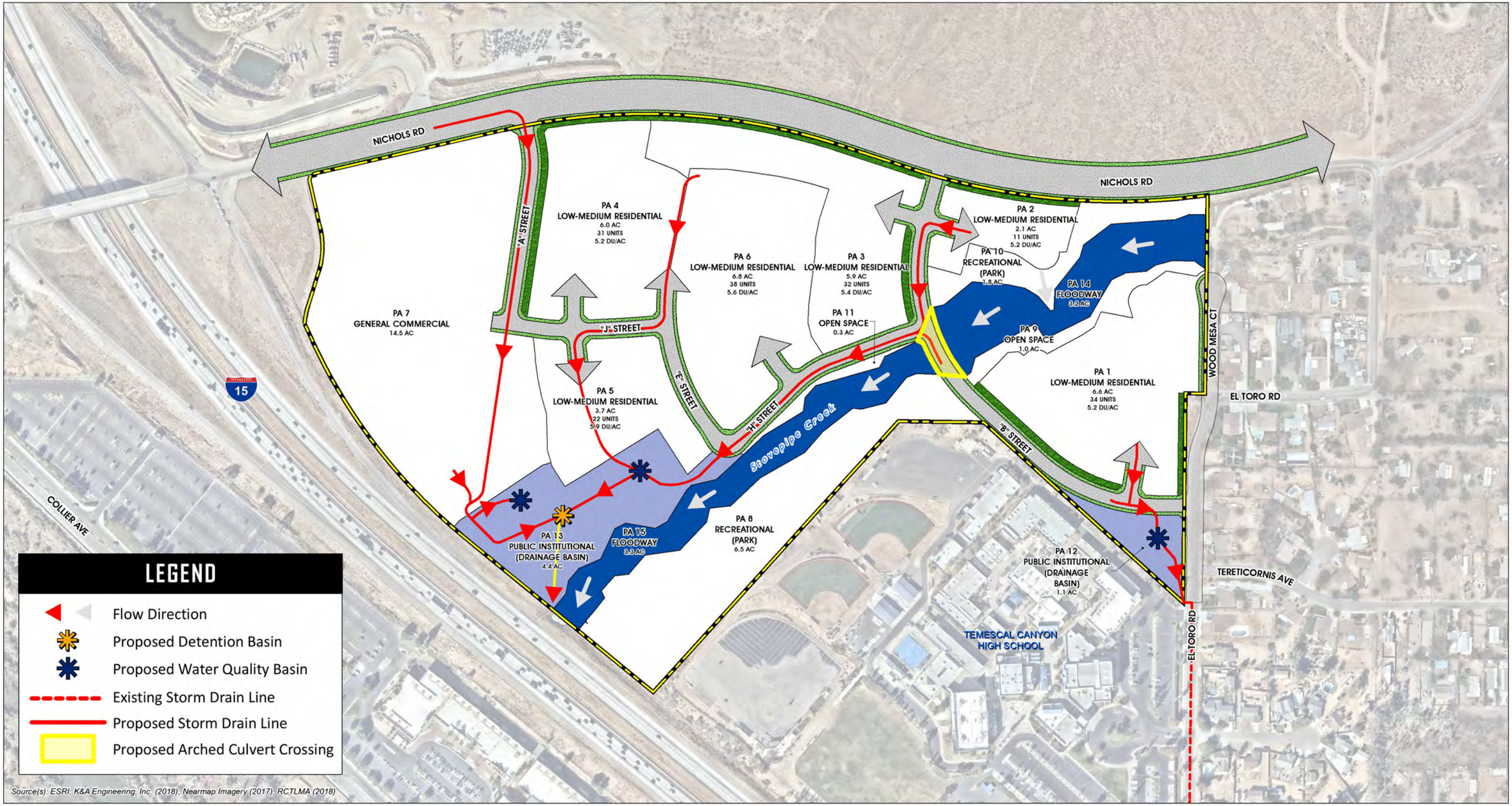


Figure 3-4

CONCEPTUAL MASTER DRAINAGE PLAN

fire suppression flows. As shown on Figure 3-5, *Conceptual Water Plan*, water service to the Project site would be provided via two points of connection to existing 16-inch water lines located within El Toro Road. The Project proposes a 20-inch water main within Nichols Road. A 12-inch water line would be constructed in "A" Street on-site to connect to the proposed 20-inch water main in Nichols Road. An additional 8-inch water line would be constructed in "B" Street on-site to connect to the existing 16-inch water main in El Toro Road. 8-inch water lines would be constructed in other local roadways on-site, creating a looped water system between the proposed 20-inch water line proposed in Nichols Road and the existing 16-inch line in El Toro Road.

F. Proposed Sewer Plan

EVMWD also would provide sewer services to the Project site. Wastewater generated from the Project site would be treated by EVMWD at its Regional Water Reclamation Facility. The Project proposes two alternatives to provide service to the Project site. As shown on Figure 3-6, *Conceptual Sewer Plan (Option #1)*, the first alternative (Option #1) proposes to convey flows from the portions of the site north of Stovepipe Creek towards a proposed sewer lift station within the proposed commercial site in Planning Area 7 via 8-inch sewer lines. Flows would then be conveyed via a 4-inch force main within "J" Street, "E" Street, and "H" Street to "B" Street, where flows would be conveyed south to a proposed 8-inch gravity sewer within "B" Street, located near the southern boundary of Planning Area 1. Flows would then be combined with flows from Planning Area 1 and conveyed through an off-site 8-inch sewer line proposed in El Toro Road towards an existing 8-inch sewer main that conveys flows to the south.

As indicated on Figure 3-7, *Conceptual Sewer Plan (Option #2)*, under the second alternative (Option #2), sewer flows from the portions of the site located north of Stovepipe Creek would be conveyed via proposed 8-inch sewer mains towards the southwest corner of the proposed commercial site in Planning Area 7. A new 12-inch sewer main would be constructed beneath I-15 using jack and bore construction and would connect to an existing 12-inch sewer main that increases and becomes a 30-inch sewer main in Collier Avenue. Sewer flows from the portion of the site located south of Stovepipe Creek would be conveyed via proposed an 8-inch sewer main towards the southeast corner of the Project site. Flows would then be conveyed through an off-site 8-inch sewer main proposed in El Toro Road towards an existing 8-inch sewer main that conveys flows to the south through existing 12-inch sewer main. Flows from both Project locations would combine with existing flows and would be conveyed to an existing sewer lift station located in the southern portions of the existing outlet mall. Flows then would travel via an existing 10-inch force main to an existing 18-inch sewer main located within Collier Avenue, near the intersection of Riverside Drive and Collier Avenue.

All sewer flows from the Project site would be conveyed to the EVMWD Regional Water Reclamation Facility, located 1.4 miles south of the Project site.

G. Open Space and Recreation Plan

As shown in Figure 3-8, *Open Space and Recreation Plan*, the recreational demands of future Project residents are planned to be met by a 6.5-acre linear park, which would be located in the southern portion of the Project site south of Stovepipe Creek, and a 1.8-acre neighborhood park, which would be located in the eastern portion

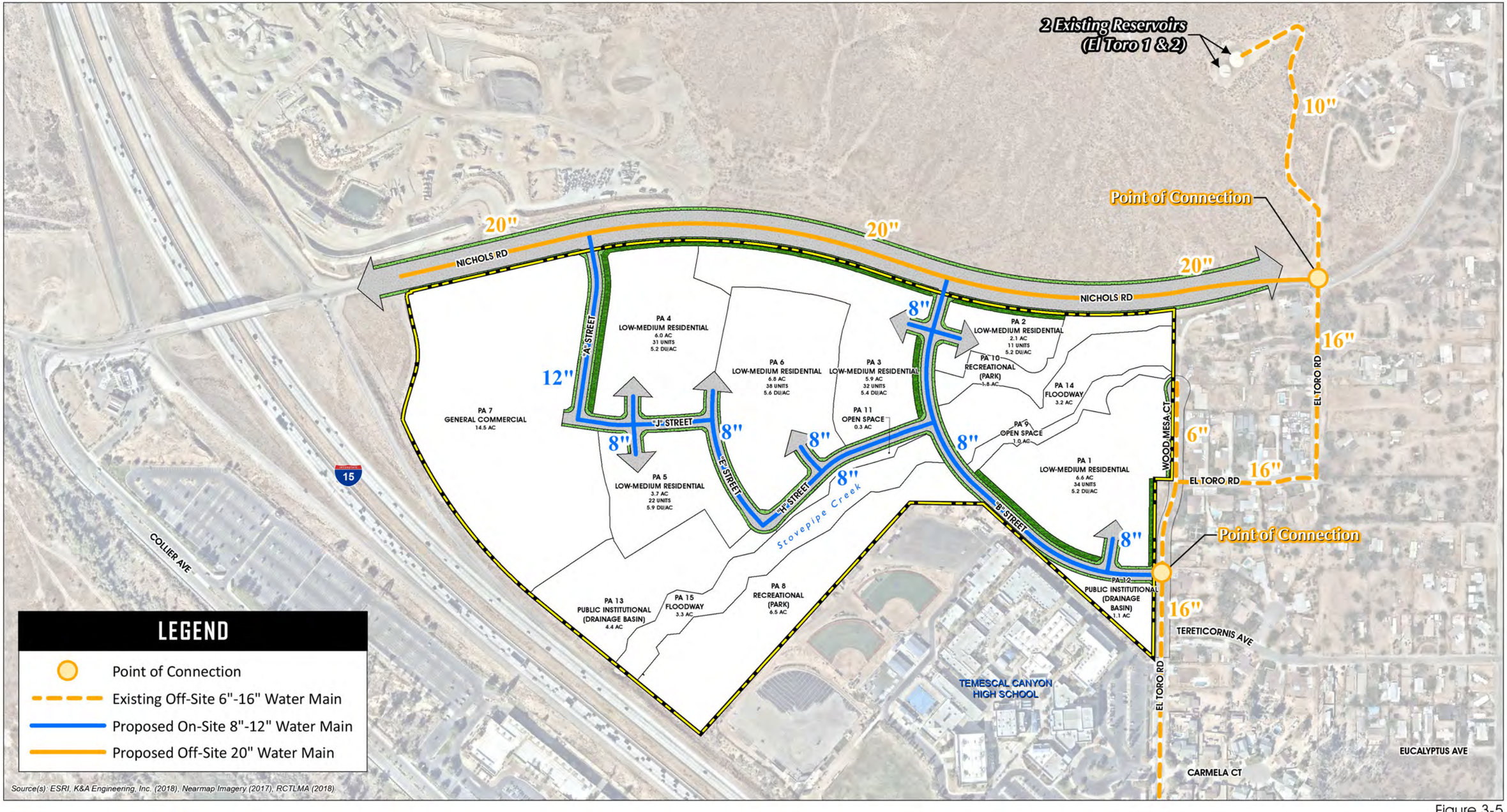


Figure 3-5

CONCEPTUAL WATER PLAN

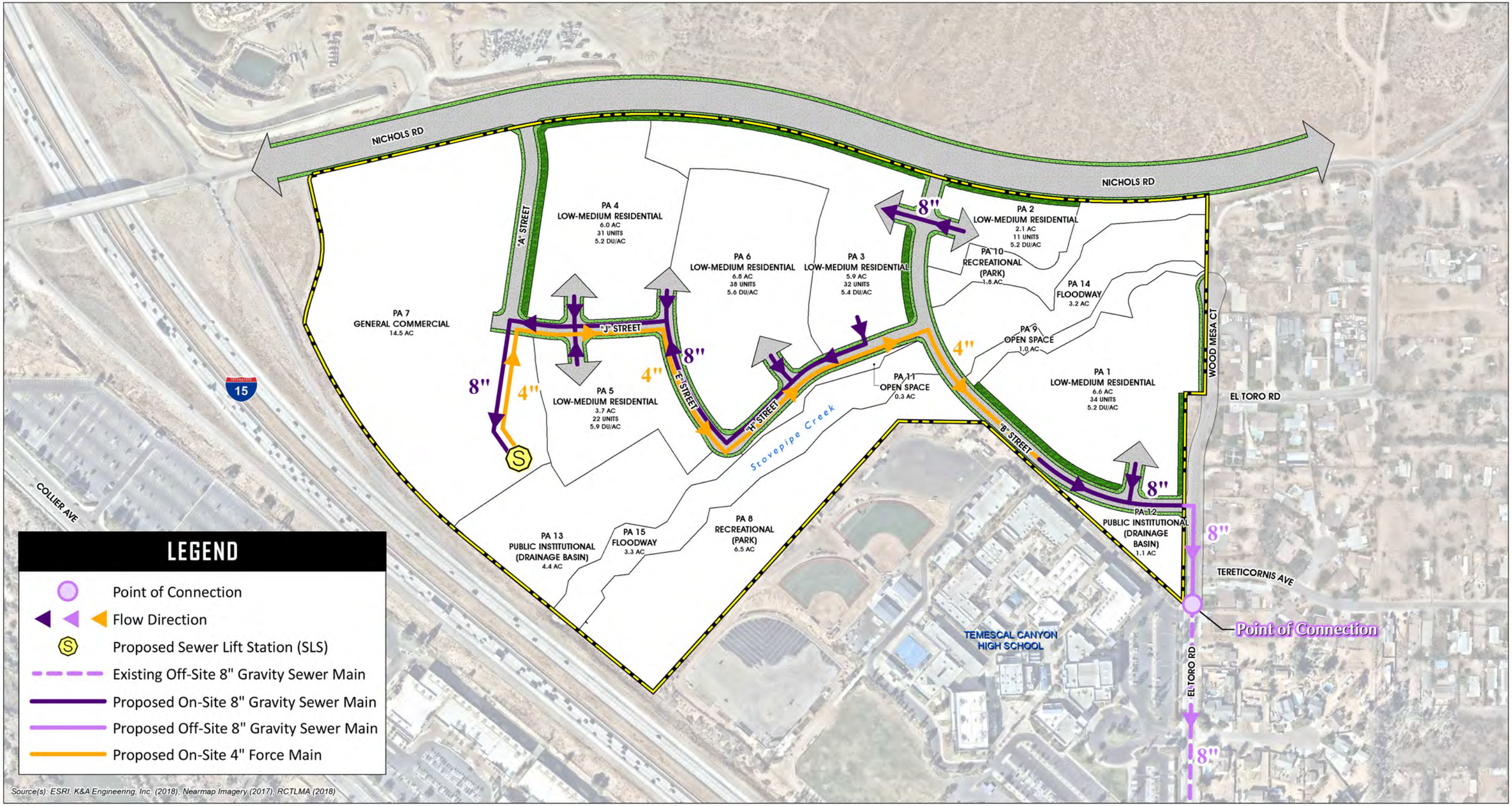


Figure 3-6

CONCEPTUAL SEWER PLAN (OPTION #1)

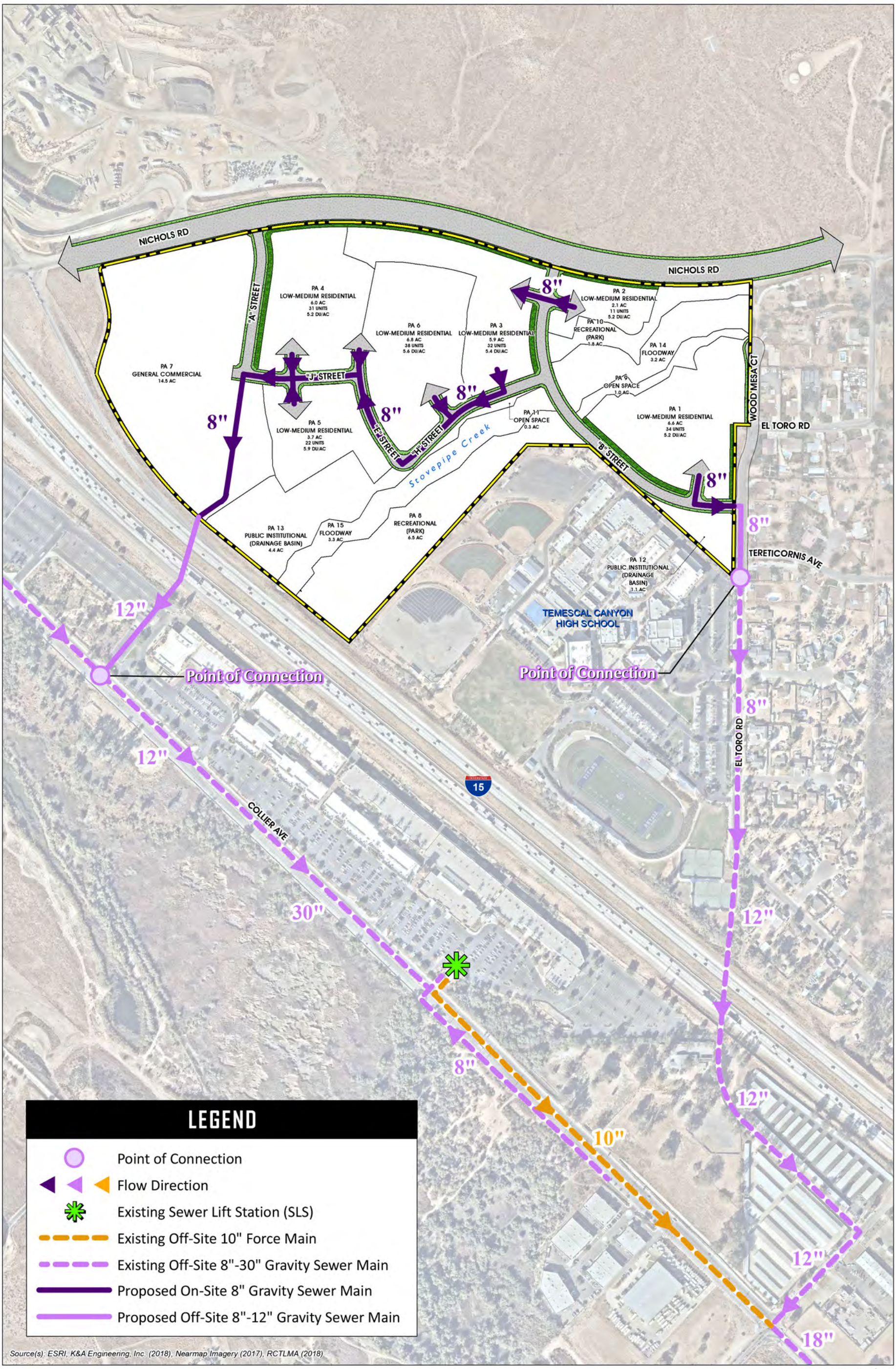
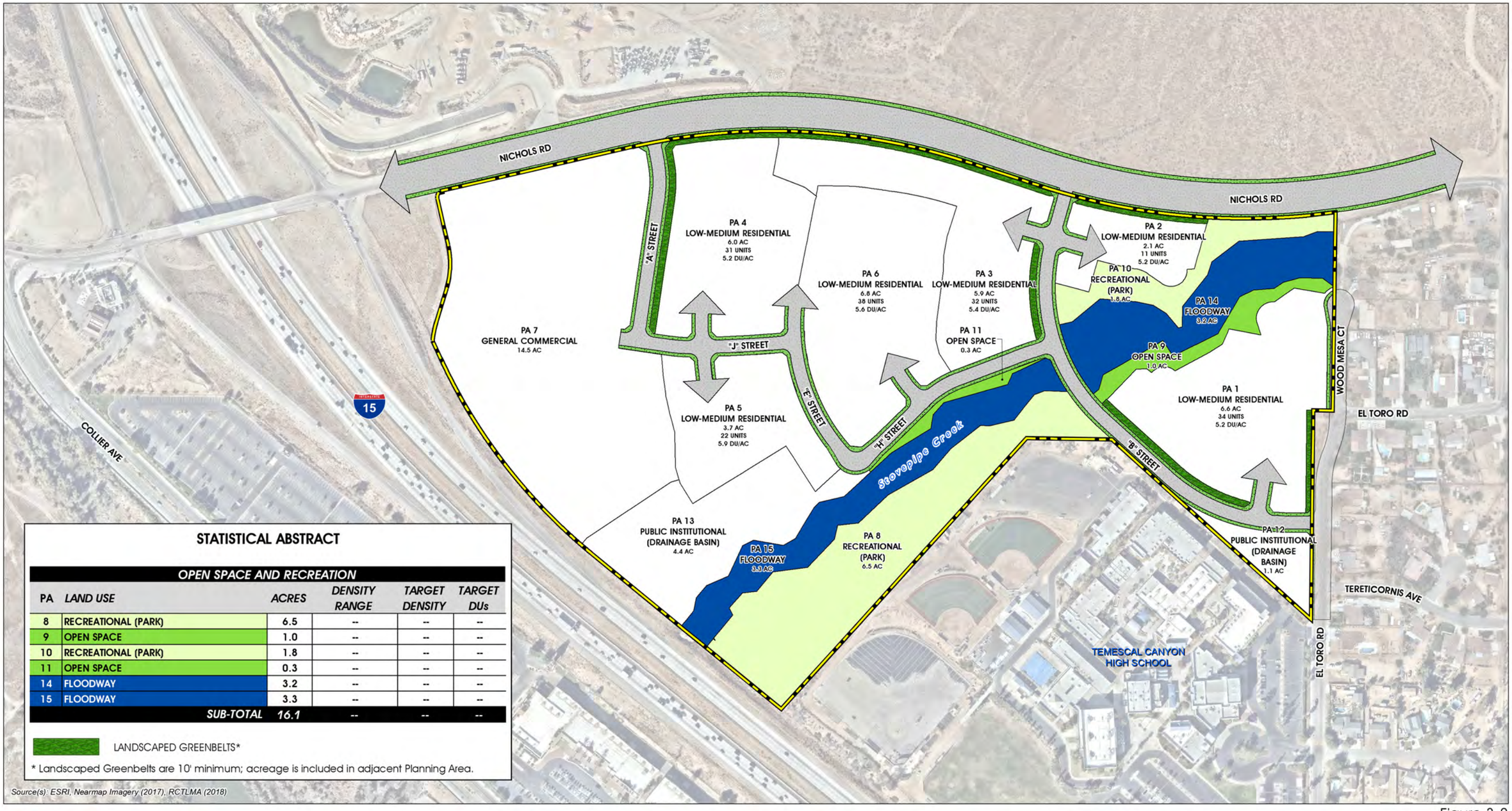


Figure 3-7

CONCEPTUAL SEWER PLAN (OPTION #2)



STATISTICAL ABSTRACT

OPEN SPACE AND RECREATION					
PA	LAND USE	ACRES	DENSITY RANGE	TARGET DENSITY	TARGET DUs
8	RECREATIONAL (PARK)	6.5	--	--	--
9	OPEN SPACE	1.0	--	--	--
10	RECREATIONAL (PARK)	1.8	--	--	--
11	OPEN SPACE	0.3	--	--	--
14	FLOODWAY	3.2	--	--	--
15	FLOODWAY	3.3	--	--	--
	SUB-TOTAL	16.1	--	--	--

LANDSCAPED GREENBELTS*

* Landscaped Greenbelts are 10' minimum; acreage is included in adjacent Planning Area.

Source(s): ESRI, Nearmap Imagery (2017), RCTLMA (2018)

Figure 3-8

0 75 150 300 Feet

OPEN SPACE AND RECREATION PLAN

of the Project site north of Stovepipe Creek, which combined would encompass 8.3 acres of recreational uses. The proposed linear park would include passive uses such as trails and par-course fitness stations. The proposed neighborhood park would include passive recreation amenities such as a tot lot, seating areas, shaded structures, and open turf areas. The Project would provide 1.3 acres of open space which would serve to preserve and protect the natural riparian habitat and provide a buffer between Stovepipe Creek and the residential neighborhoods. Furthermore, 6.5 acres of floodway uses would be provided to preserve the natural riparian areas and drainage course of Stovepipe Creek, which traverses the Project site in a northeastern to northwestern direction. Stovepipe Creek would continue to be restricted from human access and use would remain undisturbed with implementation of the Project, with the exception of a single road crossing and the outlet facilities for the water drainage basin proposed within Planning Area 13.

I. Grading Plan

Figure 3-9, *Conceptual Grading Plan*, depicts the NRSP's proposed grading concept, which conceptually establishes the development pads, provides for appropriate site drainage, accommodates necessary utility infrastructure, and details cut and fill quantities. Grading of the Project site may occur in a single phase, or may occur in up to three phases. For more information regarding Project phasing, refer to Subsection 3.2.3.K, *Phasing Plan*, below. The proposed grading to implement the Project would require approximately 198,000 cubic yards (cy) of cut material and 217,000 cy of fill material, requiring the import of approximately 19,000 cy of earthwork material. Soil export materials would be imported from the Nichols North mining site, which is located directly north of the Project site, north of Nichols Road. All slopes are anticipated to have a maximum gradient of 2:1 (horizontal: vertical) or flatter.

J. Master Fire Protection Plan

As shown in Figure 3-10, *Conceptual Fire Protection Plan*, the NRSP includes a Master Fire Protection Plan. As noted in the City of Lake Elsinore General Plan, the southern half of the Project site is located within a "Very High" wildfire risk zone, and the northern half of the Project site is located within the "High" wildfire risk zone. Structures adjacent to open space areas and Stovepipe Creek would be required to provide sufficient "defensible space" between the dwelling and the fuel associated with the open land. A total of 100 feet of fuel modification treatment would be required on all lots abutting native vegetation. In those areas where 100 feet of fuel modification zones cannot be achieved due to open space protection issues or property boundary limitations, alternative protection measures would be implemented to help protect the homes from wildfire. As shown in Figure 3-10, three Fuel Modification Zones would be provided on the Project site, as described below:

- Zone 1 would be homeowner maintained within individual lots and is required to be free of all combustible construction and materials. Zone 1 is generally located within the rear yard and side yards of the homes within residential Planning Areas that are in close proximity to Stovepipe Creek.
- Zone 2 would be Homeowner's Association (HOA) maintained and consists of landscaping and manufactured slopes that would be irrigated and fire resistant. Zone 2 is generally located in landscaping areas outside of homeowner lots, starting from the lot parcel line extending outwards, parks, roadway landscaping, and manufactured slopes.

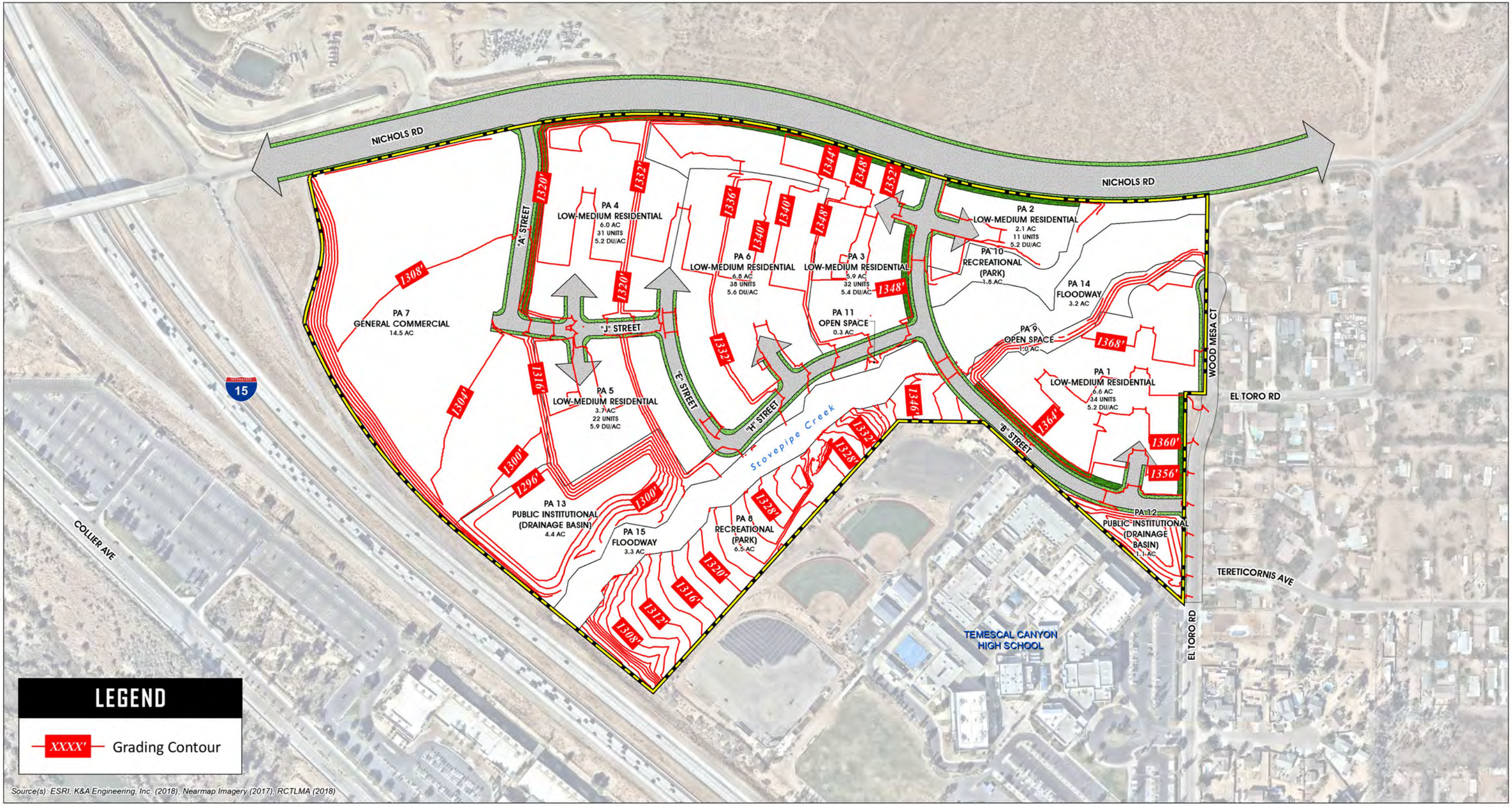


Figure 3-9

CONCEPTUAL GRADING PLAN

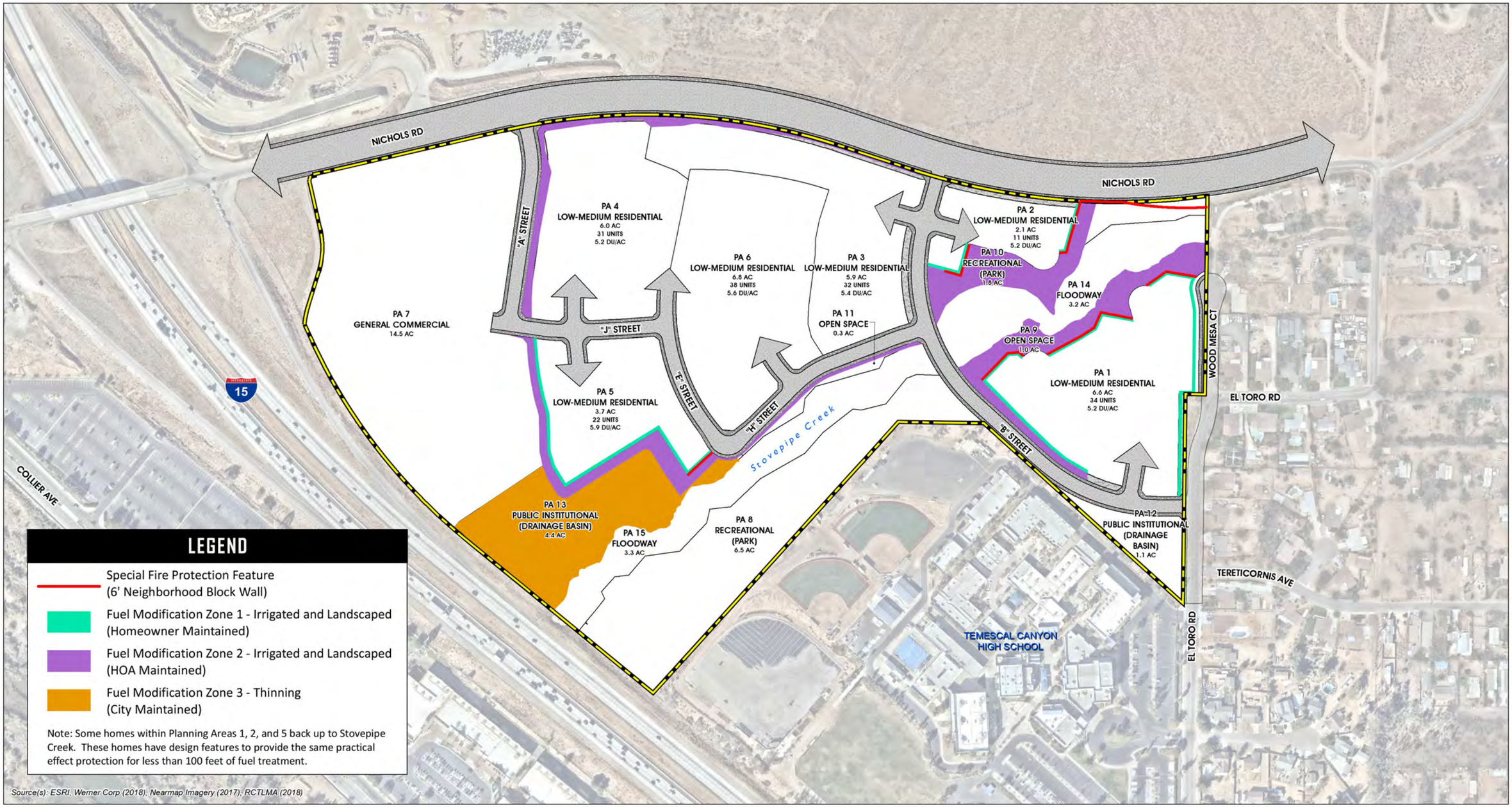


Figure 3-10

CONCEPTUAL FIRE PROTECTION PLAN

- Zone 3 would be City maintained and consists of thinning treatment to ensure that areas in Zone 3 are free of any dead and dying combustible vegetation. Zone 3 is generally located within the drainage basins and manufactured slopes within Planning Area 13. This zone is a non-irrigated area and must be maintained yearly prior to fire season to clear out any dead, dying, and invasive material.

In addition to the three Fuel Modification Zones, Special Fire Protection Features would be required for a few homes within residential Planning Areas 1, 2, and 5 because the homes in these areas would not meet the minimum 100-foot fuel treatment setback. For any home or building that is located less than 100 feet from Stovepipe Creek, six-foot neighborhood walls would be required to limit any actual radiant fire that may start in the creek area. In addition, no combustible landscaping would be permitted within five feet of the structure and no trees would be allowed on these residential lots.

K. Phasing Plan

Figure 3-11, *Conceptual Phasing Plan*, depicts the proposed phasing for the Project. For analytical evaluation in this EIR, the Project is assumed to be developed in three Phases, as follows:

- Phase 1 (2018): Construction of 34 single-family dwelling units;
- Phase 2 (2019): Construction of 134 single-family dwelling units, a 6.5-acre active park, a 1.8-acre passive park, and the sewer lift station (if required); and
- Phase 3 (2023): Construction of 14.5 acres of commercial uses.

Phasing may occur later than analytically assumed, out of the expected sequence, or in smaller increments, provided the required infrastructure and services are available at the time of development to provide adequate vehicular access and utility connections to the Project site. Circulation and infrastructure would be phased to provide the necessary infrastructure to and access to each proposed Planning Area. As noted in Subsection 3.2.3.0, phasing for grading may occur in a single phase or may occur in up to three phases. Sewer and water infrastructure would be phased in accordance with an agreement with the water and sewer purveyor or other capable service provider, which would state that the provision of service to any implementing project would be required prior to the recordation of any subdivision maps. The sewer lift station in Planning Area 7, if required, would be constructed as part of Phase 2.

L. Maintenance Plan

The NRSP includes a proposed Maintenance Plan, as shown in Table 3-2, *Maintenance Plan*. Areas including common open space, Stovepipe Creek, parks, landscaped parkways, and residential areas would be maintained by the HOA. Streets, drainage basins, and parks would be maintained by the City of Lake Elsinore. As shown, the Specific Plan identifies responsible parties for maintenance of each the facilities within the Specific Plan area.

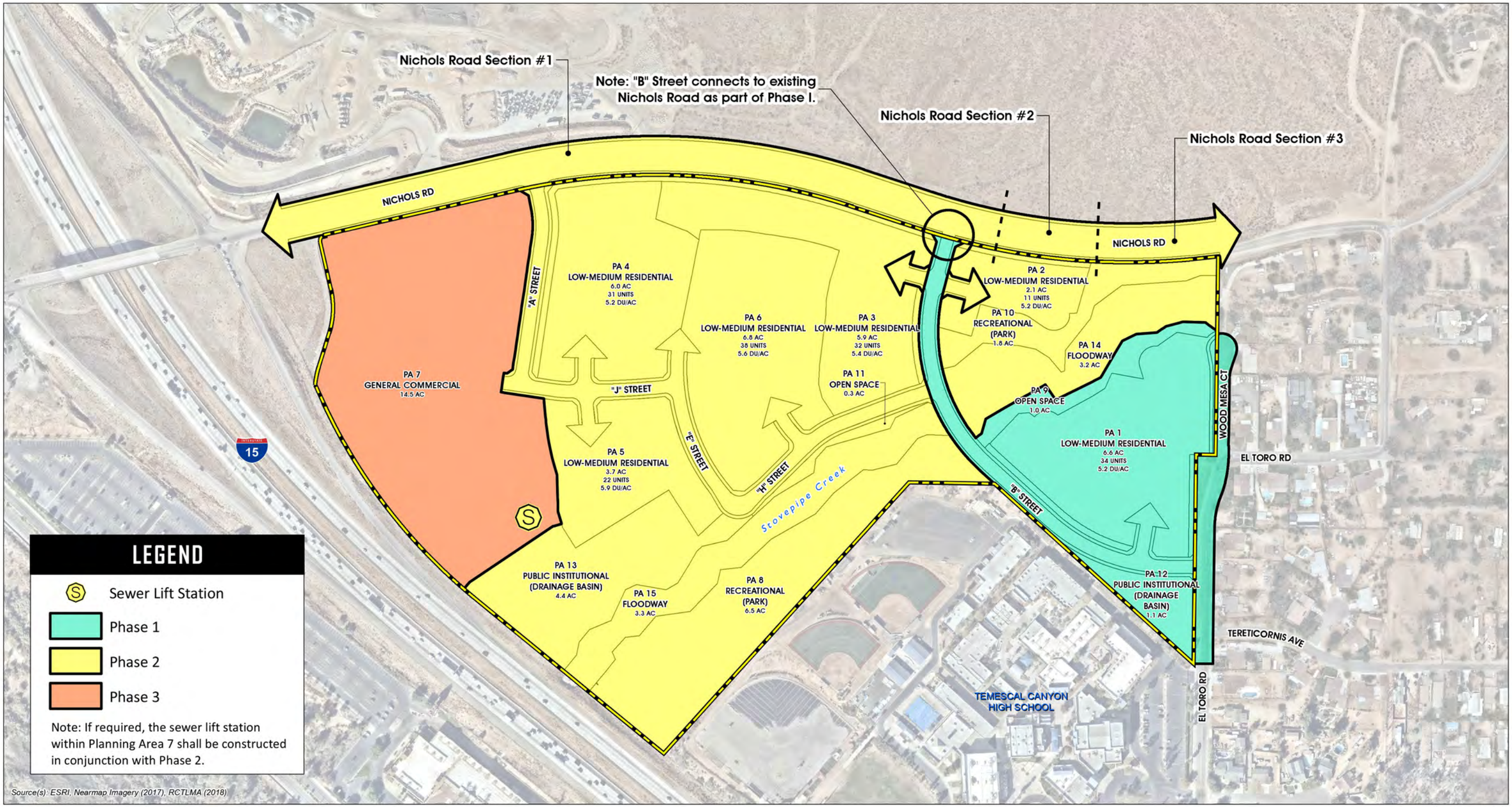


Figure 3-11

CONCEPTUAL PHASING PLAN

Table 3-2 Maintenance Plan

	Homeowners or Neighborhood Association	Commercial Property Owners Association	CSA, Public, or Quasi-Public Agency	City of Lake Elsinore	Other Service Entity	County of Riverside
Common Open Space (Including common area slopes)	✓					
Natural Open Space /Stovepipe Creek	✓					
Parks	✓			✓		
Landscaped Parkways – Within Public ROW	✓		✓	✓		
Landscaped Parkways – Within Local Roads	✓					
Monumentation and Hardscape Elements	✓					
Public Sewer/Water					✓	
Storm Drains/Drainage – Within Public ROW				✓		
Water Quality Management Facilities				✓		
Sidewalks – Within Public ROW			✓	✓		✓
Street Lighting			✓	✓		
Street Sweeping			✓			
Streets (Public)			✓	✓		✓
Private Driveways (within Commercial PA 7)		✓				
Manufactured Slopes	✓	✓		✓		
Fuel Modification Zones	✓	✓		✓		

(T&B Planning, 2018, Table II-3)

3.2.4 Zone Change No. 2018-01 (ZC No. 2018-01)

The City of Lake Elsinore Zoning Ordinance assigns a zoning classification to all properties inside the City's boundaries. Development is required by law to comply with the provisions of the City's Zoning Ordinance. Change of Zone No. 2018-01 (ZC No. 2018-01) proposes to modify the zoning designation on the southern 27.1 acres of the site from "Commercial Mixed Use (CMU)" to "Nichols Ranch Specific Plan." ZC No. 2018-01 also would change the zoning designation of the northern 45.4 acres of the site from "Alberhill Ranch Specific Plan" to "Nichols Ranch Specific Plan." ZC No. 2018-01 also would establish zoning boundaries on-site to reflect the NRSP land use plan for the 72.5-acre site. Additionally, ZC No. 2018-01 would establish allowable uses and development standards for the 72.5-acre NRSP area.

3.2.5 TENTATIVE TRACT MAP NO. 37305 (TTM NO. 37305)

As shown on Figure 3-12, *Tentative Tract Map No. 37305*, and as summarized on Table 3-3, *Tentative Tract Map 37305 Land Use Summary*, Tentative Tract Map No. 37305 (TTM 37305) proposes to subdivide the approximately ±72.50-acre site to implement the land uses proposed by the NRSP. TTM 37305 would create 168 residential lots on approximately 22.74 acres; one commercial retail lot on 14.43 acres; a sewer lift station lot on 0.13 acre; a park site lot on 6.49 acres; two drainage basin lots on 5.45 acres; nine (9) landscape lots on 1.45 acres; three (3) open space/landscape lots on 3.04 acres; two (2) open space lots on 6.49 acres; and public streets (Streets A through J) on 12.28 acres. A detailed description of the various land uses that would result from the approval of TTM 37305 is provided below.

Table 3-3 Tentative Tract Map 37305 Land Use Summary

LAND USE	LOT NOS.	ACREAGE
Single Family Residential	1-168	22.74
Neighborhood Commercial	169	14.43
Park Site	171	6.49
Sewer Lift Station	170	0.13
Drainage Basins	A and B	5.45
Landscape Lots	C through K	1.45
Open Space/Landscape Lots	L through N	3.04
Open Space	O and P	6.49
Public Streets	N/A	12.28
TOTALS:	**--**	**72.50**

- **Single Family Residential.** TTM 37305 proposes to subdivide the property to provide a total of 168 single-family residential lots on 22.74 acres and would range in size from 4,549 s.f. to 9,801 s.f., with an average lot size of 5,896 s.f. Lots 1 through 60 and 152 through 168 (located within NRSP Planning Areas 1, 2, and 3) would range in size from 4,549 s.f. to 8,487 s.f. with an average lot size of 5,674 s.f. Lots 61 through 151 (located within NRSP Planning Areas 4, 5, and 6) would range in size from 5,000 s.f. to 9,801 s.f. with an average lot size of 6,084 s.f.
- **Neighborhood Commercial.** TTM 37305 proposes one commercial lot (Lot 169) in the western portion of the site on 14.43 acres and is intended to implement Planning Area 7 of the NRSP. As proposed by the NRSP, the commercial lot is intended to accommodate a 130-room hotel, 6,000 s.f. of fast-food restaurant uses with drive-through window use, 5,500 s.f. of fast-food restaurant uses without drive-through window use, 9,400 s.f. of sit-down restaurant uses, 4,400 s.f. of commercial retail uses, an 8,000 s.f. health and fitness club, a gas station (including market and car wash) with 16 fueling stations, and 43,000 s.f. of office uses.
- **Park Site.** TTM 37305 proposes one lot for recreation purposes on 6.49 acres in the southern portion of the site along the southern edge of Stovepipe Creek. This lot would implement Planning Area 8 of the NRSP.

TENTATIVE TRACT MAP NO. 37305

IN THE CITY OF LAKE ELSINORE

EASEMENT NOTES:

2. EASEMENT(S) FOR DITCHES AND PIPELINES, IN FAVOR OF THE TEMESCAL WATER COMPANY, RECORDED ON AUGUST 9, 1905 PER A DOCUMENT RECORDED IN BOOK 33, PAGE 364 OF DEEDS.

– NOT PLOTTED – INDETERMINATE FROM RECORD.

5. AGREEMENT TO ESTABLISH COVENANTS AND EQUITABLE SERVITUDES BETWEEN ADJOINING LANDOWNERS, PER A DOCUMENT RECORDED ON DECEMBER 21, 1981 AS INSTRUMENT NO. 234628 OF OFFICIAL RECORDS.

– NOT PLOTTED – INDETERMINATE FROM RECORD.

A AN IRREVOCABLE OFFER TO DEDICATE AN EASEMENT FOR DRAINAGE AND SLOPE PURPOSES, IN FAVOR OF THE COUNTY OF RIVERSIDE, RECORDED ON JANUARY 11, 1983, PER INSTRUMENT NO. 5623 OF OFFICIAL RECORDS.

B RESERVATION OF EASEMENTS AND RIGHTS NECESSARY TO MAINTAIN, OPERATE, REPLACE, REMOVE, OR REVIEW IN-PLACE PUBLIC UTILITY FACILITIES, RECORDED ON FEBRUARY 6, 2013 PER THE VACATION OF A PORTION OF NICHOLS ROAD RECORDED AS INSTRUMENT NO. 2013-00657 OF OFFICIAL RECORDS.

– TO BE VACATED / ABANDONED PER PARCEL MAP 37465.

C EASEMENT FOR PUBLIC RIGHTS OF WAY AND PUBLIC UTILITY PURPOSES, IN FAVOR OF THE CITY OF LAKE ELSINORE, RECORDED ON MARCH 6, 2013 PER INSTRUMENT NO. 2013-0100830 OF OFFICIAL RECORDS.

1 EASEMENT FOR FUTURE CALTRANS WIDENING / IN FAVOR OF THE CITY OF LAKE ELSINORE, RECORDED ON DECEMBER 20, 2013 PER INSTRUMENT NO. 2013-0568008.

1A, 2A EASEMENT FOR POLE LINES AND / OR CONDUITS, IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, RECORDED ON DECEMBER 31, 1968, PER INSTRUMENT NO. 127409 OF OFFICIAL RECORDS.

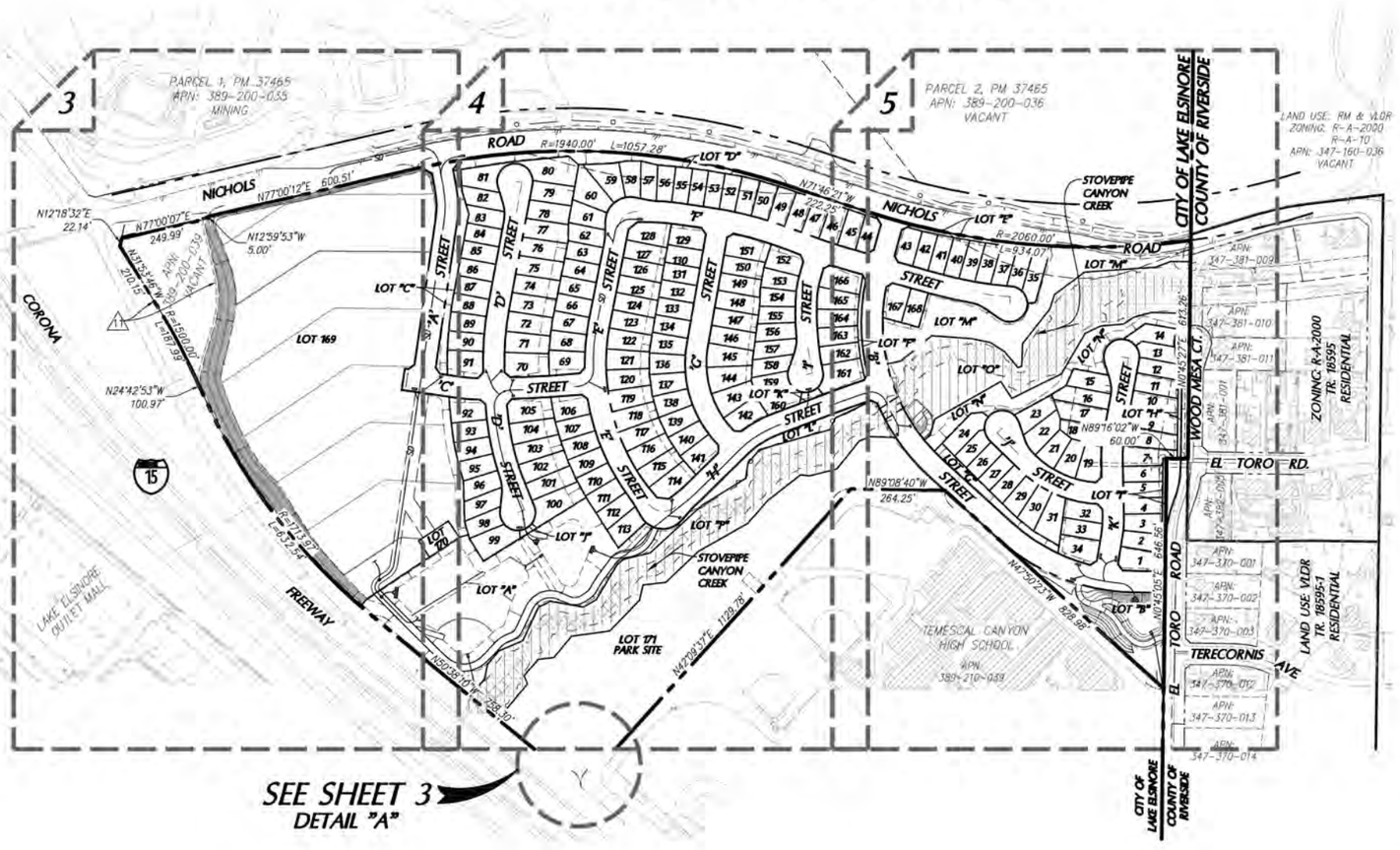
2A EASEMENT FOR ROAD AND UTILITY PURPOSES, IN FAVOR OF MARY ELIZABETH CUMMINGS, RECORDED ON NOVEMBER 16, 1988, PER INSTRUMENT NO. 311314 OF OFFICIAL RECORDS.

4 EASEMENT FOR PUBLIC ROAD PURPOSES PER PARCEL MAP NO. 37465 THIS EASEMENT IS TO BE VACATED BY THE CITY OF LAKE ELSINORE, INCLUDING ANY UTILITY RIGHTS, UPON COMPLETION OF THE NEW NICHOLS ROAD IMPROVEMENTS REQUIRED PER TTM 37305.

LEGEND/ABBREVIATIONS

A.C.	ASPHALT CONCRETE
AC., AC.	ACRE
A/B	AGGREGATE BASE
BC	BEGIN OF CURVE
CB	CATCH BASIN
C/L, ℄, ℄	CENTER LINE
C&G	CURB AND GUTTER
CY	CUBIC YARD
D/L	DAYLIGHT
DWY	DRIVEWAY
EA., EA	EACH
EC	END OF CURVE
EP	END OF PAVEMENT
EG	EXISTING GROUND
(EX., EXIST.	EXISTING
FH	FIRE HYDRANT
FS	FINISH GRADE
FL	FLOWLINE
FM	FORCE MAIN
FS	FINISHED SURFACE
GB	GRADE BREAK
HP	HIGH POINT
L.F., LF	LINEAL FEET
LN	LANE
LP	LOW POINT
LS	LANDSCAPE
MAN	MANHOLE
MIN	MINIMUM
MH	MANHOLE
N.A.P.	NOT-A-PART
NTS	NOT TO SCALE
P/L	PROPERTY LINE
PROP.	PROPOSED
R/W, RW	RIGHT OF WAY
R	RADIUS
SCE	SOUTHERN CALIFORNIA EDISON
SD	STORM DRAIN
S	SEWER
SMH	SEWER
SF, SQ. FT.	SQUARE FEET
SW	SIDEWALK
TC	TOP OF CURB
TYP	TYPICAL
VC	VERTICAL CURVE
W	WATER

CENTERLINE
PROPERTY LINE
RIGHT OF WAY
PROPOSED LOTLINE
PROPOSED WATER
PROPOSED STORM DRAIN
PROPOSED SEWER
PROPOSED RECYCLE WATER
0.5% STREET GRADE & FLOW DIRECTION
PROPOSED CONTOUR
EXISTING CONTOUR
TOP OF SLOPE
TOE OF SLOPE
PROPOSED RETAINING WALL
PROPOSED STREET LIGHT
PROPOSED FIRE HYDRANT
DAYLIGHT LINE
PAD LIMIT LINES
DIRECTION OF FLOW
1 LOT NUMBER
A LETTERED LOT
(527.00) PAD ELEVATION
DETAIL
SHEET NUMBER
PROPOSED 100 YEAR FEMA FLOODPLAIN
WATERS OF THE STATE (CDFW JURISDICTION)
WATERS OF THE US (ACOE JURISDICTION)
PROP. ROCK (RIP-RAP) CHANNEL OR RETENTION





VICINITY MAP
NOT TO SCALE
THOMAS GUIDE, PAGE 836, GRID B7, 2008
SAN BERNARDINO & RIVERSIDE COUNTY EDITION

GENERAL NOTES

1. ASSESSORS' PARCEL NUMBERS: 389-200-030, 389-200-032, 389-210-008, 389-210-032, 389-210-034, 389-210-036, & PORTIONS OF CURRENT APNS 389-200-035 & 389-200-036
3. APPROXIMATE AREA
GROSS = 73.97 ACRES
NET = 72.50 ACRES. EXCLUDES CALTRANS WIDENING EASEMENT 1A
3. EXISTING GENERAL PLAN DESIGNATION: SPECIFIC PLAN (SP) – ALBERHILL RANCH AND GENERAL COMMERCIAL (GC)
4. PROPOSED GENERAL PLAN DESIGNATION: SPECIFIC PLAN (SP) – NICHOLS SOUTH
5. EXISTING ZONING: SPECIFIC PLAN (SP) – ALBERHILL RANCH AND COMMERCIAL MIXED USE (CMU)
6. PROPOSED ZONING: SPECIFIC PLAN (SP) – NICHOLS SOUTH
7. TOTAL LOTS:

SINGLE FAMILY	LOTS 1–169	22.74 AC
COMMERCIAL	LOT 169	14.43 AC
SEWER LIFT STATION	LOT 170	0.57 AC
PARK SITE	LOT 171	8.49 AC
PUBLIC STREETS (A–J)	10 LOTS	12.28 AC
LETTERED LOTS (SEE TABLE ON SHEET 2)	16 LOTS	16.43 AC

8. RESIDENTIAL LOT SIZE DATA
AVERAGE LOT SIZE = 5,808 SF
MINIMUM LOT SIZE = 4,549 SF
MAXIMUM LOT SIZE = 8,468 SF
9. PROPOSED GROSS DENSITY RESIDENTIAL: 169 DU / 35.26 AC = 4.64 DU/AC
10. EXISTING LAND USE: VACANT
11. ADJACENT LAND USES
WEST: FREEWAY (INTERSTATE 15)
SOUTH: TEMESCAL CANYON HIGH SCHOOL
EAST: EXISTING RESIDENTIAL
NORTH: MIXED AND VACANT
12. PROPOSED USES:

RESIDENTIAL	LOTS 1–169
COMMERCIAL	LOT 169
SEWER LIFT STATION	LOT 170
PARK SITE	LOT 171
LANDSCAPE LOTS (MAINT. BY HOA)	LOTS "A" THROUGH "X"
OPEN SPACE/LS LOT	LOTS "Y" THROUGH "N"
OPEN SPACE	LOTS "O" AND "P"

13. PUBLIC STREETS: ALL STREETS SHOWN HEREON SHALL BE PUBLIC STREETS.
14. OPEN SPACE LOTS: ALL OPEN SPACE LOTS SHALL BE MAINTAINED BY THE H.O.A.
15. BUILDING SETBACKS: PER NICHOLS SOUTH SPECIFIC PLAN
16. THOMAS GUIDE: PAGE 836, GRIDS B–7 & C–7, 2007 SAN BERNARDINO & RIVERSIDE EDITION
17. GEOLOGICAL HAZARDS: PER THE SOILS REPORT BY CHJ/TERRACON THERE ARE NOT ACTIVE FAULTS WITHIN THE SITE AND THE SITE IS NOT SUBJECT TO LIQUEFACTION OR OTHER GEOLOGICAL HAZARDS.
18. FLOODPLAIN: PORTIONS OF THE SITE ARE WITHIN A MAPPED FLOOD PLAIN – ZONE "A" PER FEMA FIRM PANEL 0629 OF 2625, MAP NO. 06065C0629 G. A LOMR AND A LOMR WILL BE REQUIRED WITH THIS DEVELOPMENT TO RE-ESTABLISH THE LIMITS OF THIS FLOODPLAIN FOR STOVEPIPE CANYON CREEK TO MATCH EXISTING AND PROPOSED CONDITIONS.
19. PHASING: THREE FINAL MAPS ARE PROPOSED.

LEGAL DESCRIPTION

BEING A SUBDIVISION OF PARCELS 3 AND PARCEL 4 OF PARCEL MAP NO. 37465 IN THE CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

PUBLIC UTILITIES / SERVICES

SCHOOL DISTRICT:	LAKE ELSINORE UNIFIED SCHOOL DISTRICT (951) 253-7000
ELECTRIC:	SOUTHERN CALIFORNIA EDISON COMPANY (800) 655-4555
GAS:	SOUTHERN CALIFORNIA GAS COMPANY (800) 427-2200
WATER & SEWER:	ELSINORE VALLEY MUNICIPAL WATER DISTRICT (951) 674-3146
TELEPHONE:	VERIZON (800) 483-3000

Source(s): K&A Engineering, Inc. (03-05-2018)

Figure 3-12

NOT TO SCALE

TENTATIVE TRACT MAP NO. 37305

- **Drainage Basins.** TTM 37305 proposes two (2) lots for drainage basins on-site on a total of 5.45 acres, which would implement Planning Areas 12 and 13 of the NRSP. The drainage basin on Lot A would encompass 4.38 acres and would implement Planning Area 13 of the NRSP in the southwest portion of the site. The drainage basin on Lot B would encompass 1.07 acres and would implement Planning Area 12 of the NRSP in the southeastern portion of the site.
- **Landscape Lots.** TTM 37305 proposes nine (9) lots (Lots C through K) for common area landscaping on 1.45 acres
- **Open Space/Landscape Lots.** TTM 37305 proposes three (3) lots (Lots L through N) for open space and landscaping on 3.04 acres.
- **Open Space.** TTM 37305 proposes two (2) lots (Lots O and P) for open space uses on 6.49 acres.
- **On-Site Public Roadways.** TTM 37305 proposes a total of ten (10) public streets on 12.28 acres (Streets A through J).

TTM 37305 also identifies cross-sections for Nichols Road as well as internal roadways and identifies the improvements that would be constructed as part of the Project. These circulation improvements include the realignment and construction of a segment of Nichols Road (off-site) along the Project's frontage, construction of the western half of Wood Mesa Court (on-site), a bridge over Stovepipe Creek (on-site), and on-site local roadways (refer to Subsection 3.2.3C for a detailed description of roadway improvements proposed by the Project). TTM 37305 also would allow for the installation of on-site infrastructure improvements, such as water, sewer, and storm drain lines.

3.3 Project Construction and Operational Characteristics

3.3.1 Construction Details

A. Proposed Physical Disturbances

Physical disturbances needed to implement the proposed Project are depicted on Figure 3-13, *Proposed Physical Disturbances*. As shown, the Project proposes to grade a total area of 73.8 acres, with the area of on-site grading totaling 66.0 acres, and the area of off-site grading totaling 7.8 acres. Off-site grading would include proposed frontage improvements, realignment of Nichols Road, and installation of a 20-inch water line within Nichols Road. In addition to the 7.8 acres of off-site grading, the Project may require off-site improvements for sewer connections, which would require additional off-site grading. If sewer plan Option #1 (shown in Figure 3-6) is selected, the Project would require off-site grading along a segment of El Toro Road to provide a sewer connection to the Project site. If sewer plan Option #2 (shown in Figure 3-7) is selected, the Project would require off-site grading along a segment of El Toro Road and from the Project site under I-15 to a point of connection in Collier Avenue. In addition to the 73.8 acres (which does not include potential off-site sewer grading disturbances) of on- and off-site grading disturbances, fuel modification areas planned by the Project would impact an additional 0.8 acre on-site. No other on- or off-site physical impacts are anticipated from Project implementation.

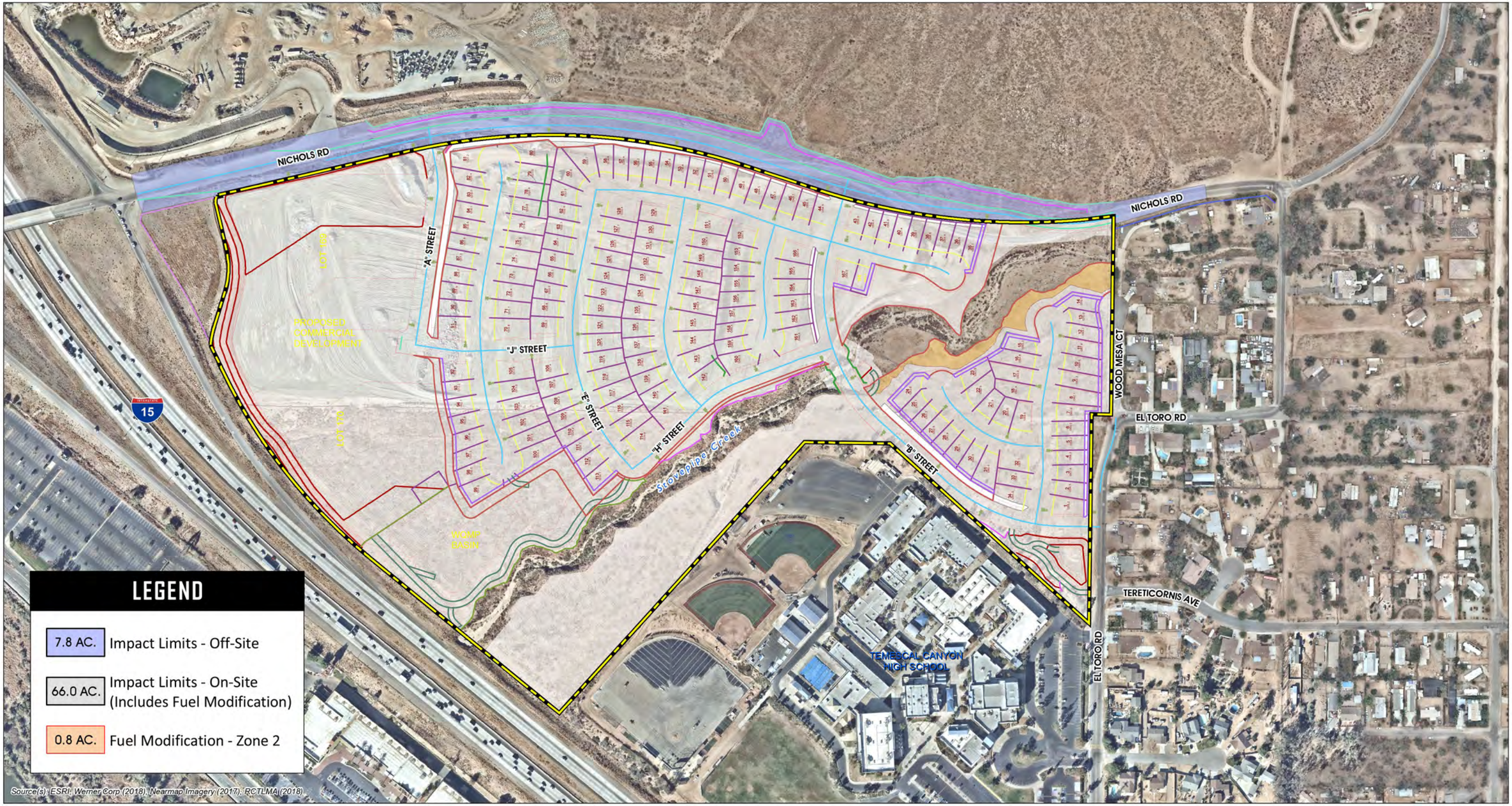


Figure 3-13

PROPOSED PHYSICAL DISTURBANCES

B. Anticipated Construction Schedule

The proposed Project would be developed in three phases, as previously depicted on Figure 3-11. Construction would begin with site preparation and grading on-site. It is anticipated for purposes of analysis within this EIR that construction of the residential portion of the Project would take approximately two years, with construction commencing in 2019 for Phase 1 and in 2020 for Phase 2. Construction of the commercial site (Phase 3) is expected to commence in 2021. Phase 1 would be occupied in 2020, Phase 2 would be occupied in 2021, and Phase 3 would be occupied in 2024. If construction commences later than analytically assumed by this EIR, impacts to the environment associated with construction equipment would be less than assumed herein, because of the phase out of older, more polluting construction equipment and replacement by newer and less polluting pieces of equipment. As noted previously in Subsection 3.2.3.I, grading would require approximately 198,000 cy of cut material and 217,000 cy of fill material, requiring the import of approximately 19,000 cy of earthwork material. Table 3-4, *Project Construction Schedule*, shows the construction schedule and durations assumed in this EIR, and Table 3-5, *Construction Equipment Assumptions*, presents the construction equipment assumptions utilized in this EIR.

3.3.2 Operational Characteristics

The proposed Project would be operated as a residential community, and as a neighborhood commercial center. As such, typical operational characteristics include residents and visitors traveling to and from the residential portion of the site, customers and vendors traveling to and from the commercial area of the site, visitors traveling to and from the hotel use on-site, leisure and maintenance activities occurring on individual residential lots and in the on-site recreation areas, and general maintenance of common areas. Low levels of noise and a moderate level of artificial exterior lighting typical of a mixed-use community is expected.

A. Future Population

Implementation of the proposed Project would result in the construction of 168 single-family homes. According to the United States Census Bureau, single-family uses within the City of Lake Elsinore generate approximately 3.74 persons per dwelling unit. Accordingly, the Project would result in an estimated future population of 628 residents (168 dwelling units x 3.74 persons per household = 628 future residents). An additional transient population also would result from the proposed hotel uses. (USCB, 2016)

B. Future Employment

Implementation of the proposed Project would result in the construction of a neighborhood commercial center on approximately 14.5 acres of the Project site, which would include a 130-room hotel, 6,000 s.f. of fast-food restaurant uses with drive-through window use, 5,500 s.f. of fast-food restaurant uses without drive-through window use, 9,400 s.f. of sit-down restaurant uses, 4,400 s.f. of commercial retail uses, an 8,000 s.f. health and fitness club, a gas station (including market and car wash) with 16 fueling stations, and 43,000 s.f. of office uses. Based on the Southern California Association of Government's (SCAG) Employment Density Study Summary Report, the employment density for other retail/service uses is 21.98 employees per acre. Thus, the 14.5 acres of commercial retail uses proposed by the Project would result in approximately 319 employees (14.5 acres x 21.98 jobs per acre = 319 jobs). (SCAG, 2001, Table 2A)

Table 3-4 Project Construction Schedule

Phase Name	Start Date	End Date	Days
Site Preparation and Grading			
Site Preparation	06/03/2019	07/26/2019	40
Mass Grading	07/27/2019	12/27/2019	110
Phase 1			
Fine Grading	12/28/2019	01/24/2020	20
Building Construction	12/28/2019	11/13/2020	230
Paving	10/18/2020	11/13/2020	20
Architectural Coating	10/18/2020	12/11/2020	40
Phase 2			
Fine Grading	06/01/2020	06/26/2020	20
Building Construction	06/01/2020	12/10/2021	400
Paving	09/26/2021	11/12/2021	35
Architectural Coating	09/26/2021	12/31/2021	70
Phase 3			
Fine Grading	12/09/2021	01/05/2022	20
Building Construction	12/09/2021	11/08/2023	500
Paving	08/20/2023	11/12/2021	50
Architectural Coating	08/20/2023	01/05/2024	100

(Urban Crossroads, 2018a, Table 3-2)

Table 3-5 Construction Equipment Assumptions

Activity	Equipment	Number	Hours Per Day
Site Preparation	Crawler Tractors	4	8
	Rubber Tired Dozers	3	8
Mass Grading and Fine Grading	Crawler Tractors	2	8
	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
Building Construction	Cranes	1	8
	Crawler Tractors	3	8
	Forklifts	3	8
	Generator Sets	1	8
	Welders	1	8
Paving	Paving Equipment	2	8
	Rollers	2	8
	Pavers	2	8
Architectural Coating	Air Compressors	1	8

(Urban Crossroads, 2018a, Table 3-3)

C. *Future Traffic*

Based on a Project-specific Traffic Impact Analysis conducted by Urban Crossroads, Inc. (*Technical Appendix L*), and as discussed in Subsection 4.15, *Transportation and Traffic*, to this EIR, Phase 1 of the proposed Project, which includes the construction of 34 dwelling units, would generate 321 net daily trip-ends, with 26 vehicles per hour (VPH) in the AM peak hour and 35 VPH in the PM peak hour. Phase 2 of the Project, which includes 168 dwelling units and a park site, would generate 1,593 net daily trip-ends, with 128 VPH in the AM peak hour and 169 VPH in the PM peak hour. Buildout of the Project, including 168 dwelling units, a park site, and commercial uses [including a 130-room hotel, 6,000 s.f. of fast-food restaurant uses with drive-through window use, 5,500 s.f. of fast-food restaurant uses without drive-through window use, 9,400 s.f. of sit-down restaurant uses, an 8,000 s.f. health and fitness club, a gas station (including market and car wash) with 16 fueling stations, and 43,000 s.f. of office uses], would result in a total of approximately 6,901 net daily trip-ends, with 734 VPH in the AM peak hour and 622 VPH in the PM peak hour. (Urban Crossroads, 2018d, Table 4-2)

D. *Water Demand*

Based on Table 3-14, *Land Use Classifications and Acreages*, of the EVMWD Water System Master Plan, residential and recreational uses result in a demand for 2,300 gallons per day per acre (gpd/ac) of water while

commercial uses result in a demand for 1,800 gpd/ac. Accordingly, the estimated demand for water for the Project's 31.1 acres of residential uses, 14.5 acres of commercial uses, and 8.3 acres of recreational uses is equal to approximately 116,720 US gallons per day [(31.1 ac of residential uses x 2,300 gpd/ac = 71,530 gpd)+(14.5 ac of commercial uses x 1,800 gpd/ac = 26,100 gpd)+(8.3 ac of recreational uses x 2,300 gpd/ac = 19,090 gpd) = a total of 116,720 gpd]. (EVMWD, 2016a, Table 3-14)

E. Wastewater Demand

Based on Table 4-8, *Calibrated Wastewater Duty and Generation Factors*, of the EVMWD Sewer System Master Plan, residential uses generate 778 gpd/ac of wastewater while commercial uses result in a demand for 994 gpd/ac, and recreational uses generate 101 gpd/ac. Accordingly, the estimated generation of wastewater for the Project's 31.1 acres of residential uses, 14.5 acres of commercial uses, and 8.3 acres of recreational uses is equal to approximately 39,447 US gallons per day [(31.1 ac of residential uses x 778 gpd/ac = 24,196 gpd) + (14.5 ac of commercial uses x 994 gpd/ac = 14,413 gpd) + (8.3 ac of recreational uses x 101 gpd/ac = 838 gpd) = a total of 39,447 gpd]. (EVMWD, 2016b, Table 4-8)

3.4 SUMMARY OF REQUESTED ACTIONS

The City of Lake Elsinore 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's Planning Commission will hold a public hearing to consider the Final EIR, the Project's General Plan Amendment, Specific Plan, Specific Plan Amendment, Zone Change, and Tentative Tract Map applications. The Planning Commission will make advisory recommendations to the City Council on whether to approve, approve with changes, or deny the proposed General Plan Amendment, Specific Plan, Specific Plan Amendment, Zone Change, and Tentative Tract Map applications. 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, Specific Plan Amendment, Zone Change, and Tentative Tract Map applications. Upon approval or conditional approval of the above-described Project actions and upon certification of the Final EIR by the 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 City jurisdiction is provided in Table 3-6, *Matrix of Project Approvals/Permits.*

3.5 RELATED ENVIRONMENTAL REVIEW AND CONSULTATION REQUIREMENTS

Subsequent to approval of General Plan Amendment No. 2018-01, Specific Plan No. 2018-01, Specific Plan Amendment No. 2017-03, Zone Change No. 2018-01, and a Tentative Tract Map No. 37305, additional discretionary and ministerial actions may be necessary to implement the proposed Project. These include, but are not limited to, individual plot plans and/or conditional use permits, grading permits, encroachment permits/road improvements, drainage infrastructure improvements, water and sewer infrastructure improvements, storm water permit(s) (National Pollutant Discharge Elimination System [NPDES]), a Section 1602 Streambed Alteration Agreement, Regional Water Quality Control Board (RWQCB) Waste Discharge Requirements, Federal Emergency Management Agency (FEMA) Conditional Letter of Map Revision, ~~and~~ FEMA Letter of Map Revision, and permits to construct and operate the proposed gas station from the South

Coast Air Quality Management District (SCAQMD). Table 3-6 provides a summary of the agencies responsible for subsequent discretionary approvals associated with the Project. The required EIR will cover all federal, state, and local government approvals which may be needed to construct or implement the Project, whether explicitly noted in Table 3-6 or not (CEQA Guidelines § 15124[d]).

Table 3-6 Matrix of Project Approvals/Permits

PUBLIC AGENCY	APPROVALS AND DECISIONS
CITY OF LAKE ELSINORE	
City of Lake Elsinore Discretionary Approvals	
City of Lake Elsinore Planning Commission	• Provide recommendations to the City of Lake Elsinore City Council regarding certification of the Project's EIR. • Provide recommendations to the City of Lake Elsinore City Council whether to approve General Plan Amendment (GPA No. 2018-01), Nichols Ranch Specific Plan (SP No. 2018-01), Alberhill Ranch Specific Plan Amendment (SPA No. 2017-03), Zone Change (ZC No. 2018-01), and a Tentative Tract Map (TTM No. 37305).
City of Lake Elsinore City Council	• Reject or certify this EIR along with appropriate CEQA Findings. • Approve, conditionally approve, or deny the proposed whether to approve General Plan Amendment (GPA No. 2018-01), Zone Change (ZC No. 2018-01), and a Tentative Tract Map (TTM No. 37305). • Approve by Ordinance or deny Nichols Ranch Specific Plan 2018-01, Alberhill Ranch and Alberhill Ranch Specific Plan Amendment (SPA No. 2017-03).
City of Lake Elsinore Subsequent Discretionary and Ministerial Approvals	
City of Lake Elsinore Community Development Department	• Approve additional Tract Maps, as well as Final Maps, Design Reviews, and/or Site Plans as may be appropriate. • Issue Grading Permits. • Issue Building Permits. • Approve Road Improvement Plans. • Issue Encroachment Permits. • Issue Conditional Use Permits, if required.
OTHER AGENCIES-SUBSEQUENT APPROVALS AND PERMITS	
California Department of Fish and Wildlife (CDFW)	• Issuance of a Section 1602 Streambed Alteration Agreement (SAA)
Caltrans	• Encroachment permit(s) (if work within Caltrans right-of-way is required)
Santa Ana Regional Water Quality Control Board (RWQCB)	• Issuance of a Construction Activity General Construction Permit. • Compliance with National Pollutant Discharge Elimination System (NPDES) Permit. Waste Discharge Requirements
Riverside County Flood Control & Water Conservation District (RCFCWCD)	• Approvals for construction of drainage basins.
Elsinore Valley Municipal Water District (EVMWD)	• Approval of water and sewer improvements
Federal Emergency Management Agency (FEMA)	• Issuance of a Conditional Letter of Map Revision • Issuance of a Letter of Map Revision
South Coast Air Quality Management District (SCAQMD)	• Issuance of permits to construct and operate the proposed gasoline station

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*, provides analyses of potential direct, indirect, and cumulatively-considerable impacts that could result 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. Public comment on the scope consisted of written comments received by the City of Lake Elsinore in response to the Notice of Preparation (NOP) issued for this EIR. An EIR scoping meeting also was held on June 14, 2018 at the Lake Elsinore Cultural Arts Center, located at 183 North Main Street, Lake Elsinore, CA 92530; however, no members of the publics attended the scoping meeting. Taking all known information and public comments into consideration, 18 primary environmental subject areas are evaluated in this Section 4.0, as listed below. Each subsection evaluates several specific subject matters related to the general topic of the subsection. 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	4.10	Land Use and Planning
4.2	Air Quality	4.11	Noise
4.3	Biological Resources	4.12	Paleontological Resources
4.4	Energy	4.13	Population and Housing
4.5	Geology and Soils	4.14	Public Services
4.6	Greenhouse Gas Emissions	4.15	Recreation
4.7	Hazards and Hazardous Materials	4.16	Transportation and Traffic
4.8	Historic and Archeological Resources	4.17	Tribal Cultural Resources
4.9	Hydrology and Water Quality	4.18	Utilities and Service Systems

Two (2) environmental subjects, Agriculture/Forest Resources and Mineral Resources, were determined by the City of Lake Elsinore to have no potential to be significantly impacted by the Project, as concluded by the Project's Initial Study (included in *Technical Appendix A* to this EIR) and after consideration of all comment received by the City of Lake Elsinore on the scope of this EIR and documented in the City's administrative record. The subjects of Agriculture and Forest Resources; and Mineral Resources; are discussed briefly 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 near-term traffic and vehicular-related air quality, greenhouse gas, and noise impacts which rely instead on the list of projects approach. This methodology was determined to be appropriate by the City of Lake Elsinore because long-range planning documents contain a sufficient amount of information to enable an analysis of cumulative effects 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.

Under this approach, the cumulative analysis under most sections considers impacts to each issue area based on the presumed buildout of the City's General Plan as well as the General Plans of any nearby jurisdictions that occur within the cumulative study area for each subject area. For most issue areas, this would encompass the City of Lake Elsinore and nearby portions of unincorporated Riverside County, although the cumulative study area may be smaller or larger depending on the issue area under evaluation. For example, for the issue area of aesthetics, the cumulative study area is defined by the Project's viewshed (i.e., off-site areas with views of the Project site), which encompasses only portions of the City of Lake Elsinore and unincorporated Riverside County. For the issue of hydrology and water quality, by contrast, the cumulative study area is defined as the Santa Ana River Watershed, which encompasses portions of San Bernardino, Riverside, Orange, and Los Angeles Counties. Refer to EIR Section 4.0 for a description of the specific cumulative study area used for each subject area evaluated in this EIR.

As noted, for most issue areas, the City of Lake Elsinore and nearby portions of unincorporated Riverside County is used as the Project's cumulative study area. This cumulative study area encompasses a large area surrounding the Project site that has similar environmental characteristics as the Project area. This area has historically been used for extractive mining uses but has in recent decades been developed for residential and non-residential developments. This study area exhibits similar characteristics in terms of climate, geology,

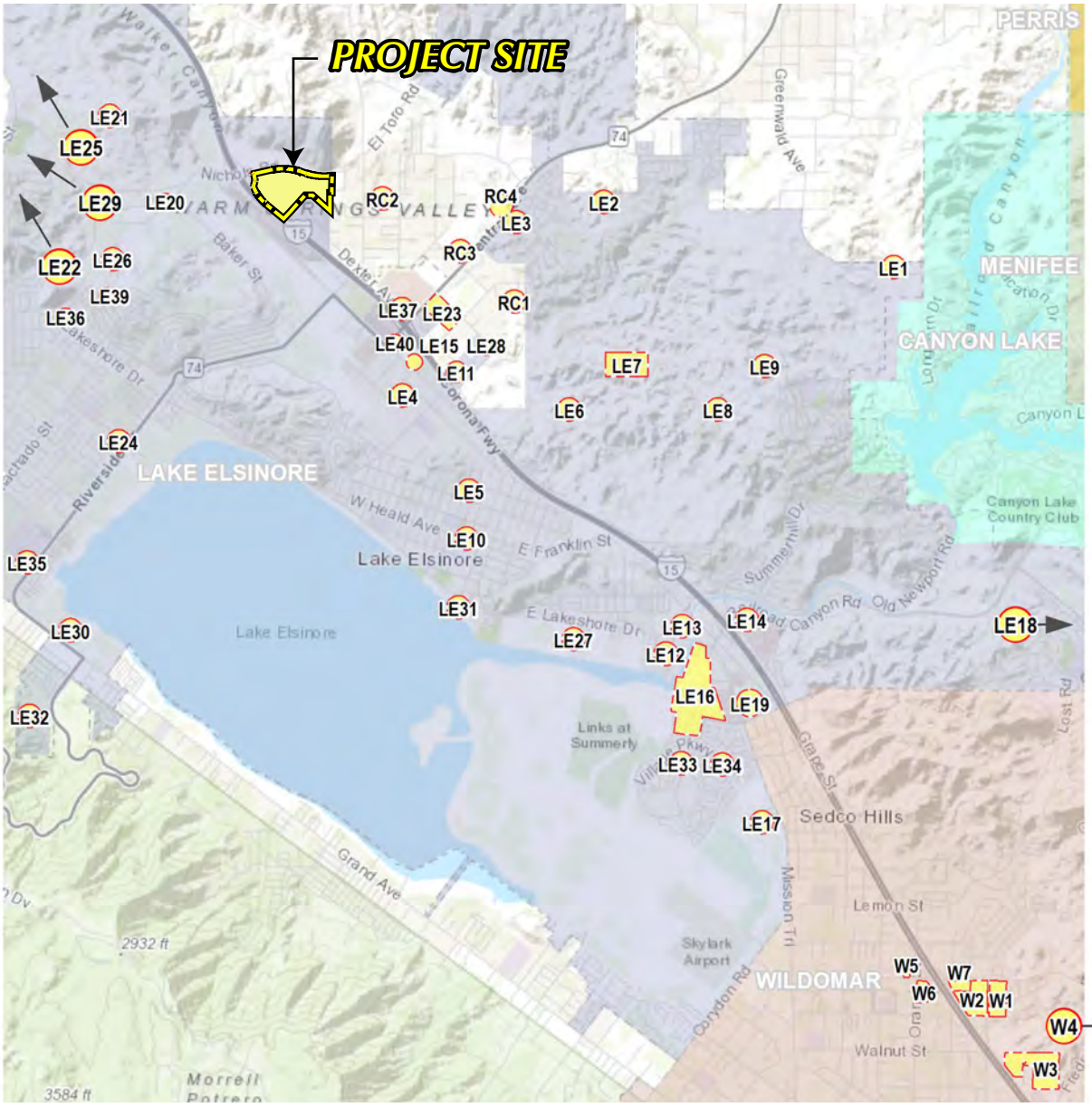
and hydrology, and therefore is also likely to have similar biological and archaeological characteristics as well. This study area also encompasses the service areas of the Project site's primary public service and utility providers. Areas outside of this study area either exhibit topographic, climatological, 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.

The analysis of cumulatively-considerable traffic impacts uses a combined approach, utilizing the list of projects approach for the near-term analysis of cumulatively-considerable traffic impacts, and the summary of projections approach for the evaluation of long-term cumulatively-considerable traffic impacts. The cumulative impact analyses of near-term vehicular-related air quality, greenhouse gas, and noise impacts, which rely on data from the Project's traffic study, also inherently utilize the combined approach. With the combined approach, the cumulative impact analyses for the analysis of traffic impacts, as well as cumulative air quality, greenhouse gas, and noise impacts, overstate the Project's (and Project-related components') potential cumulatively-considerable 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 traffic, air quality, greenhouse gas, and noise impacts.

For near-term conditions, the analyses of cumulatively-considerable traffic, air quality, greenhouse gas, and noise impacts are based on existing traffic conditions plus ambient growth and the manual addition of traffic from past, present, and reasonably foreseeable projects and includes approved and pending development projects in proximity to the Project site that would contribute traffic to the same transportation facilities as the Project, as well as large, traffic-intensive projects farther from the Project site that have the potential to affect regional transportation facilities. 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. As shown on Table 4.0-1, *Cumulative Project List*, and as depicted on Figure 4.0-1, *Cumulative Development Projects Location Map*, the near-term cumulative impact analysis of traffic impacts, as well as the near-term cumulative impact analysis of air quality, greenhouse gases, and noise, includes 44 other past, present, and reasonably foreseeable projects within this study area in addition to the summary of projections (Urban Crossroads, 2018d, pp. 80-81). The analysis of long-term cumulatively-considerable traffic impacts considers full buildout of the City of Lake Elsinore and nearby portions of unincorporated Riverside County, based on the General Plan land use plans for these jurisdictions.

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.

- City of Lake Elsinore General Plan EIR (SCH No. 2005121019), available for public review at the City of Lake Elsinore Planning Division, located at 130 South Main Street, Lake Elsinore, CA 92530.



Source(s): Urban Crossroads (07-24-2018)

Figure 4.0-1

NOT TO SCALE

CUMULATIVE DEVELOPMENT PROJECTS LOCATION MAP

Table 4.0-1 Cumulative Project List

No.	Project Name	Location	Land Use	Quantity[1]	
City of Lake Elsinore					
LE1	Greenwald[2]	Lake Elsinore	Shopping Center	104.450	TSF
LE2	Ramsgate	Lake Elsinore	Single Family Residential	1,306	DU
			Condo/Townhomes	120	DU
LE3	Trieste Residential (Tract 36624)	Lake Elsinore	Single Family Residential	75	DU
LE4	Fairway Business Park	Lake Elsinore	Warehouse	279.445	TSF
LE5	Ness Industrial Garage	Lake Elsinore	Warehouse	12.000	TSF
LE6	Spyglass Ranch[3]	Lake Elsinore	Single Family Residential	523	DU
			Condo/Townhomes	171	DU
			Shopping Center	145.00	TSF
LE7	South Shore I (Tract 31593)	Lake Elsinore	Single Family Residential	521	DU
	South Shore II (Tract 36567)	Lake Elsinore	Single Family Residential	147	DU
LE8	La Strada (Tract 32077)	Lake Elsinore	Single Family Residential	134	DU
LE9	Tuscany West (Tract 25473)	Lake Elsinore	Single Family Residential	164	DU
LE10	Marina Village Condos (Tract 33820)[6]	Lake Elsinore	Condo/Townhomes	94	DU
LE11	La Quinta Inn	Lake Elsinore	Hotel	64	RM
LE12	LE Sports Complex	Lake Elsinore	Recreational Community Center	525.000	TSF
LE13	TAG Property[4]	Lake Elsinore	New Car Sales	50.000	TSF
LE14	City Center Condos[4]	Lake Elsinore	Condo/Townhomes	144	DU
LE15	Central & Collier	Lake Elsinore	Shopping Center	75.000	TSF
LE16	Diamond Specific Plan[5]	Lake Elsinore	Condo/Townhomes	600	DU
			Hotel	150	RM
			General Office	425.000	TSF
			Shopping Center	472.000	TSF
LE17	The Colony[4]	Lake Elsinore	Apartments	211	DU
	Back Basin Specific Plan & East Lake Specific Plan	Lake Elsinore	Single Family Residential	2,407	DU
			Condo/Townhomes	324	DU
	John Laing Homes (Phase 2)	Lake Elsinore	Single Family Residential	506	DU
			Condo/Townhomes	1,141	DU
			Apartments	308	DU
			Shopping Center	117.000	TSF
LE18	Canyon Hills Estates (Tract 34249)	Lake Elsinore	Single Family Residential	302	DU
	Canyon Hills (Multiple Tracts)	Lake Elsinore	Single Family Residential	2,700	DU
			Apartments	1,575	DU
	Audie Murphy (Tract 36484)	Lake Elsinore	Single Family Residential	109	DU
	Audie Murphy (Tract 36485)	Lake Elsinore	Single Family Residential	1,003	DU

Table 4.0-1 Cumulative Project List

No.	Project Name	Location	Land Use	Quantity[1]	
LE19	Artisan Alley	Lake Elsinore	Shopping Center	95.100	TSF
LE20	Quikrete Plant	Lake Elsinore	Warehouse	163.900	TSF
LE21	Alberhill Ridge (Tract 35001)	Lake Elsinore	Single Family Residential	1,056	DU
			Apartments	345	DU
			Shopping Center	679.000	TSF
			General Office	679.000	TSF
LE22	Alberhill Ranch	Lake Elsinore	Single Family Residential	1,986	DU
LE23	Lake Elsinore Walmart	Lake Elsinore	Free-Standing Discount Superstore	154.487	TSF
			Specialty Retail	4.600	TSF
			Fast Food w/Drive Thru	6.800	TSF
			Fast Food w/o Drive Thru	4.600	TSF
LE24	Circle K	Lake Elsinore	Gas Station	4.500	TSF
LE25	Alberhill Villages	Lake Elsinore	Single Family Residential	9,536	DU
LE26	Terracina	Lake Elsinore	Single Family Residential	365	DU
LE27	Lakeshore Senior Apartments	Lake Elsinore	Senior Adult Housing Attached	121	DU
LE28	North Peak Plaza	Lake Elsinore	Condo/Townhomes	92	DU
			Shopping Center	92.000	TSF
LE29	Running Deer (TR 31957)		Single Family Residential	101	DU
LE30	Wake Rider Beach Resort	Lake Elsinore	Beach Resort	11.350	TSF
LE31	Lakeshore Town Center	Lake Elsinore	Town Center	237.400	TSF
LE32	Ortega	Lake Elsinore	Single Family Residential	105	DU
LE33	Summerly	Lake Elsinore	Single Family Residential	142	DU
LE34	Beazer, KB Homes, McMillin Homes, Richmond American	Lake Elsinore	Single Family Residential	395	DU
LE35	Village at Lake Elsinore SPA #1	Lake Elsinore	Single Family Residential	163	DU
LE36	Lakeview Manor	Lake Elsinore	Condo/Townhomes	104	DU
LE37	Golden Corral Restaurant	Lake Elsinore	Restaurant	7.798	TSF
LE38	Tige Watersports	Lake Elsinore	Shopping Center	34.500	TSF
LE39	Kassab Travel Center	Lake Elsinore	High Turnover (Sit-Down) Restaurant	17.200	TSF
LE40	Honda	Lake Elsinore	Automobile Sales	53.400	TSF
County of Riverside					
RC1	Lennar (Tract 31792)	County of Riverside	Single Family Residential	191	DU
RC2	PM33840	County of Riverside	Single Family Residential	4	DU
RC3	PP20158R1	County of Riverside	Storage Facility	103.727	TSF
RC4	CUP03651	County of Riverside	Recycling Facility	0.504	TSF

[1] TSF = Thousand Square Feet; DU = Dwelling Unit; AC = Acres; STU = Students; VFP = Vehicle Fueling Positions

[2] Source: Greenwald Avenue Commercial Center TIA, Urban Crossroads, Inc., May 2008.

[3] Source: Spyglass Ranch TIA (Revised), Kunzman Associates, February 2007.

[4] Source: Lake Elsinore TAG Property TIA (Revised), Urban Crossroads, Inc., August 2008.

[5] Source: The Diamond Specific Plan TIA, Urban Crossroads, Inc., April 2009.

(Urban Crossroads, 2018d, Table 4-5)

- 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 4.18 of this EIR evaluate the 18 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 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 (as updated in December 2018) and as applied by the City of Lake Elsinore 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 Lake Elsinore 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 Lake Elsinore, taking into consideration CEQA Guidelines Appendix G (as updated in December 2018); the City of Lake Elsinore'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. A summarized "impact statement" is provided in each subsection following the analysis. The following terms are used to describe the level of significance related to the physical conditions within the area affected by the proposed Project:

- No Impact: An adverse change in the physical environment would not occur.
- Less-than-Significant Impact: An adverse change in the physical environment would occur but the change would not be substantial or potentially substantial and would not exceed the threshold(s) of significance presented in this EIR.
- Significant Impact: A substantial or potentially substantial adverse change in the physical environment would occur and would exceed the threshold(s) of significance presented in this EIR, requiring the consideration of mitigation measures or alternatives to the proposed Project.

Each subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations) that the Project is 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. The following terms are used to describe the level of significance following the application of recommended mitigation measures:

- Less-than-Significant Impact with Mitigation: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR; however, the impact can be avoided or reduced to a less than significant level through the application of feasible mitigation measures.
- Significant and Unavoidable Impact: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR. Feasible and enforceable mitigation measures that have a proportional nexus to the Project's impact are either not available or would not be fully effective in avoiding or reducing the impact to below a level of significance.

For any impact identified as significant and unavoidable, the City of Lake Elsinore 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 describes the aesthetic qualities and visual resources present on the Project site and in the site's vicinity. This Subsection also evaluates the potential effects that the Project may have on these resources. Descriptions of existing visual characteristics, both on-site and in the vicinity of the Project site, and the analysis of potential impacts to aesthetic resources are based on several sources. Descriptions are based, in part, on field observations and site photographs collected by T&B Planning, Inc. on April 25, 2018 (T&B Planning, 2018); analysis of aerial photography (Google Earth, 2018); and Project application materials submitted to the City of Lake Elsinore and described in Section 3.0, *Project Description*, of this EIR. This Subsection is also based in part on information and policies contained in the City of Lake Elsinore General Plan (Lake Elsinore, 2011a), applicable City of Lake Elsinore Municipal Code sections (Lake Elsinore, 2018), and the Aesthetics section of the City of Lake Elsinore General Plan EIR (Lake Elsinore, 2011b).

4.1.1 EXISTING CONDITIONS

The Project site is located in the northeastern portion of the City of Lake Elsinore, which is within Riverside County. The Project site comprises approximately 72.5 acres. This site is located east of and adjacent to I-15, south of Nichols Road, and west of Wood Mesa Court/El Toro Road. Topographically, the site ranges in elevation from 1,294 feet above mean sea level (amsl) in the southwestern portion of the site to approximately 1,370 feet amsl in the eastern portion of the site; however, following reclamation elevations on-site would range from 1,294 to 1,323 feet amsl. (Google Earth, 2018)

CEQA Guidelines § 15125 requires EIRs to include a description of the physical environmental conditions in the vicinity of the Project as they existed at the time this EIR's Notice of Preparation (NOP) was released for public review. The NOP for this EIR was released on May 24, 2018. As of that date, the site consisted of a largely undeveloped and disturbed piece of property. The northern 45.4 acres of the Project site were undergoing reclamation activities, pursuant to Amendment No. 2 to Reclamation Plan 2006-01 (RP 2006-01A2); however, because reclamation activities will cease prior to implementation of the proposed Project, the analysis herein assumes that the existing visual condition of the northern 45.4 acres of the site is the condition that will exist upon completion of reclamation activities. At the time of site visits, the southern 27.1 acres of the site consisted of undeveloped, disturbed lands that are routinely disced as part of on-going fire abatement activities. Additionally, the Project site is traversed by Stovepipe Creek, which generally crosses the site in a northeast-to-southwest orientation. The existing conditions of the Project site were previously shown on Figure 2-4, *Aerial Photograph*.

To illustrate the existing visual conditions of the Project site in more detail, a photographic inventory was prepared. Figure 4.1-1, *Site Photograph Key Map*, depicts the locations of six (6) vantage point photographs, each of which are described below. These photographs, shown on Figure 4.1-2 and Figure 4.1-3, provide a representative visual inventory of the site's visual characteristics as seen from surrounding public viewing areas. It should be noted that while site photographs were collected in April 2018, conditions on the property have not substantially changed since that time (aside from on-going reclamation activities on the northern 45.4 acres of the site); thus, the photographs presented in this section provide an accurate reflection of the existing conditions of the Project site and surrounding areas.



Figure 4.1-1

0 150 300 600 Feet

SITE PHOTOGRAPH KEY MAP

East



South

Site Photograph 1: From Nichols Road looking east to south.

South



West

Site Photograph 2: From Nichols Road looking south to west.

South



North

Site Photograph 3: From the intersection of El Toro Road and Wood Mesa Court looking south to north.

Figure 4.1-2

NOT TO SCALE

SITE PHOTOGRAPHS 1, 2, & 3

Southwest



East

Site Photograph 4: From southern corner of Project Site looking southwest to east.

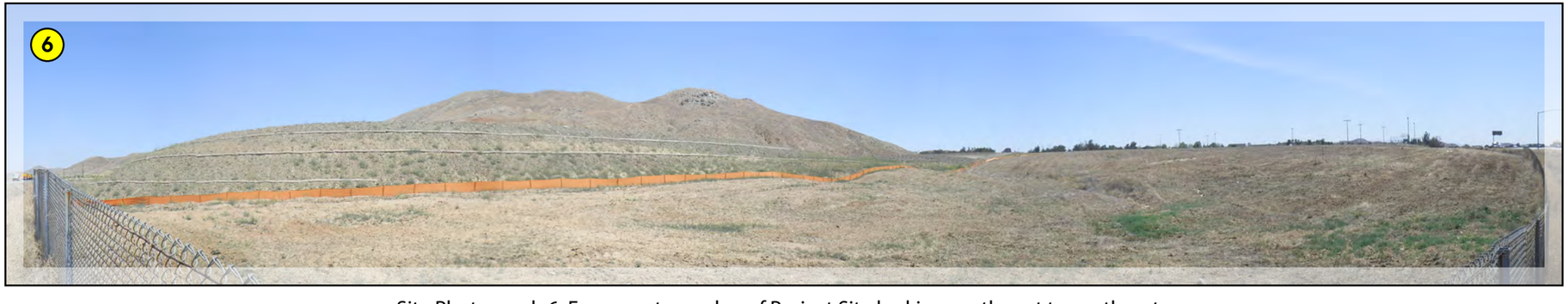
Northwest



Northeast

Site Photograph 5: From southwestern corner of Project Site looking northwest to northeast.

Northwest



Southeast

Site Photograph 6: From western edge of Project Site looking northwest to southeast.

Figure 4.1-3

NOT TO SCALE

SITE PHOTOGRAPHS 4, 5, & 6

- Site Photograph 1 (Figure 4.1-2): Site Photograph 1 was taken from the northwestern corner of the Project site, along Nichols Road looking east to south. As shown in this photograph, this portion of the Project site is undergoing reclamation activities, pursuant to Amendment No. 2 to Reclamation Plan 2006-01 (Reclamation Plan 2006-01A2). The near-ground of this photograph shows a gravelly slope with haybales along the manufactured slope at regular intervals. Orange construction fencing is visible along the toe of the manufactured slope. The left side of the photograph provides a view of Nichols Road with telephone poles and a three-wire fence alongside. Located in the background right portion of the photograph is I-15. Distant views of local steep hills also can be seen from this vantage in the left portion of the photo.

- Site Photograph 2 (Figure 4.1-2): Site Photograph 2 was taken from the northeastern corner of the Project site along Nichols Road, looking south to west. Chain link and three-wire fencing delineate the Project boundary and is visible throughout the photograph. Within the Project site, Stovepipe Creek is visible with shrubs delineating its location along the northern Project boundary before turning to the southwest. The remaining portions of the Project site are shown to include gently sloping topography with grassland vegetation that is regularly disced. The utility poles that travers the Project site are visible in the distance. The left side of the photograph depicts existing residential structures with tall trees along Wood Mesa Court. Visible on the right side of the photograph is Nichols Road. Along the horizon in the center-left portion of the photo is the Temescal Canyon High School. Distant views of mountains associated with the Cleveland National Forest also can be seen from this vantage.

- Site Photograph 3 (Figure 4.1-2): Site Photograph 3 was taken from the eastern boundary of the Project site near the intersection of El Toro Road and Wood Mesa Court looking south to north. From this location, the chain link fencing that occurs along the Project's eastern boundary are visible, beyond which is the Project site with gently sloping topography. Vegetation visible from this location is limited to grasses that are routinely disced for fire abatement purposes. The existing utility poles that traverse the site are visible throughout the photo. The left side of the photograph provides a view of El Toro Road, to the right of which the Temescal Canyon High School is visible. The right side of the photograph depicts Wood Mesa Court, beyond which are the steep hillsides that occur to the north of the Project site. Distant views of mountains associated with the Cleveland National Forest also can be seen from this vantage.

- Site Photograph 4 (Figure 4.1-3): Site Photograph 4 was taken from the southern portion of the Project site adjacent to the Temescal Canyon High School, looking southwest to east. As shown in this photograph, this portion of the Project site consists of gently sloping topography and is sparsely vegetated due to on-going fire abatement activities. Construction debris, consisting of concrete pipes and blocks, are visible in the center portion of the photo. In the right portion of the photo the existing utility poles on site are visible, beyond which are the steep hillsides located north of the Project site. Orange construction fencing is visible along the center-left portion of the photo, beyond which the existing mining activities to the north of Nichols Road are visible. The right side of the photograph depicts ornamental landscaping associated with existing residences to the east of the Project site.

- Site Photograph 5 (Figure 4.1-3): Site Photograph 5 was taken from southwestern corner of the Project site looking northwest to northeast. The Project site is visible throughout the foreground of this photo with gently sloping topography and sparse vegetation due to on-going fire abatement activities. In the

distance, the steep slopes that occur to the north of the Project site are visible, to the left of which is the existing mining operation located north of Nichols Road. The left side of the photograph depicts I-15. A wooden structure that appears to have been used in the past as a billboard is visible in the left portion of the photo. In the far-right portion of the photo, fencing and light poles associated with the adjacent Temescal Canyon High School are visible.

- Site Photograph 6 (Figure 4.1-3): Site Photograph 6 was taken from the western edge of Project site looking northwest to southeast. The near-ground of the photo depicts the gently sloping topography of the Project site. Orange construction fencing is visible in the left portion of the photo, which delineates areas in the northern portion of the Project site that are undergoing reclamation activities pursuant to RP 2006-01. In the left portion of the photo are manufactured slopes created as a visual buffer for mining activities to the north of the Project site, beyond which are the steep hillsides. Further in the background in the middle and right side of the photograph are tall trees, utility poles, street lamps, and vegetation associated with the existing residential uses to the east of the Project site.

4.1.2 Applicable Environmental Regulations

A. *City of Lake Elsinore General Plan*

The City of Lake Elsinore General Plan Section 4.8, *Aesthetics*, states that "[s]cenic resources within and surrounding the City of Lake Elsinore include the lake, Cleveland National Forest, rugged hills, mountains, ridgelines, rocky outcroppings, streams, vacant land with native vegetation, buildings of historical and cultural significance such as the cultural center, bathhouse and military academy, parks, and trails." (Lake Elsinore, 2011a, p. 4-72)

The City of Lake Elsinore General Plan Chapter 4.0, *Resource Protection and Preservation*, addresses sources of light and glare in the City and contains goals, policies, and implementation programs regarding aesthetics, which generally require the following: contour grading along steep slopes; preservation of the City's visual character, in particular the surrounding hillsides, which topographically define the Lake Elsinore region; the application of design strategies for historical buildings; preservation or retention of existing scenic landscape resources, such as existing mature trees, streetscapes, and other landscape elements; the preservation of "valued" public views throughout the City, with particular emphasis on views of Lake Elsinore and local ridgelines; and the regulation of mining activities in a manner that does not adversely affect the City's visual character. Additionally, the General Plan also identifies 15 landscape viewshed units in the City. As depicted in General Plan Figure 4.9, *Landscape Viewshed Units*, the Project site is located in Landscape Viewshed Unit 12, which is the location of the Lake Elsinore Outlet stores with a large vacant portion to the east (i.e., the Project site and areas north of the Project site) for future expansion (Lake Elsinore, 2011a, p. 4-73).

B. *City of Lake Elsinore Municipal Code*

The City of Lake Elsinore's Zoning Code (Municipal Code Title 17) regulates the character and use of property throughout the various zones in the City (Lake Elsinore, 2018). The City of Lake Elsinore's Zoning Code (Municipal Code Title 17) regulates the character and use of property throughout the various zones in the City (Lake Elsinore, 2018). Title 17 of the City's Municipal Code designates overlay zones that affect aesthetic and visual qualities, including the: Scenic Overlay Zone (Chapter 17.16), Lakeshore Overlay Zone (Chapter

17.20), Hillside Planned Development Overlay (Chapter 17.36), and Historic Downtown Elsinore Overlay District (Chapter 17.40). The Project site is not located within any of these overlay zones. (Lake Elsinore, 2014)

City Municipal Code Chapter 17.112.040 identifies outdoor lighting standards for nonresidential development in the City. All outdoor lighting fixtures in excess of 60 watts are required to be oriented and shielded to prevent any glare or direct illumination on adjacent properties or streets. Additionally, due to the City's proximity to the Mt. Palomar Observatory, the use of low pressure sodium lighting is explicitly encouraged. (Lake Elsinore, 2011b, p. 3.3-24)

City Municipal Code Chapter 17.148.110 identifies parking lot lighting standards for all developments, except for single-family and duplex dwellings. Lighting shall be located and designed so as to preclude the direct glare of light shining onto adjacent property, streets, or into the sky above a horizontal plane passing through the luminaire. (Lake Elsinore, 2018)

4.1.3 Basis for Determining Significance

Except as provided in Public Resources Code Section 21099, 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. *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings, or in urbanized areas, result in a conflict with applicable zoning and other regulations governing scenic quality (public views are those that are experienced from a publicly accessible vantage point); or*
d. *Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.*

The above-listed thresholds are derived directly from Section I of Appendix G to the CEQA Guidelines and address typical adverse effects to aesthetics (OPR, 2018).

4.1.4 Impact Analysis

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

Under existing conditions, the 72.5-acre Project site consists of undeveloped lands, portions of which are undergoing reclamation activities pursuant to Reclamation Plan No. 2016-01A2. Portions of the site also contain wild grass, weeds, and brush, with a natural drainage (Stovepipe Creek) traversing the site in a northeast-to-southwest orientation. The Project site does not comprise a scenic vista under existing conditions, although scenic vistas of the hillsides associated with Warm Springs to the north and the Santa Ana Mountains to the west are available from the Project site under existing conditions, and these landforms represent scenic resources. However, future development on site would be regulated by the Nichols Ranch Specific Plan

(NRSP), which restricts commercial buildings to a maximum height of 55 feet and restricts residential structures to a maximum height of 40 feet. These building heights are not of a scale that would obstruct views of the natural landforms, which rise to high elevations, from existing off-site viewing locations. Thus, the Project would result in less-than-significant impacts due to an adverse effect on views of distant mountains.

Lake Elsinore is considered a scenic resource by the City of Lake Elsinore General Plan. The Project site is located approximately 1.7 miles north from the lake and is not prominently visible from the lake due to distance and intervening development and topography. As such, the Project would have no impact on scenic views to or from the lake. The City of Lake Elsinore General Plan Chapter 4.0, *Resource Protection and Preservation-Part 2*, focuses on views to Lake Elsinore, and identifies 15 landscape viewshed units in the City (Lake Elsinore, 2011a, p. 4-72). The Project site is located within Landscape Viewshed Unit 12, which is the location of the Lake Elsinore Outlet stores and of which "a large portion to the east is vacant for future [development] expansion" (Lake Elsinore, 2011a, p. 4-73). The Project proposes the development of residential and commercial land uses, which is compatible with Viewshed Unit 12.

Accordingly, and based on the foregoing analysis, the Project would not have a substantial adverse effect on a scenic vista, 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?***

According to information from the California Department of Transportation (Caltrans), there are no officially-designated scenic highways within the Project site's vicinity. The Project site is located adjacent to I-15, which is identified as a "State Eligible" scenic highway but has not officially been designated as a scenic highway. SR-74, located approximately 0.6 mile south of the Project site, also is designated as a "State Eligible" scenic highway. (Caltrans, 2011)

In order to assess the Project's potential to result in significant impacts to eligible scenic highway facilities in the area, a viewshed analysis was conducted in Google Earth. Based on the viewshed analysis, the Project would be visible from nearby I-15 segments. However, given that surrounding areas include Temescal Canyon High School to the south, Lake Elsinore Outlet Center to the southwest, and residential development to the east, the general character of the Project area would not change substantially. In addition, although the Project would obscure views of local steep hillsides to the northeast of the Project site, these hillsides are not unique and are only visible from along short segments of I-15 near the Project site. Accordingly, Project impacts to I-15 would be less than significant. Furthermore, the Project site does not contain any scenic resources, including, but not limited to trees, rock outcroppings and historic buildings under existing conditions. (Google Earth, 2018)

Based on the viewshed analysis, the Project would not be prominently visible from nearby segments of SR-74 due to intervening development and topography. Thus, Project impacts to nearby segments of SR-74 would be less than significant. (Google Earth, 2018)

Based on the foregoing, the proposed Project would not have a substantial adverse effect on scenic resources visible from a state scenic highway, and impacts would be less than significant.

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

According to mapping information from the Southern California Association of Governments (SCAG), which is based on U.S. Census data for urbanized areas, the Project site is not located within an urbanized area (SCAG, 2018). The area surrounding the Project site is transitioning from a concentrated mining area into a community of residential, commercial, industrial, and mixed-use developments. The Project site is surrounded by a mixture of mining uses, residential, school, and commercial land uses. Under existing conditions, the Project site is partially disturbed by on-going mining and reclamation activities, and does not contain any visually prominent resources. All development on the Project site would be required to comply with the Development Standards and Design Guidelines of the Nichols Ranch Specific Plan, which have been crafted to ensure that future development on-site is aesthetically pleasing and not visually offensive. The Design Guidelines contain standards related to architecture, landscaping, walls/fences, and other elements of the physical environment, and provide specific guidance for future implementing developments. Mandatory compliance with the Design Guidelines and development standards of the Specific Plan would ensure that the Project is developed in such a fashion so as not to degrade the visual character or quality of the Project site or its surroundings. Additionally, the Project would comply with all applicable Municipal Code requirements addressing scenic quality, including Chapter 17.184 (Design Review) of the City's Municipal Code, which requires approval of a Design Review prior to development of any commercial or residential structures on site. As part of the Design Review application(s), the Project Applicant would submit for approval plans identifying specific design elements of the proposed development, such as building elevations, floor plans, landscaping plans, etc. The Project also would be developed in a manner that is consistent with the transitioning mixed-use character of the surrounding area, including existing residential developments to the east, commercial development to the southwest, and an existing high school to the south. In addition, with mandatory compliance to the proposed NRSP, the Project would be developed in a manner that is not visually offensive either on-site or within the context of surrounding uses and planned development. There are no components of the Project that would result in the substantial degradation of the visual character or quality of the Project site and surrounding areas. Accordingly, impacts due to the degradation of the existing visual character or quality of the Project site and its surroundings would be less than significant.

Threshold d:	***Would the Project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?***

Under existing conditions, lighting is used on occasion within the northern 45.4 acres of the Project site that are subject to reclamation activities during nighttime mining and reclamation activities, while no sources of artificial lighting are associated with the southern 27.1 acres of the site. Existing residential development located east of the site and the Temescal Canyon High School utilize sources of artificial lighting. Additionally, under existing conditions the Project site does not contain any topographically prominent landforms or visually prominent rock outcroppings. Additionally, and as visible throughout the site photos

(Figure 4.1-2 and Figure 4.1-3), the Project site does not contain any trees that may be visible from off-site locations.

Implementation of the proposed Project would include exterior lighting elements. The Project is a proposed residential community and neighborhood commercial center, and all lighting elements that would be installed would be of low intensity, primarily consisting of lights installed on residential/commercial lots, lights installed in on-site parks, and street lights, and would not create a new source of substantial light or glare that could adversely affect day or nighttime views in the area. Development of the proposed Project would be subject to the lighting design guidelines of the Nichols Ranch Specific Plan, as well as the lighting provisions of Municipal Code §§ 17.112.040 & 17.148.40, which would reduce Project lighting impacts to less-than-significant levels. The Project would use low sodium lighting on-site in mandatory compliance with City Municipal Code Chapter 17.112.040. (Lake Elsinore, 2011b, p. 3.3-24)

The Project site is located within a 45-mile radius of the Mt. Palomar Observatory (Zone B) (Riverside County, 2015, Figure 4.4-1). The 45-mile radius surrounding the Mt. Palomar Observatory is defined by Riverside County Ordinance No. 655 as an area in which light pollution may impact the functionality of the observatory. Any development project within a 45-mile radius of the observatory that would add artificial light sources, has the potential to contribute to sky glow effects, which could adversely affect operations at the observatory. Residential development on the Project site would be regulated by Chapter 17.148.110 of the City's Municipal Code while lighting associated with the commercial portion of the Project would be regulated by Chapter 17.112.040 of the Municipal Code, which identify lighting requirements for outdoor lighting for residential and commercial developments and parking lots to minimize potential adverse effects on observations at the Mt. Palomar Observatory. Mandatory compliance with applicable City lighting standards would reduce potential impacts regarding lighting and the Palomar Observatory to a less than significant level.

Implementation of the proposed Project would not result in substantial impacts regarding glare because the Project does not propose additional sources of glare such as highly reflective surfaces or buildings with reflective glass. Thus, the Project would have a less-than-significant impact regarding the creation of glare.

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 that have views of the Project site (i.e., the Project's viewshed). 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, scenic vistas of the hillsides associated with Warm Springs to the north and the Santa Ana Mountains to the west are available from the Project site under existing conditions. However, the Project would be subject to the NRSP, which restricts residential and commercial buildings to a maximum height that would not obstruct views of the scenic resources from existing off-site view locations. Accordingly, the Project would not result in a cumulatively-considerable impact to scenic vistas.

As noted under the analysis of Threshold b, the Project site is not located within close proximity to any designated Scenic Routes and does not contain any scenic resources under existing conditions. The Project would affect views from I-15, which is designated as a "State Eligible" scenic highway. However, given

surrounding areas include commercial and residential development, the general character of the Project area would not change substantially. The Project would not be prominently visible from nearby segments of SR-74 due to intervening development and topography. Therefore, the Project would not result in a cumulatively-considerable impact to state scenic highways.

The Project site does not contain any trees or visually-prominent outcroppings. Therefore, the proposed Project would not contribute to a cumulatively significant scenic resource impact to designated scenic routes. As such, a less-than-significant cumulatively-considerable impact would occur.

With respect to visual quality and character of the site and surrounding area, under cumulative conditions the geographic area of the Project site includes I-15 to the west, mining and reclamation activities to the north, residential development to the east, and a high school to the south. The area surrounding the Project site is transitioning from a concentrated mining area into a community of residential, commercial, industrial, and mixed-use communities. Development of the Project would be subject to the NRSP design guidelines, which would ensure the Project does not create an aesthetically offensive site open to public view. Thus, the Project's impact would be less-than-cumulatively considerable and the proposed Project would not considerably contribute to an adverse cumulative impact to the existing visual character or quality of the Project site or its surroundings.

With respect to potential cumulative light and glare impacts, City of Lake Elsinore Municipal Code § 17.112.040 (Nonresidential Development Standards – Lighting), requires that all lighting fixtures in excess of 60 watts shall be oriented and shielded to prevent any glare or direct illumination on adjacent properties or streets, and recommends the use of low-pressure sodium fixtures. Cumulative development projects in the unincorporated areas of Riverside County and City of Lake Elsinore would comply with Riverside County Ordinance No. 655 (Regulating Light Pollution) or City of Lake Elsinore Municipal Code § 17.148.110, which identifies lighting requirements for outdoor lighting for residential developments. The requirements to shield lighting enforced by these lighting regulations has the effect of minimizing light and glare that would create sky glow. 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, because City of Lake Elsinore Municipal Code § 17.112.040 and the light control regulations of other jurisdictions within the 45-mile radius of the Mount Palomar Observatory would minimize the amount of sky glow that could affect nighttime operations at the observatory the cumulative effect would be less than significant. Because the proposed Project is mandated to comply with the City's Municipal Code, the Project's contribution to light and glare impacts as well as sky glow impacts affecting the Mount Palomar Observatory would be less-than-cumulatively considerable.

4.1.6 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. No unique or scenic vistas would be impacted by the Project. The Project site does not contain any scenic vistas, nor does it offer unique views of any visually prominent features; therefore, impacts to scenic vistas resulting from the Project would be less than significant.

Threshold b: Less-than-Significant Impact. The Project would not be prominently visible to SR-74, an "Eligible State Scenic Highway – Not Officially Designated" due to intervening development and topography.

The Project would affect views from I-15; however, the Project would be compatible with surrounding land uses and distant hillsides seen from I-15 are not prominent nor unique and would remain visible in the distance beyond the Project site. Impacts to scenic highway corridors would be less than significant.

Threshold c: Less-than-Significant Impact. The Project would not substantially degrade the existing visual character or quality of the site or its surrounding areas. The Project proposes residential and commercial development that would be similar in character and quality to development in the surrounding areas to the east, west, and south of the Project site.

Threshold d: Less-than-Significant Impact. The Project would not create substantial amounts of light or glare. Compliance with the City of Lake Elsinore Municipal Code Title 17, including § 17.112.040, and Chapters 17.16, 17.20, 17.36, and 17.40 would ensure less-than-significant impacts associated with light and glare affecting day or nighttime views in the area.

4.1.7 City Regulations, Design Requirements, and Mitigation

Applicable City Regulations and Design Requirements

The following are applicable regulations and design requirements within the City of Lake Elsinore. Although these requirements technically do not meet CEQA's definition for mitigation, they are applied herein to ensure Project compliance with applicable City regulations and design requirements.

- The Project is required to comply with the Development Standards and Design Guidelines of the proposed Nichols Ranch Specific Plan. Compliance with these Project design features which include but are not limited to guidelines for architecture, landscaping, and lighting, would be assured by the City's future review of implementing building permits for compliance with the Nichols Ranch Specific Plan.
- The Project is required to comply with the City of Lake Elsinore's Zoning Code (Municipal Code Title 17), which regulates the character and use of property throughout the various zones in the City.

Mitigation

Impacts to aesthetics as a result of Project implementation would be less than significant, and mitigation is not required.

4.2 AIR QUALITY

This Subsection is based on a technical report prepared by Urban Crossroads, Inc., titled, "Nichols Ranch Air Quality Impact Analysis" (AQIA), which is dated August 23, 2018 and included as *Technical Appendix B* to this EIR (Urban Crossroads, 2018a). Refer to EIR Section 7.0, *References*, for a complete list of reference sources.

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). The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. The Project site is located within the SCAB, 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. The larger South Coast district boundary includes 10,743 square miles. (Urban Crossroads, 2018a, p. 8)

The SCAB is bounded 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 bounded 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 bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. (Urban Crossroads, 2018a, p. 8)

B. Regional Climate

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality. (Urban Crossroads, 2018a, p. 8)

The annual average temperatures throughout the SCAB vary from the low to middle 60s (degrees Fahrenheit). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F. (Urban Crossroads, 2018a, p. 8)

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 is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide to sulfates is heightened in air with high relative humidity. 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, periods of

heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast. (Urban Crossroads, 2018a, p. 8)

More than 90 percent of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. 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, 2018a, p. 9)

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is 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 14½ hours of possible sunshine. (Urban Crossroads, 2018a, p. 9)

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the 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. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. 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 begins 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, 2018a, p. 9)

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, 2018a, p. 9)

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. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as NO_x and CO from vehicles, as the pool of cool

air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline. (Urban Crossroads, 2018a, p. 9)

C. Existing Air Quality

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated and 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 are shown in Table 4.2-1, *Ambient Air Quality Standards*. (Urban Crossroads, 2018a, p. 10)

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 air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for Ozone (O_3), Carbon Monoxide (CO), Sulfur Dioxide (SO_2), Nitrogen Dioxide (NO_2), Particulate Matter $\leq$ 10 Microns (PM_{10}), and Particulate Matter $\leq$ 2.5 Microns ($PM_{2.5}$) 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, 2018a, p. 10)

D. Regional Air Quality

The SCAQMD monitors levels of various criteria pollutants at 38 permanent monitoring stations and 5 single-pollutant source Lead (Pb) air monitoring sites throughout the air district. In 2015, the federal and state ambient air quality standards (NAAQS and CAAQS) were exceeded on one or more days for ozone, PM_{10}, and $PM_{2.5}$ at most monitoring locations. No areas of the SCAB exceeded federal or state standards for NO_2, SO_2, CO, sulfates or lead. See Table 4.2-2, *Attainment Status of Criteria Pollutants in the SCAB*, for attainment designations for the SCAB. Appendix 2.1 of the Project's AQIA (*Technical Appendix B*) provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB. (Urban Crossroads, 2018a, p. 13)

E. Local Air Quality

Relative to the Project site, the nearest long-term air quality monitoring site for O_3, CO, NO_2, and PM_{10} is the South Coast Air Quality Management District Elsinore Valley monitoring station (SRA 25), located approximately 2.3 miles south of the Project site. Data for $PM_{2.5}$ was obtained from the District Metropolitan Riverside County 1 monitoring station (SRA 23), located approximately 20 miles north of the project site. (Urban Crossroads, 2018a, p. 13)

The most recent three (3) years of data available is shown on Table 4.2-3, *Project Area Air Quality Monitoring Summary 2015-2017*, and identifies the number of days ambient air quality standards were exceeded for the

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			

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

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Table 4.2-1 Ambient Air Quality Standards (Cont'd)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

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

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

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

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

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

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

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

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

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

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

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

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

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

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(Urban Crossroads, 2018a, Table 2-1)

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

Criteria Pollutant	State Designation	Federal Designation
Ozone - 1hour standard	Nonattainment	Nonattainment ("Extreme")
Ozone - 8 hour standard	Nonattainment	Nonattainment ("Extreme")
PM_{10}	Nonattainment	Attainment (Maintenance)
$PM_{2.5}$	Nonattainment	Nonattainment ("Serious")
Carbon Monoxide	Attainment	Attainment (Maintenance)
Nitrogen Dioxide	Attainment	Unclassifiable/Attainment
Sulfur Dioxide	Attainment	Unclassifiable/Attainment
Lead[1]	Attainment	Nonattainment (Partial)

Source: State/Federal designations were taken from http://www.arb.ca.gov/desig/adm/adm.htm.
Note: See Appendix 2.1 of the Project's AQIA (*Technical Appendix B*) for a detailed map of State/National Area Designations within the South Coast Air Basin.
(Urban Crossroads, 2018a, Table 2-2)

Table 4.2-3 Project Area Air Quality Monitoring Summary 2015-2017

POLLUTANT	STANDARD	YEAR		
		2015*	2016*	2017**
Ozone (O_3)				
Maximum 1-Hour Concentration (ppm)		0.131	0.124	0.121
Maximum 8-Hour Concentration (ppm)		0.093	0.093	0.098
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	18	15	23
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	35	45	56
Number of Days Exceeding Federal 8-Hour Standard	> 0.07 ppm	31	44	54
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)		0.8	1.2	--
Maximum 8-Hour Concentration (ppm)		0.6	0.6	--
Nitrogen Dioxide (NO_2)				
Maximum 1-Hour Concentration (ppm)		0.047	0.051	--
Annual Arithmetic Mean Concentration (ppm)		0.009	0.02	--
Particulate Matter ≤ 10 Microns (PM_{10})				
Maximum 24-Hour Concentration ($\mu g/m^3$)		90	99	--
Annual Arithmetic Mean ($\mu g/m^3$)		18.7	21.4	--
Number of Samples		356	366	--
Number of Samples Exceeding State Standard	> 50 $\mu g/m^3$	5	4	--
Number of Samples Exceeding Federal Standard	> 150 $\mu g/m^3$	0	0	0
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)***				
Maximum 24-Hour Concentration ($\mu g/m^3$)		54.7	39.12	27.2
Annual Arithmetic Mean ($\mu g/m^3$)		11.89	12.54	11.20
Number of Samples Exceeding Federal 24-Hour Standard	> 35 $\mu g/m^3$	9	4	--

Source: SCAQMD's Air Quality Data Tables
-- = data not available from ARB
*Data for 2015 and 2016 obtained from SCAQMD.
** Data for 2017 obtained from ARB
***Data for $PM_{2.5}$ for 2017 was obtained from the Riverside-Rubidoux monitoring site.

(Urban Crossroads, 2018a, Table 2-3)

study area, which is considered to be representative of the local air quality at the Project site. Additionally, data for SO_2 has been omitted as attainment is regularly met in the South Coast Air Basin and few monitoring stations measure SO_2 concentrations. (Urban Crossroads, 2018a, p. 13)

F. Criteria Pollutants

Criteria pollutants are pollutants that are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and health effects are identified below.

- 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. (Urban Crossroads, 2018a, p. 14)

- Sulfur Dioxide (SO_2): Is a colorless, extremely irritating gas or liquid. It 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). (Urban Crossroads, 2018a, p. 15)

- Nitrogen Oxides (Oxides of Nitrogen, or NO_X): 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 monitors. (Urban Crossroads, 2018a, p. 15)

- 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, light wind, and warm temperature conditions are favorable to the formation of this pollutant. (Urban Crossroads, 2018a, p. 15)

- PM_{10} (Particulate Matter less than 10 microns): 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 adverse health effects. PM_{10} also causes visibility reduction and is a criteria air pollutant. (Urban Crossroads, 2018a, p. 15)

- $PM_{2.5}$ (Particulate Matter less than 2.5 microns): A similar air pollutant 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 highly depends on location, time of year, and weather conditions. $PM_{2.5}$ is a criteria air pollutant. (Urban Crossroads, 2018a, p. 15)

- Volatile Organic Compounds (VOC): Volatile organic compounds are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) 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, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The SCAQMD uses the terms VOC and ROG (see below) interchangeably. (Urban Crossroads, 2018a, p. 15)

- Reactive Organic Gases (ROG): Similar to VOC, Reactive Organic Gases (ROG) are also precursors in forming ozone and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The SCAQMD uses the terms ROG and VOC (see previous) interchangeably. (Urban Crossroads, 2018a, pp. 15-16)

- Lead (Pb): Lead is a heavy metal that is highly persistent in the environment. In the past, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. As a result of the removal of lead from gasoline, there have been no violations at any of the SCAQMD's regular air monitoring stations since 1982. Currently, emissions of lead are largely limited to stationary sources such as lead smelters. It should be noted that the Project is not anticipated to generate a quantifiable amount of lead emissions. Lead is a criteria air pollutant. (Urban Crossroads, 2018a, p. 16)

G. Health Effects of Air Pollutants

1. Ozone

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. 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. Elevated ozone levels are associated with increased school absences. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital admission rates, as well as mortality, has also been reported. 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, 2018a, p. 16)

Ozone exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes ozone may be more

toxic than exposure to ozone alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes. (Urban Crossroads, 2018a, p. 16)

2. Carbon Monoxide

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen supply to the heart. 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). Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (oxygen deficiency) as seen at high altitudes. (Urban Crossroads, 2018a, p. 16)

Reduction in birth weight and impaired neurobehavioral development have been observed in animals chronically exposed to CO, resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels; these include pre-term births and heart abnormalities. (Urban Crossroads, 2018a, p. 16)

3. Particulate Matter

A consistent correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks, and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, 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. (Urban Crossroads, 2018a, p. 17)

Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, 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. (Urban Crossroads, 2018a, p. 17)

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, 2018a, p. 17)

4. Nitrogen Dioxide

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 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary

disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups. (Urban Crossroads, 2018a, p. 17)

In animals, exposure to levels of NO_2 considerably higher than ambient concentrations results in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of ozone exposure increases when animals are exposed to a combination of ozone and NO_2. (Urban Crossroads, 2018a, p. 17)

5. Sulfur Dioxide

A few minutes of exposure to low levels of SO_2 can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2. (Urban Crossroads, 2018a, p. 17)

Animal studies suggest that despite SO_2 being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, 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, 2018a, p. 17)

Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor. (Urban Crossroads, 2018a, pp. 17-18)

6. Lead

Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb 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 Pb levels are associated with increased blood pressure. (Urban Crossroads, 2018a, p. 18)

Pb poisoning can cause anemia, lethargy, seizures, and death; although it appears that there are no direct effects of Pb on the respiratory system. Pb can be stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland), and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous environmental Pb exposure of their mothers. (Urban Crossroads, 2018a, p. 18)

7. Odors

The science of odor as a health concern is still new. Merely identifying the hundreds of VOCs that cause odors poses a big challenge. Offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, 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. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress. (Urban Crossroads, 2018a, p. 18)

4.2.2 APPLICABLE ENVIRONMENTAL REGULATIONS

The following is a brief description of the federal, state, and local environmental laws and related regulations governing air quality emissions.

A. Federal Regulations

1. Federal Clean Air Act

The Clean Air Act (CAA; 42 U.S.C. § 7401 et seq.) is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Among other things, this law authorizes Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants, which include O_3, CO, NO_x, SO_2, PM_{10}, $PM_{2.5}$, and lead. (EPA, 2017a)

One of the goals of the CAA was to set and achieve NAAQS in every state by 1975 in order to address the public health and welfare risks posed by certain widespread air pollutants. The setting of these pollutant standards was coupled with directing the states to develop state implementation plans (SIPs), applicable to appropriate industrial sources in the state, in order to achieve these standards. The CAA was amended in 1977 and 1990 primarily to set new goals (dates) for achieving attainment of NAAQS since many areas of the country had failed to meet the deadlines. (EPA, 2017a)

The sections of the federal 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 address the urban air pollution problems of ozone (smog), carbon monoxide (CO), and particulate matter (PM_{10}). Specifically, it clarifies how areas are designated and re-designated "attainment." It also allows EPA to define the boundaries of "nonattainment" areas: geographical areas whose air quality does not meet Federal air quality standards designed to protect public health. (EPA, 2017b) Mobile source emissions are regulated in accordance with the CAA Title II provisions. These standards are intended to reduce tailpipe emissions of hydrocarbons, CO, and NO_X on a phased-in basis that began in model year 1994. Automobile manufacturers also are required to reduce vehicle emissions resulting from the evaporation of gasoline during refueling. These provisions further require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. (EPA, 2017c)

Section 112 of the Clean Air Act addresses emissions of hazardous air pollutants. Prior to 1990, CAA established a risk-based program under which only a few standards were developed. The 1990 Clean Air Act Amendments revised Section 112 to first require issuance of technology-based standards for major sources and certain area sources. "Major sources" are defined as a stationary source or group of stationary sources that emit or have the potential to emit 10 tons per year or more of a hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants. An "area source" is any stationary source that is not a major source. (EPA, 2017a)

For major sources, Section 112 requires that EPA establish emission standards that require the maximum degree of reduction in emissions of hazardous air pollutants. These emission standards are commonly referred to as "maximum achievable control technology" or "MACT" standards. Eight years after the technology-based MACT standards are issued for a source category, EPA is required to review those standards to determine whether any residual risk exists for that source category and, if necessary, revise the standards to address such risk. (EPA, 2017a)

B. State Regulations

1. California Clean Air Act (CCAA)

The California Clean Air Act (CCAA) establishes numerous requirements for district plans to attain state ambient air quality standards for criteria air contaminants. The CCAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the State's ambient air quality standards, the California Ambient Air Quality Standards (CAAQS), 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. Generally, the CAAQS are more stringent than the NAAQS. For districts with serious air pollution, its attainment plan should include the following: no net increase in emissions from new and modified stationary sources; and best available retrofit technology for existing sources. (SCAQMD, 2018)

2. Air Quality Management Planning

The California Air Resources Board (CARB) and local air districts throughout the State are responsible for developing clean air plans to demonstrate how and when California will attain air quality standards established under both the CAA and CCAA. For the areas within California that have not attained air quality standards, CARB works with local air districts to develop and implement State and local attainment plans. In general, attainment plans contain a discussion of ambient air quality data and trends; a baseline emissions inventory; future year projections of emissions, which account for growth projections and already adopted control measures; a comprehensive control strategy of additional measures needed to reach attainment; an attainment demonstration, which generally involves complex modeling; and contingency measures. Plans may also include interim milestones for progress toward attainment. Air quality planning activities undertaken by CARB also include the development of policies, guidance, and regulations related to State and federal ambient air quality standards; coordination with local agencies on transportation plans and strategies; and providing assistance to local districts and transportation agencies. (CARB, 2012)

4.2.3 Basis for Determining Significance

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. 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;

c. Expose sensitive receptors to substantial pollutant concentrations; or

d. Result in other emissions (such as those leading to odors) affecting a substantial number of people.

The above-listed thresholds are derived directly from Section III of Appendix G to the CEQA Guidelines and address typical adverse project effects on regional air pollution and nearby sensitive receptors (OPR, 2018). The City of Lake Elsinore has chosen to apply SCAQMD significance thresholds, as presented in SCAQMD's CEQA Air Quality Significance Thresholds (March 2015), to evaluate the Project's air quality impacts against the above Appendix G standards.

Accordingly, Threshold a., which addresses Section III.a of Appendix G to the State CEQA Guidelines, evaluates whether the proposed Project would conflict with SCAQMD's 2016 AQMP, which addresses state and federal requirements under the CAA. A conflict with the AQMP standards and requirements would inhibit the SCAQMD's ability to achieve State and federal standards for air quality.

Threshold b. addresses Section III.b of Appendix G to the CEQA Guidelines, while Threshold c. addresses Section III.c of Appendix G to the CEQA Guidelines. Under these thresholds, emissions generated by a development project would be significant under Threshold b. if emissions are projected to exceed the Regional Thresholds established by the SCAQMD for criteria pollutants and would be significant under Threshold c. if emissions are projected to exceed the Localized Significance Thresholds (LSTs) established by the State of California and the SCAQMD for criteria pollutants.

Table 4.2-4, *SCAQMD Maximum Regional Emissions Thresholds*, and Table 4.2-5, *SCAQMD Maximum Localized Emission Thresholds*, respectively depict the SCAQMD's Regional and Localized Significance Thresholds for regulated pollutants. 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, as discussed in further detail below.

Additionally, and based on the SCAQMD's CEQA Air Quality Handbook (1993), a project's localized CO emissions impacts would be significant under Threshold d. if they exceed the following California standards for localized CO concentrations:

- 1-hour CO standard of 20.0 parts per million (ppm)
- 8-hour CO standard of 9.0 ppm

The SCAQMD published a report giving direction on how to address cumulative impacts from air pollution, titled, *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (SCAQMD, 2003). In this report the AQMD clearly states (Page D-3): (Urban Crossroads, 2018a, p. 43)

Table 4.2-4 SCAQMD Maximum Regional Emissions Thresholds

Pollutant	Construction	Operations
Regional Thresholds[A]		
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

[A]: Based on SCAQMD Air Quality Significance Thresholds, March 2015

(Urban Crossroads, 2018a, Table 3-1)

Table 4.2-5 SCAQMD Maximum Localized Emission Thresholds

Pollutant	Construction	Operations
Localized Thresholds[B]		
NO_x	303 lbs/day (Site Preparation)	N/A
	266 lbs/day (Grading)	
CO	1,339 lbs/day (Site Preparation)	N/A
	1,961 lbs/day (Grading)	
PM_{10}	10 lbs/day (Site Preparation)	N/A
	11 lbs/day (Grading)	
$PM_{2.5}$	6 lbs/day (Site Preparation)	N/A
	7 lbs/day (Grading)	

[B]: As per the SCAMD Localized Significance Threshold (LST) Methodology, localized thresholds are determined based on the maximum number of acres disturbed on the peak day using construction equipment. Based on the equipment list and the nearest sensitive receptor distance of 56 feet/17.07 meters, the proposed Project could actively disturb approximately 3.5 acres per day during the site preparation and 4.0 acres per day during the grading activities.

(Urban Crossroads, 2018aTable 3-1)

"…the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and

the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

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."

The analysis presented herein 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 commutatively-considerable increase in emissions for those pollutants for which the SCAB is in nonattainment. Therefore, the individual project 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. (Urban Crossroads, 2018a, p. 43)

Threshold d. evaluates Section III.d of Appendix G of the State CEQA Guidelines. SCAQMD Rule 402 ("Nuisance") and California Health & Safety Code, Division 26, Part 4, § 41700 prohibit the emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of the public, including odors. The potential to violate Rule 402 or § 41700 is used herein as a basis to determine whether the Project's odors or other emissions would be significant and require feasible mitigation measures.

4.2.4 IMPACT ANALYSIS

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

The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743 square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what use to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards. (Urban Crossroads, 2018a, pp. 39-40)

Currently, these state and federal air quality standards are exceeded in most parts of the Basin. 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. (Urban Crossroads, 2018a, p. 40)

In March 2017, the AQMD released the Final 2016 AQMP. The 2016 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. Similar to the 2012 AQMP, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and updated emission inventory methodologies for various source categories. The Project's consistency with the AQMP will be determined using the 2016 AQMP is discussed below. (Urban Crossroads, 2018a, p. 40)

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook (1993). These indicators are as follows: (Urban Crossroads, 2018a, p. 40)

- ***Consistency Criterion No. 1****: The proposed Project will 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) or Regional Significance Thresholds were exceeded (Urban Crossroads, 2018a, p. 40). The Project has the potential to result in significant air quality emissions that could 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 during both construction and long-term operation. Each is discussed below.

Construction Impacts

As discussed under the analysis of Threshold d., the Project would not exceed the applicable LST for construction activity (after implementation of applicable mitigation measures). However, as discussed under the analysis of Thresholds b. and c., the Project would exceed the regional significance thresholds for emissions of NO_X. No feasible mitigation measures exist that would reduce these emissions to levels that are less-than-significant. Moreover, a majority of construction-source NO_X emissions would be generated from the hauling of soil during grading activities from trucks that cannot be mitigated. Because neither the Project Applicant nor the Lead Agency (City of Lake Elsinore) have regulatory authority to control tailpipe emissions, no feasible mitigation measures exist that would reduce construction-related NO_X emissions to levels that are less-than-significant, thus these emissions are considered significant and unavoidable. As such, the Project has the potential to conflict with the AQMP according to this criterion. (Urban Crossroads, 2018a, p. 40)

Operational Impacts

As discussed under the analysis of Threshold d., the Project would not exceed the applicable LST thresholds for operational activity. However, as discussed under the analysis of Thresholds b. and c., the Project would exceed the applicable regional significance thresholds for operational activity for emissions of NO_X. Over 93 percent of operational-source NO_X emissions would be generated from the mobile activities from vehicles that

cannot be mitigated. Neither the Project Applicant nor the Lead Agency (City of Lake Elsinore) can substantively or materially affect reductions in Project mobile-source emissions beyond the regulatory requirements and mitigation measures identified herein. No feasible mitigation measures exist that would reduce NOx emissions to levels that are less-than-significant; thus, these emissions are considered significant and unavoidable. As such, the Project has the potential to conflict with the AQMP according to this criterion. (Urban Crossroads, 2018a, pp. 40-41, 45)

On the basis of the preceding discussion, the Project is determined to be inconsistent with the first criterion.

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

Overview

The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the Southern California Association of Governments (SCAG), which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in the City of Lake Elsinore General Plan (referred to as the "General Plan") is considered to be consistent with the AQMP. (Urban Crossroads, 2018a, p. 41)

Construction Impacts

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, construction activities would not exceed the assumptions in the AQMP. (Urban Crossroads, 2018a, p. 41)

Operational Impacts

The northern portion of the Project site is located within the Alberhill Ranch Specific Plan (ARSP) and is designated as "Commercial Specific Plan (C-SP)," which allows for up to 380,000 square feet of regional general commercial uses. The City of Lake Elsinore General Plan designates the southern portion as "General Commercial" which allows for retail, services, restaurants, professional and administrative offices, hotels and motels, mixed-use projects, public and quasi-public uses, and similar compatible uses. The Project proposes an amendment to the ARSP to remove the northern portion of the Project site that is currently located within the ARSP and establish the Nichols Ranch Specific Plan (NRSP). Additionally, the Project would amend the General Plan land use designation of "General Commercial" to "Specific Plan." The Project proposes to develop 168 low-medium density residential dwelling units, an 8.3-acre park, 6,000 square feet (s.f.) of fast-food restaurant with drive-through window use, 9,400 s.f. of high turnover (sit-down) restaurant use, 8,000 s.f. of health and fitness club use, 43,000 s.f. of office use, 5,500 s.f. of fast food without drive-through, a 16-vehicle fueling position gas station with convenience store and car wash, and a 130-room hotel.

Table 4.2-6, *Currently Approved Land Use vs. Project Buildout*, provides a comparison of the emissions that would result from development of the Project site pursuant to the site's existing General Plan and Specific Plan designations with the emissions that would result from buildout of the proposed Project. Detailed operation model outputs are presented in Appendix 3.3 of the Project's AQIA (*Technical Appendix B*). As shown, the Project would result in substantially fewer emissions of criteria pollutants as compared to development of the site with commercial retail land uses pursuant to the site's existing land use designations. (Urban Crossroads, 2018a, p. 30) As such the Project would not exceed the AQMP growth assumptions for the Project site. (Urban Crossroads, 2018a, p. 41).

Table 4.2-6 Currently Approved Land Use vs. Project Buildout

Operational Activities- Total Maximum Daily Emissions	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Currently Approved Land Use						
Area Source	19.05	7.90E-04	0.09	0.00	3.10E-04	3.10E-04
Energy Source	0.06	0.51	0.43	3.05E-03	0.04	0.04
Mobile	49.36	328.34	455.53	2.11	160.61	43.75
Total Maximum Daily Emissions	**68.46**	**328.85**	**456.05**	**2.11**	**160.65**	**43.79**
Project Buildout						
Area Source	13.23	2.95	15.06	0.02	0.30	0.30
Energy Source	0.67	5.99	4.49	0.04	0.46	0.46
Mobile	19.76	131.55	167.70	0.76	56.27	15.34
Total Maximum Daily Emissions	**33.66**	**140.49**	**187.26**	**0.82**	**57.03**	**16.10**
Net Change	***-34.81***	***-188.36***	***-268-79***	***-1.29***	***-103.62***	***-27.69***

(Urban Crossroads, 2018a, Table 3-7)

AQMP Consistency Conclusion

The Project would result in or cause NAAQS or CAAQS violations. Although the proposed Project would result in less emissions than what is expected under the currently adopted land uses, Project construction-source and operational-source emissions would exceed the Regional Thresholds for emissions of NO_X. Because no feasible mitigation measures exist that would reduce NO_X emissions to levels that are less-than-significant, these emissions are considered significant and unavoidable. As such, the Project would result in significant direct and cumulatively-considerable impact due to a conflict with the AQMP. (Urban Crossroads, 2018a, p. 42)

***Threshold b*: 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?**

Land uses proposed by the Project affect air quality through construction-source and operational-source emissions. On October 17, 2017, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model™ (CalEEMod™) v2016.3.2. The purpose of this model is to calculate

construction-source and operational-source criteria pollutant (NO_X, VOC, PM_{10}, $PM_{2.5}$, SO_x, and CO) and greenhouse gas (GHG) emissions from direct and indirect sources, and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod™ has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendix 3.1 to 3.4 of the Project's AQIA (*Technical Appendix B*). (Urban Crossroads, 2018a, p. 23)

❑ Construction Emissions Impact Analysis

Construction Emissions

Construction activities associated with the Project will result in emissions of VOCs, NO_X, SO_x, CO, PM_{10}, and $PM_{2.5}$. Construction related emissions are expected from the following construction activities (Urban Crossroads, 2018a, p. 23):

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating
- Construction Workers Commuting

Construction is expected to commence in June 2019 and will last through January 2024, as previously shown in EIR Table 3-3 in Subsection 3.0, *Project Description*. The duration of construction activity was estimated based on CalEEMod model defaults, past project experience, and a 2024 project buildout year. The construction schedule utilized in the analysis (EIR Table 3-3) represents a "worst-case" analysis scenario in that should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[1] The construction schedule has been adjusted to account for possible overlap in phases. It should be noted that proposed grading of the Project site may occur in a single phase, or up to three phases. As previously shown in EIR Table 3-3, mass grading of the Project site would occur prior to the start of Phase 1 construction activities. Fine grading has been incorporated into the beginning of each phase and would occur simultaneous with building construction of each sub-phase. Paving and architectural coating activities would commence sometime during building construction activities and would be conducted concurrently. Further, each phase of construction activity is assumed to overlap with each subsequent phase. Phase 2 fine grading and building construction would overlap with Phase 1 building construction and Phase 3 of fine grading and building construction would overlap with Phase 2 building construction. This potential overlap allows for disclosure of a conservative estimate of emissions for CEQA purposes. (Urban Crossroads, 2018a, p. 24)

The detailed summary of construction equipment was previously shown in EIR Table 3-4 and was estimated based on CalEEMod model defaults and Urban Crossroads' professional judgement. The site-specific

[1] As shown in the California Emissions Estimator Model (CalEEMod) User's Guide Version 2016.3.2, Section 4.3 "OFFROAD Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

construction fleet may vary due to specific project needs at the time of construction. The duration of construction activity and associated equipment both represent a reasonable approximation of the expected construction fleet as required per CEQA guidelines. Please refer to specific detailed modeling inputs/outputs contained in Appendix 3.1 of the Project's AQIA (*Technical Appendix B*). (Urban Crossroads, 2018a, p. 24)

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 to calculate fugitive dust emissions resulting from this phase of activity. The Project would require approximately 19,000 cubic yards of soil import which would be sourced from the North Nichols Mine site, located approximately 0.5 mile from the Project area. (Urban Crossroads, 2018a, p. 26)

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 estimated based on CalEEMod model defaults. (Urban Crossroads, 2018a, p. 26)

Construction Emissions Summary

The SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1113 (Architectural Coatings); Rule 431.2 (Low Sulfur Fuel); Rule 403 (Fugitive Dust); and Rule 1186 / 1186.1 (Street Sweepers). As such, credit for Rule 1113 and Rule 403 have been taken. (Urban Crossroads, 2018a, p. 26)

The estimated maximum daily construction emissions without mitigation are summarized on Table 4.2-7, *Emissions Summary of Overall Construction (Without Mitigation)*. Detailed construction model outputs are presented in Appendix 3.1 of the Project's AQIA (*Technical Appendix B*). Under the scenarios described above, emissions resulting from the Project construction would exceed criteria pollutant thresholds established by the SCAQMD for emissions of NO_X. As such, prior to mitigation, the Project would violate an air quality standard and would contribute substantially to an existing air quality violation, as NO_X is an ozone precursor. Additionally, the Project's construction activities would result in a cumulatively-considerable net increase of NO_X, a precursor to ozone, and the Project region is non-attainment for ozone. Accordingly, the Project's construction-related air quality emissions would be significant on a direct and cumulatively-considerable basis prior to implementation of mitigation measures.

❑ Operational Emissions Impact Analysis

Operational activities associated with the proposed Project would result in emissions of VOCs, NO_X, SO_x, CO, PM_{10}, and $PM_{2.5}$. Operational emissions would be expected from the following primary sources: (Urban Crossroads, 2018a, p. 27)

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

Table 4.2-7 Emissions Summary of Overall Construction (Without Mitigation)

Year	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
2019	15.27	174.41	89.36	0.20	19.72	12.46
2020	24.46	203.80	112.00	0.27	19.18	11.44
2021	36.49	155.02	102.02	0.27	16.25	8.82
2022	8.24	84.92	54.52	0.16	10.03	5.23
2023	30.75	44.03	42.21	0.11	5.17	2.55
2024	25.82	1.71	3.39	7.47E-03	0.54	0.21
Maximum Daily Emissions	**36.49**	**203.80**	**112.00**	**0.27**	**19.72**	**12.46**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

(Urban Crossroads, 2018a, Table 3-4)

Area Source Emissions

Architectural Coatings

Over a period of time, the buildings that are part of this Project would 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. (Urban Crossroads, 2018a, pp. 27-28)

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 defaults provided within the CalEEMod. (Urban Crossroads, 2018a, p. 28)

Hearths/Fireplaces

The emissions associated with use of hearths/fireplaces were calculated based on assumptions provided in the CalEEMod model. The Project is required to comply with SCAQMD Rule 445, which prohibits the use of wood burning stoves and fireplaces in new development. In order to account for the requirements of this Rule, the unmitigated CalEEMod model estimates were adjusted to remove wood burning stoves and fireplaces. As the Project is required to comply with SCAQMD Rule 445, the removal of wood burning stoves and fireplaces is not considered "mitigation" although it must be identified as such in CalEEMod in order to treat the case appropriately. (Urban Crossroads, 2018a, p. 28)

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. (Urban Crossroads, 2018a, p. 28)

Energy Source Emissions

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) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, 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. (Urban Crossroads, 2018a, p. 28)

Mobile Source Emissions

Vehicles

Project mobile source air quality impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. The Project-related operational air quality impacts are derived primarily from vehicle trips generated by the Project. Trip characteristics available from the report, *Nichols Ranch Traffic Impact Analysis* ("TIA," EIR *Technical Appendix L*), were utilized in this analysis. (Urban Crossroads, 2018a, pp. 28-29)

Per the Project's TIA, the Project is expected to generate a net total of approximately 6,901 trip-ends per day (actual vehicles) on a typical weekday with 734 AM peak hour trips and 622 PM peak hour trips. It should be noted that weekday and Saturday trip characteristics are based on CalEEMod defaults. The Project's AQIA relies on the net Project trips (as opposed to the passenger car equivalents) to accurately account for the effect of individual truck emissions associated with the Project. Trip characteristics based on CalEEMod defaults were used in the analysis. (Urban Crossroads, 2018a, p. 29)

Fugitive Dust Related to Vehicular Travel

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of tire wear particulates. The emissions estimates for travel on paved roads were calculated using the CalEEMod model. (Urban Crossroads, 2018a, p. 29)

Operational Emissions Summary

Table 4.2-8, *Summary of Operational Emissions (Without Mitigation)*, summarizes the Project's daily regional emissions from on-going operations. During operational activity, the Project would exceed the thresholds of significance for emissions of NO_X only. Detailed construction model outputs are presented in Appendix 3.3 of the Project's AQIA (*Technical Appendix B*). Accordingly, prior to mitigation the Project's operational emissions would violate an applicable air quality standard and would contribute substantially to an existing air

quality violation for ozone, as NO_X is an ozone precursor. Additionally, the Project's operational emissions would represent a cumulatively-considerable net increase of a criteria pollutant for which the Project region is non-attainment (i.e., ozone). Accordingly, the Project's impacts would be significant on both a direct and cumulatively-considerable basis prior to mitigation. (Urban Crossroads, 2018a, p. 29)

Table 4.2-8 Summary of Operational Emissions (Without Mitigation)

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source	13.23	2.95	15.06	0.02	0.30	0.30
Energy Source	0.67	5.99	4.49	0.04	0.46	0.46
Mobile	21.70	132.55	175.81	0.80	56.26	15.33
Total Maximum Daily Emissions	**35.60**	**141.48**	**195.37**	**0.85**	**57.03**	**16.10**
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	13.23	2.95	15.06	0.02	0.30	0.30
Energy Source	0.67	5.99	4.49	0.04	0.46	0.46
Mobile	17.82	130.55	159.59	0.73	56.27	15.34
Total Maximum Daily Emissions	**31.71**	**139.49**	**179.15**	**0.79**	**57.03**	**16.10**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

(Urban Crossroads, 2018a, Table 4-6)

***Threshold c*: Would the Project expose sensitive receptors to substantial pollutant concentrations?**

During both construction and long-term operation, the Project has the potential to expose nearby sensitive receptors to substantial pollutant concentrations. The following provides an analysis based on the applicable LSTs established by the State of California and SCAQMD, along with an analysis of the Project's potential to result in or contribute to CO "Hot Spots" that could adversely affect sensitive receptors.

Background on LST Development

The analysis makes use of methodology included in the SCAQMD Final Localized Significance Threshold Methodology (Methodology). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). (Urban Crossroads, 2018a, p. 31)

The significance of localized emissions impacts depends on whether ambient levels in the vicinity of any given project are above or below State standards. In the case of CO and NO_2, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of

one or more of these standards. If ambient levels already exceed a state or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM_{10} and $PM_{2.5}$, both of which are non-attainment pollutants. (Urban Crossroads, 2018a, p. 31)

The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses. (Urban Crossroads, 2018a, p. 31)

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the SCAQMD Final Localized Significance Threshold Methodology (LST Methodology). (Urban Crossroads, 2018a, p. 31)

❑ Construction-Related LST Analysis

Emissions Considered

SCAQMD's Methodology clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered. (Urban Crossroads, 2018a, p. 31)

Applicability of LSTs for the Project

For the proposed Project, the appropriate Source Receptor Area (SRA) for the LST is the Lake Elsinore monitoring station (SRA 25). LSTs apply to carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter $\leq$ 10 microns (PM_{10}), and particulate matter $\leq$ 2.5 microns ($PM_{2.5}$). The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size. (Urban Crossroads, 2018a, p. 31)

In order to determine the appropriate methodology for determining localized impacts that could occur as a result of Project-related construction, the following process is undertaken: (Urban Crossroads, 2018a, p. 31)

- The CalEEMod model is utilized to determine the maximum daily on-site emissions that will occur during construction activity.
- The SCAQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds is used to determine the maximum site acreage that is actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod.
- If the total acreage disturbed is less than or equal to five acres per day, then the SCAQMD's screening look-up tables are utilized to determine if a project has the potential to result in a significant impact (the SCAQMD recommends that projects exceeding the screening look-up tables undergo dispersion

modeling to determine actual impacts). The look-up tables establish a maximum daily emissions threshold in pounds per day that can be compared to CalEEMod outputs.

- The LST methodology presents mass emission rates for each SRA, project sizes of 1, 2, and 5 acres, and nearest receptor distances of 25, 50, 100, 200, and 500 meters. For project sizes between the values given, or with receptors at distances between the given receptors, the methodology uses linear interpolation to determine the thresholds.

Maximum Daily Disturbed Acreage

Table 4.2-9, *Maximum Daily Disturbed Acreage*, is used to determine the maximum daily disturbed-acreage for purposes of modeling localized emissions. As shown, the proposed Project could actively disturb approximately 3.5 acres per day during the site preparation and 4.0 acres per day during the grading phase of construction. (Urban Crossroads, 2018a, p. 32)

Table 4.2-9 Maximum Daily Disturbed Acreage

Construction Phase	Equipment Type	Equipment Quantity	Acres graded per 8-hour day	Operating Hours per Day	Acres graded per day
Site Preparation	Crawler Tractors	4	0.5	8	2
	Rubber Tired Dozers	3	0.5	8	1.5
Total acres disturbed per day during Site Preparation					3.5
Construction Phase	**Equipment Type**	**Equipment Quantity**	**Acres graded per 8-hour day**	**Operating Hours per Day**	**Acres graded per day**
Grading	Crawler Tractors	2	0.5	8	1
	Graders	1	0.5	8	0.5
	Rubber Tired Dozers	1	0.5	8	0.5
	Scrapers	2	1	8	2
Total acres disturbed per day during Grading					4.0

(Urban Crossroads, 2018a, Table 3-8)

Sensitive Receptors

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, individuals with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as "sensitive receptors"; they are also known to be locations where an individual can remain for 24 hours. The nearest sensitive receptors are residential homes and Temescal Canyon High School, as shown on Figure 4.2-1, *Sensitive Receptor Locations*. For analytical purposes, the nearest residence is located approximately 56 feet/ 17.07 meters east of the Project site's eastern boundary. The Methodology explicitly states that "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to



Source(s): Urban Crossroads (08-29-2018)

Figure 4.2-1

NOT TO SCALE

SENSITIVE RECEPTOR LOCATIONS

the nearest receptor should use the LSTs for receptors located at 25 meters." Consistent with the SCAQMD's Final LST Methodology, a 25-meter receptor distance was utilized in the Project's AQIA and provides for a conservative i.e. "health protective" standard of care. (Urban Crossroads, 2018a, p. 33)

Construction-Source Emissions LST Analysis

Because the total acreage disturbed is less than five acres per day for both the site preparation phase and the grading phase, the SCAQMD's screening look-up tables were utilized in determining impacts. It should be noted that since the look-up tables identifies thresholds at only 1 acre, 2 acres, and 5 acres, linear regression has been utilized, consistent with SCAQMD guidance, in order to interpolate the threshold values for the other disturbed acreage not identified. As previously noted, a 25-meter receptor distance is utilized to determine the LSTs for emissions of CO, NO_2, PM_{10}, and $PM_{2.5}$. (Urban Crossroads, 2018a, p. 35)

Table 4.2-10, *Localized Significance Summary – Construction (Without Mitigation)*, identifies the localized impacts at the nearest receptor location in the vicinity of the Project. Without mitigation, localized construction emissions would exceed the applicable SCAQMD LSTs for emissions of PM_{10} and $PM_{2.5}$ during site preparation. Outputs from the model runs for construction LSTs are provided in Appendix 3.1 of the Project's AQIA (*Technical Appendix B*). Accordingly, prior to mitigation, the Project's construction-related localized emissions of PM_{10} and $PM_{2.5}$ would expose sensitive receptors to substantial pollutant concentrations and impacts would be significant on both a direct and cumulatively-considerable basis. (Urban Crossroads, 2018a, p. 35)

❑ Operational-Related LST Analysis

The proposed Project involves the construction and operation of up to 168 single family residential dwelling units, 8.3-acre park, 6,000 square feet (sf) of fast-food restaurant with drive-through window use, 9,400 sf of high turnover (sit-down) restaurant use, 8,000 sf of health and fitness club use, 43,000 sf of office use, 5,500 sf of fast food without drive-through, a 16-vehicle fueling position gas station with convenience store and car wash, and 130-room hotel. 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 significant stationary source emissions, no long-term localized significance threshold analysis is needed. Accordingly, localized air quality impacts associated with Project operations would be less than significant on both a direct and cumulatively-considerable basis.

❑ CO "Hot Spot" Analysis

An adverse CO concentration, known as a "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. At the time of the 1993 Handbook, the SCAB was designated nonattainment under the California AAQS and National AAQS for CO. (Urban Crossroads, 2018a, p. 37)

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the

Table 4.2-10 Localized Significance Summary – Construction (Without Mitigation)

On-Site Site Preparation Emissions	Emissions (pounds per day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**68.20**	**23.17**	**10.85**	**6.70**
SCAQMD Localized Threshold	303	1,339	10	6
Threshold Exceeded?	**NO**	**NO**	**YES**	**YES**
On-Site Mass Grading Emissions	**Emissions (pounds per day)**			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**65.83**	**33.93**	**6.48**	**3.91**
SCAQMD Localized Threshold	266	1,961	11	7
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
On-Site Phase 1 Fine Grading Emissions	**Emissions (pounds per day)**			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**65.92**	**34.00**	**6.47**	**3.91**
SCAQMD Localized Threshold	266	1,961	11	7
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
On-Site Phase 2 Fine Grading Emissions	**Emissions (pounds per day)**			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**60.84**	**32.38**	**6.26**	**3.72**
SCAQMD Localized Threshold	266	1,961	11	7
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
On-Site Phase 3 Fine Grading Emissions	**Emissions (pounds per day)**			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**56.54**	**31.23**	**6.08**	**3.55**
SCAQMD Localized Threshold	266	1,961	11	7
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

(Urban Crossroads, 2018a, Table 3-9)

last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment, as noted in Table 2-2. Also, CO concentrations in the Project vicinity have steadily declined, as indicated by historical emissions data presented in Table 2-3 of the Project's AQIA (*Technical Appendix B*). (Urban Crossroads, 2018a, pp. 37-38)

To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon

time periods. This "hot spot" analysis did not predict any violation of CO standards, as shown on Table 3-11 of the Project's AQIA (*Technical Appendix B*). (Urban Crossroads, 2018a, p. 38)

Based on the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, of the 8.4 ppm CO concentration measured at the Long Beach Blvd. and Imperial Hwy. intersection (highest CO generating intersection within the "hot spot" analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.7 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared. Therefore, even if the traffic volumes for the proposed Project were double or even triple of the traffic volumes generated at the Long Beach Blvd. and Imperial Hwy. intersection, coupled with the on-going improvements in ambient air quality, the Project would not be capable of resulting in a CO "hot spot" at any study area intersections. (Urban Crossroads, 2018a, p. 38)

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that 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 – in order to generate a significant CO impact. (Urban Crossroads, 2018a, p. 38)

Traffic volumes generating the CO concentrations for the "hot spot" analysis are shown on Table 3-12 of the Project's AQIA (*Technical Appendix B*). The busiest intersection evaluated was that at Wilshire Blvd. and Veteran Ave., which had a daily traffic volume of approximately 100,000 vehicles per day and AM/PM traffic volumes of 8,062 vehicles per hour and 7,719 vehicles per hour respectively. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm; this indicates that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations (4.6 ppm x 4 = 18.4 ppm) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).[2] At buildout of the Project, as shown on Exhibit 9-3 of the Project's TIA (*Technical Appendix L*), the highest average daily trips on a segment of road would be 41,100 daily trips on Cambern Avenue and Central Avenue (SR-74), which is lower than the highest daily traffic volumes at Wilshire Blvd. and Veteran Ave. of 100,000 vehicles per day. Additionally, and as shown on Table 4.2-11, *Project Traffic Volumes*, the highest AM/PM trips on a segment of road would be 5,030 vehicles per hour and 5,741 vehicles per hour respectively, which is lower than the highest AM/PM traffic volumes at Wilshire Blvd. and Veteran Ave. of 8,062 vehicles per hour and 7,719 vehicles per hour. (Urban Crossroads, 2018a, pp. 38-39)

The proposed Project considered herein would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles hot spot study, or based on representative BAAQMD CO threshold considerations. Therefore, CO "hot spots" are not an environmental impact of concern for the proposed Project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant. (Urban Crossroads, 2018a, p. 39)

[2] Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

Table 4.2-11 Project Traffic Volumes

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
Lake St./Nichols Rd.	1,4183/860	476/1,336	595/624	441/723	2,929/3,542
Lakeshore Dr./Riverside Dr.	770/696	472/699	764/969	1,231/1,287	3,236/3,651
Collier Av./Central Av.	465/710	1,113/1,412	197/665	1,691/1,459	3,466/4,245
Driveway 1/Nichols Rd.	525/522	703/611	1,589/2,784	2,212/1,824	5,030/5,741

(Urban Crossroads, 2018a, Table 3-13)

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

Based on the Project's construction and operational characteristics, the Project only has the potential to result in odor emissions that could adversely affect a substantial number of people. There are no other potential sources of emissions associated with the Project that could adversely affect a substantial number of people, aside from the localized emissions that are addressed separately above under Threshold c. Land uses generally associated with odor complaints include: agricultural uses (livestock and farming); wastewater treatment plants; food processing plants; chemical plants; composting operations; refineries; landfills; dairies; and fiberglass molding facilities. The Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and are thus considered less than significant. (Urban Crossroads, 2018a, pp. 42-43)

It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. There may also be intermittent odors associated with the gasoline service station, however any odors associated with the gasoline service station would also be governed by SCAQMD Rule 402 and best management practices. (Urban Crossroads, 2018a, p. 43)

Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required. (Urban Crossroads, 2018a, p. 43)

4.2.5 Cumulative Impact Analysis

Although Project-related construction and operational activities would not exceed the land use assumptions of the SCAQMD 2016 AQMP, Project-related construction emissions of NO_X and operational emissions of NO_X would exceed the SCAQMD Regional Thresholds. As such, the Project would result in a conflict with the

AQMP. Other developments within the SCAB region also have the potential to conflict with the AQMP; therefore, the Project's impacts due to a conflict with the AQMP would be cumulatively considerable.

Near-term construction activities and long-term operational activities would result in emissions of NO_X that exceed the SCAQMD Regional Thresholds. As such, prior to mitigation, during both construction and operation the Project would violate an air quality standard and would contribute substantially to an existing air quality violation, as NO_X is an ozone precursor. Additionally, the Project's construction and operational activities would result in a cumulatively considerable net increase of NO_X, a precursor to ozone, and the Project region is non-attainment for ozone. Accordingly, the Project's construction- and operational-related air quality emissions impacts would be cumulatively considerable.

Prior to mitigation, the Project's construction activities would exceed the SCAQMD LSTs for PM_{10} and $PM_{2.5}$. Pursuant to SCAQMD guidance, projects that exceed the LSTs should be considered to have a direct and cumulatively-considerable impact to air quality. Accordingly, prior to mitigation, the Project's localized emissions of PM_{10} and $PM_{2.5}$ would be cumulatively considerable.

The Project does not propose any stationary sources of air quality emissions, and therefore would result in a less-than-cumulatively considerable impact to sensitive receptors during long-term operations. Additionally, the Project would not result in or contribute to any CO "Hot Spots"; therefore, impacts due to CO "Hot Spots" would be less-than-cumulatively considerable.

The Project does not involve any uses that would produce substantial amounts of odors. Construction-related odors would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less-than-cumulatively considerable. The Project and cumulative developments in the surrounding areas would be required to comply with the City's solid waste regulations (or similar regulations of surrounding jurisdictions), and must also comply with SCAQMD Rule 402, both of which would ensure that long-term operational odor impacts are less-than-cumulatively considerable.

4.2.6 Significance of Impacts Before Mitigation

Threshold a.: Significant Direct and Cumulatively-Considerable Impact. Although the Project's construction and operational characteristics would not exceed the growth assumptions of the SCAQMD 2016 AQMP, air quality emissions during both construction and operation would result in emissions of NO_X that exceed the SCAQMD's Regional Thresholds. As such, the Project's emissions of NO_X during both construction and long-term operations represents a significant direct and cumulatively-considerable impact due to a conflict with the AQMP.

Threshold b.: Significant Direct and Cumulatively-Considerable Impact. Construction and operational emissions associated with the proposed Project would exceed the SCAQMD Regional Thresholds for NO_X. Accordingly, prior to mitigation the Project's construction and operational emissions would violate an applicable air quality standard and would contribute substantially to an existing air quality violation for ozone, as NO_X is an ozone precursor. Additionally, the Project's construction and operational emissions would represent a cumulatively-considerable net increase of a criteria pollutant for which the Project region is non-

attainment (i.e., ozone). Accordingly, the Project's impacts would be significant on both a direct and cumulatively-considerable basis prior to mitigation.

Threshold c.: Significant Direct and Cumulatively-Considerable Impact. Although long-term operational-related air quality emissions would not significantly affect sensitive receptors and the Project would not result in or contribute to a CO "Hot Spot," the Project's localized emissions of PM_{10} and $PM_{2.5}$ during construction would exceed the SCACMD LSTs for these pollutants. Accordingly, prior to mitigation, the Project's emissions of PM_{10} and $PM_{2.5}$ during construction represent a direct and cumulatively-considerable impact of the Project.

Threshold d.: Less-than-Significant Impact. During both construction and operation, the Project would not create objectionable odors affecting a substantial number of people. Impacts due to odors would be less than significant.

4.2.7 City Regulations, Design Requirements, and Mitigation

Applicable City Regulations and Design Requirements

The following are standard project design requirements within the City of Lake Elsinore. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable project design and regulatory requirements. Note that the Project would comply with the most up-to-date regulatory conditions and requirements as appropriate.

- The Project is required to comply with the provisions of SCAQMD Rule 403, "Fugitive Dust" by implementing the following dust control measures during construction activities, such as earth moving activities, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the City shall verify that the following notes are included on the grading plan. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Lake Elsinore staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.
    - All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph) per SCAQMD guidelines in order to limit fugitive dust emissions.
    - The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the midmorning, afternoon, and after work is done for the day.
    - The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 mph or less.
- The Project is required to comply with the provisions of SCAQMD Rule 113, *Table of Standards*, by requiring that all architectural coatings must consist of low VOCs (i.e., VOCs of less than 100 grams per liter [g/L]) unless otherwise specified in the SCAQMD Table of Standards.

- The Project is required to comply with applicable SCAQMD rules for construction activities on the Project site. SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1403 (Asbestos); Rule 1113 (Architectural Coatings); Rule 431.2 (Low Sulfur Fuel); Rule 403 (Fugitive Dust); and Rule 1186 / 1186.1 (Street Sweepers).

- The Project is required to comply with the provisions of SCAQMD Rule 402, "Nuisance" which requires that a person shall not discharge air contaminants or other materials that would cause health or safety hazards to any considerable number of persons or the public.

- The Project is required to comply with SCAQMD Rule 445, which prohibits the use of wood burning stoves and fireplaces in new development.

- The Project has been designed to provide pedestrian connections along selected roads and trails within the development to provide access to the various uses and activity centers within the Project. Facilitating pedestrian access encourages people to walk instead of drive. The Project would not impose barriers to pedestrian access and interconnectivity.

- The Project is designed to accommodate a mix of uses (i.e., residential, commercial, and recreational land uses) which would serve to reduce travel distances and regional vehicle miles traveled (VMT) by consolidating trips and reducing requirements for multiple trips.

- The Project shall comply with standards applicable to operation of equipment which emit Toxic Air Contaminants (TACs), such as the proposed fueling station. In particular, the Project shall comply with SCAQMD Rules 1401 and 1401.1, which provide screening-level risk estimates for fueling stations, including ones placed near schools, for new, relocated, and modified units requiring SCAQMD permits. SCAQMD Rule 212 also shall be applicable to the project, which has standards for approving permits and issuing public notices. Under Rule 212, the fueling station shall not be granted a Permit to Construct or Permit to Operate, unless the applicant shows the equipment is designed and controlled to a sufficient standard. SCAQMD Rule 461 regulates the transfer of gasoline, which includes vapor emissions.

Mitigation

MM 4.2-1 Prior to grading permit issuance, the City of Lake Elsinore shall verify the following notes ~~is~~ are included on the grading plan. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Lake Elsinore staff or its designee to confirm compliance. ~~This~~ These notes also shall be specified in bid documents issued to prospective construction contractors.

- *"During ~~grading activities~~each phase of construction, all construction equipment greater than ~~1~~50 horsepower shall consist of off-road diesel construction equipment that complies with EPA/CARB Tier ~~4~~3 emissions standards, if such equipment is readily available and cost effective at the time of construction of each phase of the proposed Project. In such*

cases where feasible, equipment outfitted with Best Available Control Technology (BACT) devices including, but not limited to, a CARB-certified Level 3 Diesel Particulate Filters (DPF), are encouraged. Level 3 DPFs are capable of achieving at least an 85 percent reduction in particulate matter emissions. A list of CARB verified DPFs are available on the CARB website. Additionally, the Construction Manager should include this requirement in applicable bid documents, and must demonstrate the ability to supply compliant equipment prior to commencement of any construction activities. The construction contractor also shall ensure all equipment is tuned and maintained in accordance with the manufacturer's specifications. The construction contractor shall keep a log of all applicable construction equipment demonstrating compliance with these requirements, and the log shall be made available for inspection by City of Lake Elsinore staff upon request. In the event that the City of Lake Elsinore determines that Tier 4 construction equipment is infeasible pursuant to CEQA Guidelines Section 15364, the Project Applicant shall demonstrate through future study with written findings supported by substantial evidence that is reviewed and approved by the City of Lake Elsinore before using other technologies/strategies. For purposes of this measure, "infeasible" means construction equipment is either not readily available or is not cost effective. Alternative applicable strategies may include, but would not be limited to, Tier 3 construction equipment, reduction in the number and/or horsepower rating of construction equipment, and/or limiting the number of daily construction haul truck trips to and from the Project site."

- *"During all construction phases, signs shall be posted at construction entry points and in construction equipment staging areas requiring truck drivers to turn off engines when not in use, and limiting idling of diesel delivery trucks servicing the Project to no more than five (5) minutes. The signs also shall include telephone numbers of the construction manager and the California Air Resources Board (CARB) to report violations."*

MM 4.2-2 As a condition of all grading and building permits, the Construction Manager shall be required to provide information to construction contractors regarding SCAQMD "SOON" funds to encourage fleet turnover to cleaner vehicles. All construction contractors shall be referred the SCAQMD's web site at the following address: http://www.aqmd.gov/home/programs/business/business-detail?title=off-road-diesel-engines&parent=vehicle-engine-upgrades

MM 4.2-3 Prior to the issuance of occupancy permits for the proposed office uses on site, the Project Applicant shall demonstrate that future occupants of the building have been provided materials regarding the benefits of public transportation and carpooling, and that future tenants have been encouraged to provide incentives for public transportation and carpooling, such as discounted transit passes or carpool rebates. Future occupants also shall be encouraged to implement a rideshare program and to set goals to achieve a certain participation rate over a period of time.

4.2.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a.: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. No feasible mitigation measures exist to reduce the Project's emissions of NO_X to below the applicable SCAQMD Regional Thresholds of significance. During construction activities, the majority of construction-source NO_X emissions would be generated from soil import activities, while under operational conditions over 93 percent of operational-source NOx emissions would be generated by Project-related traffic. Neither the Project Applicant nor the Lead Agency (City of Lake Elsinore) can substantively or materially affect reductions in mobile-source emissions beyond the regulatory requirements and mitigation measures identified herein. Accordingly, the Project's significant direct and cumulatively-considerable impact due to a conflict with the SCAQMD 2016 AQMP would be significant and unavoidable.

Threshold b.: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Project construction- and operational-related air quality emissions would exceed the Regional Thresholds established by the SCAQMD for NO_X. As noted above, during construction activities, the majority of construction-source NO_X emissions would be generated from soil import activities, while under operational conditions over 93 percent of operational-source NOx emissions would be generated by Project-related traffic. Neither the Project Applicant nor the Lead Agency (City of Lake Elsinore) can substantively or materially affect reductions in mobile-source emissions beyond the regulatory requirements and mitigation measures identified herein. Accordingly, the Project would result in unavoidable direct and cumulatively-considerable impacts due to projected violations of an applicable air quality standard (NO_X) and the Project's substantial contribution to an existing air quality violation for ozone, as NO_X is an ozone precursor. Additionally, the Project's construction and operational emissions would represent a cumulatively-considerable net increase of a criteria pollutant for which the Project region is non-attainment (i.e., ozone); this also represents a significant and unavoidable direct and cumulatively-considerable impact of the proposed Project.

Threshold c: Less-than-Significant Impact with Mitigation Incorporated. Table 4.2-12, *Localized Significance Summary – Construction (With Mitigation)*, summarizes the Project's localized emissions during construction following implementation of applicable regulations and design requirements as well as compliance with Mitigation Measure MM 4.2-1. As shown, construction-related emissions would not exceed the SCAQMD LSTs for any criteria pollutant during construction after mitigation. Accordingly, implementation of the required mitigation would reduce the Project's localized construction-related impacts to sensitive receptors to below a level of significance.

Table 4.2-12 Localized Significance Summary – Construction (With Mitigation)

On-Site Site Preparation Emissions	Emissions (pounds per day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**27.05**	**30.31**	**8.90**	**4.99**
SCAQMD Localized Threshold	303	1,339	10	6
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
On-Site Mass Grading Emissions	**Emissions (pounds per day)**			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**33.97**	**40.40**	**5.14**	**2.79**
SCAQMD Localized Threshold	266	1,961	11	7
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
On-Site Phase 1 Fine Grading Emissions	**Emissions (pounds per day)**			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**34.02**	**40.46**	**5.14**	**2.79**
SCAQMD Localized Threshold	266	1,961	11	7
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
On-Site Phase 2 Fine Grading Emissions	**Emissions (pounds per day)**			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**33.95**	**40.38**	**5.13**	**2.79**
SCAQMD Localized Threshold	266	1,961	11	7
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
On-Site Phase 3 Fine Grading Emissions	**Emissions (pounds per day)**			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**33.97**	**40.40**	**5.14**	**2.79**
SCAQMD Localized Threshold	266	1,961	11	7
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

(Urban Crossroads, 2018a, Table 3-10)

4.3 BIOLOGICAL RESOURCES

The analysis in this Subsection is based, in part, on information from the report titled "Biological Technical Report and Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis for the Nichols Ranch Project" by VCS Environmental (herein VCS), dated September 2018. This report is included as *Technical Appendix C* to this EIR.

4.3.1 EXISTING CONDITIONS

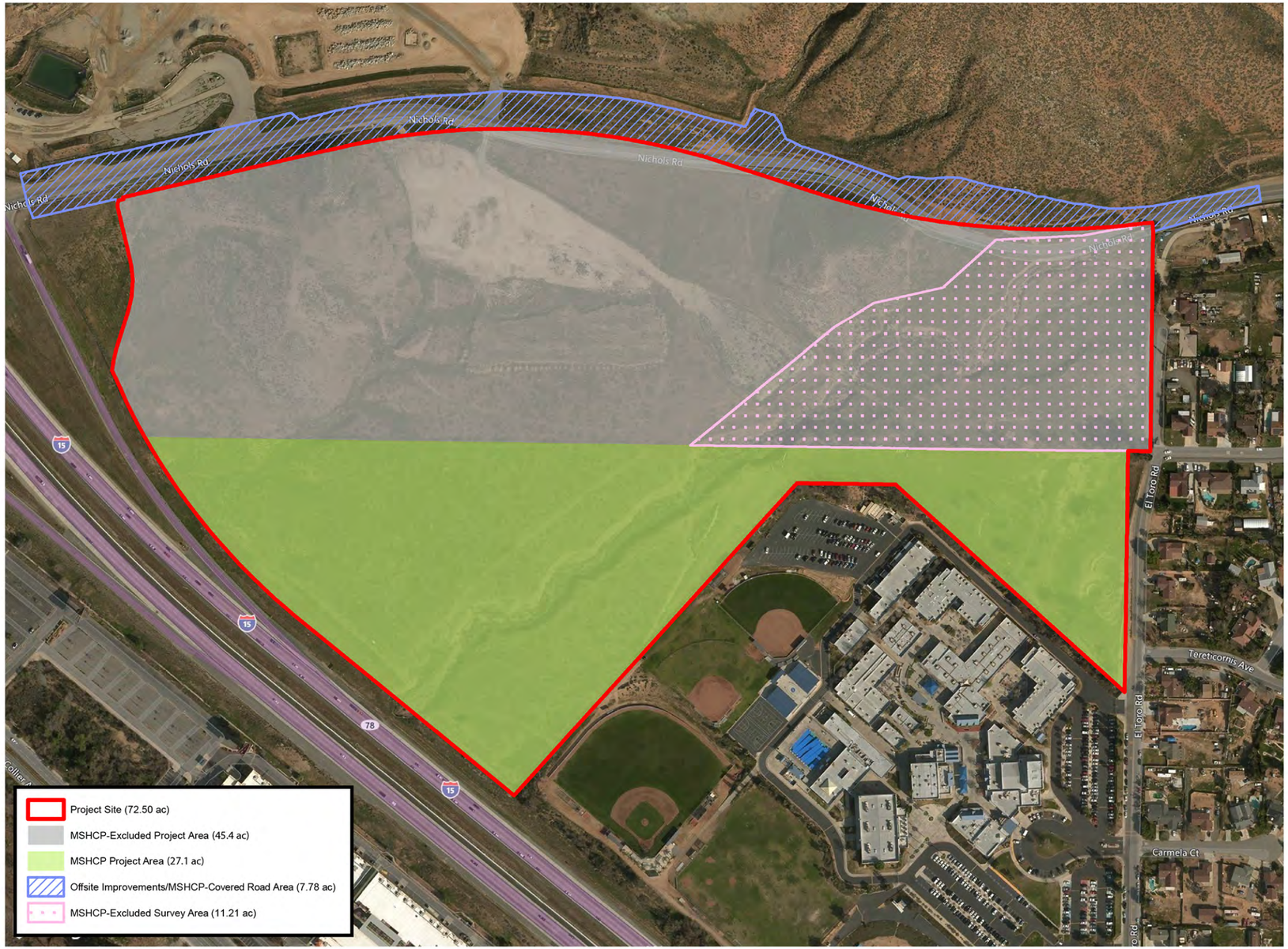
The following Subsection describes biological resources that are located within the Project's Study Area. The Project's Study Area includes on- and off-site areas that would be impacted by grading and development activities, as shown on EIR Figure 3-14, *Proposed Physical Disturbances*.

Under existing conditions, the Project site is mainly vacant. The northern 45.4 acres of the Project site are currently undergoing reclamation activities, pursuant to Amendment No. 2 to Reclamation Plan 2006-01 (Reclamation Plan 2006-01A2). Reclamation activities include grading and benching of slopes subject to mining, implementation of erosion control measures, and restoration of the site to a more natural appearance. The southern 27.1 acres of the Project site are mainly vacant and undeveloped. The southwest portion of the site contains Stovepipe Creek, which traverses the site in a northeast-to-southwest orientation.

The Project area is within the boundaries of the Riverside County Multiple Species Habitat Conservation Plan (MSHCP), which is a comprehensive habitat conservation/planning program for Western Riverside County. Refer to Subsection 4.3.2 for more information regarding the MSHCP. Under existing conditions, the northern 45.4 acres of the Project site are exempted from the MSHCP pursuant to a Memorandum of Understanding (MOU) and Settlement Agreement ("Agreement") between the prior landowner and Riverside County Redevelopment Agency in 2004. Throughout this Subsection the northern 45.4 acres of the Project site that are not subject to MSHCP requirements are referred to as the "MSHCP-Excluded Area." Within the 45.4-acre MSHCP-Excluded Area, approximately 34.2 acres of the site are undergoing active reclamation activities; thus, biological surveys only were required for the eastern 11.2 acres of the MSHCP-Excluded Area that are not subject to on-going reclamation activities. The biological resources located in the northern 45.4 acres of the Project site are still subject to regulatory administration by the federal government, State of California, and City of Lake Elsinore as detailed throughout this subsection. The southern 27.1 acres of the Project site are subject to the requirements of the MSHCP and are referred to herein as the "MSHCP Project Area." The off-site improvements associated with the construction of Nichols Road are covered under the MSHCP and are referred to herein as the "MSHCP-Covered Road Area." Figure 4.3-1, *Project Area Boundaries*, shows the boundaries of the overall Project Study Area, MSHCP-Excluded Area (including the 11.2 acres that were subject to biological surveys), and MSHCP Project Area.

A. Vegetation Communities

The Project's biological technical report (*Technical Appendix C*) documents the botanical resources at the Project site and off-site improvement areas (herein, "Project Study Area") based on a literature search; a list of target special-status plant species and sensitive vegetation communities that could occur within the Project area; general field reconnaissance surveys; vegetation mapping; and habitat assessments and focused surveys



Source(s): VCS Environmental (September 2018)

Figure 4.3-1

NOT TO SCALE

PROJECT AREA BOUNDARIES

for special status species (pursuant to MSHCP requirements). Under existing conditions, the Project site is mainly vacant. The northern 45.4 acres of the Project site are undergoing mining reclamation activities pursuant to Amendment No. 2 to Reclamation Plan 2006-01 (Reclamation Plan 2006-01A2). The Project site includes an earthen drainage feature that conveys storm water flows entering the Project site by two corrugated metal culverts located at the eastern boundary. The Project site is vegetated with non-native grassland, Riversidean sage scrub, disturbed Riversidean sage scrub, disturbed Riversidean sage scrub – encelia dominant, Riversidean alluvial fan sage scrub, ruderal, ornamental, open streambed, disturbed/developed, and ornamental vegetation. Table 4.3-1, *Summary of Study Area Vegetation Communities*, provides a summary of the existing vegetation communities occurring within the Project's Study Area, while the location of each vegetation community is depicted on Figure 4.3-2, *Vegetation Map*. (VCS, 2018, p. 3)

Table 4.3-1 Summary of Study Area Vegetation Communities

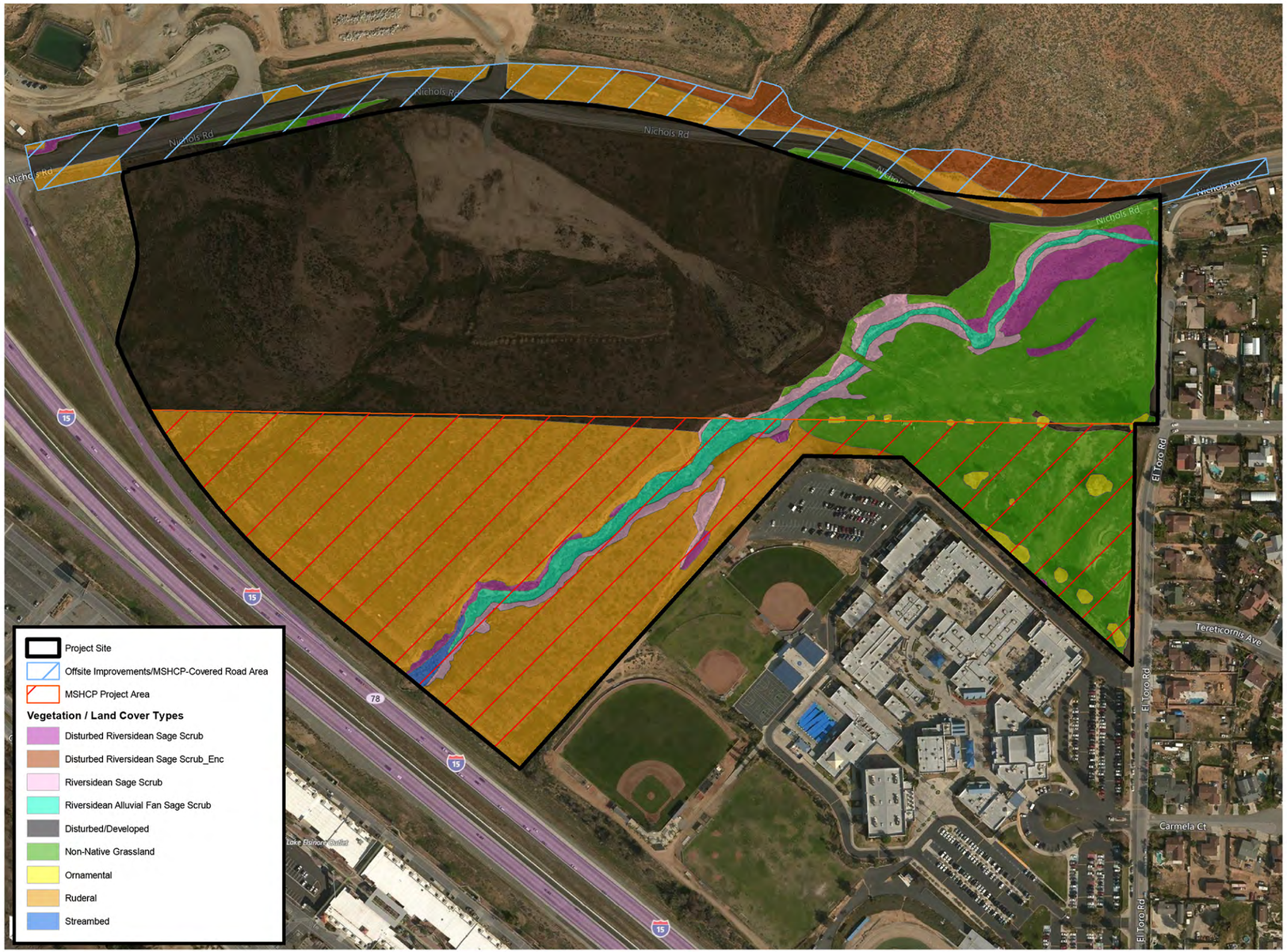
Vegetation Communities	Project Site Acreage			Offsite Improvements Acreage	Total (Onsite + Offsite)
	MSHCP Project Area	MSHCP-Excluded Project Area	Total Project Site		
Non-native grassland	5.21	6.58	**11.79**	0.32	**12.11**
Ruderal	18.72	0.14	**18.86**	2.25	**21.11**
Riversidean Sage Scrub	0.63	1.02	**1.65**	0	**1.65**
Disturbed Riversidean Sage Scrub	0.31	0.99	**1.30**	0.18	**1.48**
Riversidean Alluvial Fan Sage Scrub	1.07	0.61	**1.68**	0	**1.68**
Disturbed Riversidean Sage Scrub – Encelia dominant	0	0.14	**0.14**	1.59	**1.73**
Open Streambed	0.14	0	**0.14**	0	**0.14**
Disturbed/Developed	0.54	35.93	**36.47**	3.44	**39.91**
Ornamental	0.38	0.09	**0.47**	0	**0.47**
TOTAL	**27.00**	**45.50**	**72.50**	**7.78**	**80.28**

(VCS, 2018, Table 1)

A description of the vegetation communities occurring on-site and within off-site improvement areas is provided below:

1. Non-Native Grassland

A total of 11.79 acres of non-native grassland habitat was mapped within the Project site and 0.32 acre within the off-site improvement area. The non-native grassland habitat is characterized by weedy non-native annual herbaceous species with a low density of weedy native species intermixed. Much of the non-native grassland habitat appears to be subject to annual disking. Non-native species within the habitat include red-stem filaree (*Erodium cicutarium*), cheeseweed (*Malva parviflora*), Russian thistle (*Salsola tragus*), London rocket



Source(s): VCS Environmental (September 2018)

Figure 4.3-2

NOT TO SCALE

VEGETATION MAP

(*Sisymbrium irio*), shortpod mustard (*Hirschfeldia incana*), tumble pigweed (*Amaranthus albus*), oats (*Avena* sp.), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), cheatgrass (*Bromus tectorum*), and false barley (*Hordeum murinum*). Native species within the habitat include doveweed (*Croton setigerus*), common fiddleneck (*Amsinckia intermedia*), and vinegar weed (*Trichostema lanceolatum*). Occasional small California sagebrush (*Artemisia californica*), brittlebush (*Encelia farinosa*), and California buckwheat (*Eriogonum fasciculatum*) were observed within the habitat. (VCS, 2018, p. 15)

2. Ruderal

A total of 18.86 acres of ruderal land and associated plant species was observed within the Project site and 2.25 acres within the off-site improvement area. The ruderal land type was identified within the southwestern portion of the Project site as well as north of and adjacent to Nichols Road. The area includes primarily weedy, non-native species such as Russian thistle and mustard, and appears to be regularly disturbed by mowing, disking, or other vegetation maintenance activities. Occasional native species within the land type include small scattered grassland pinebush, vinegar weed, and doveweed. This area mostly lacks non-native grasses, which is one main distinguishing factor from the non-native grassland vegetation community. (VCS, 2018, p. 15)

3. Riversidean Sage Scrub

A total of 1.65 acres of Riversidean sage scrub was identified within the Project site. The Riversidean sage scrub is found primarily on the gently sloping and steep banks adjacent to the drainage channel as well as in a small area south of the drainage feature. Species observed within this habitat on-site include California sagebrush, California buckwheat, brittlebush, deerweed (*Acmispon glaber*), white sage (*Salvia apiana*), jimson weed (*Datura wrightii*), and grassland pinebush (*Ericameria palmeri* var. *pachylepis*). The understory was composed of mostly herbaceous species including native dove weed as well as weedy, non-native red-stem filaree, shortpod mustard, and brome grasses. (VCS, 2018, p. 15)

4. Disturbed Riversidean Sage Scrub

A total of 1.30 acres of disturbed Riversidean sage scrub was identified within the Project site and 0.18 acre within the off-site improvement area. The disturbed Riversidean sage scrub is found in areas adjacent to the drainage channel on the gently sloping banks as well as slopes somewhat removed from the drainage channel. Vegetation observed within this habitat is predominantly a high density of weedy native and non-native annual herbaceous species such as doveweed, red-stem filaree, shortpod mustard, and brome grasses with sparse and small Riversidean sage scrub shrubs throughout including California sagebrush, California buckwheat, brittlebush, grassland pinebush, and deerweed. It appears the areas of disturbed Riversidean sage scrub may experience regular disturbance, such as annual discing, explaining why the shrubs are small and sparse. (VCS, 2018, pp. 15-16)

5. Riversidean Alluvial Fan Sage Scrub

A total of 1.68 acres of Riversidean alluvial fan sage scrub was mapped within the Project site. This habitat is associated with the sandy/gravely bottomed ephemeral wash within the channel that bisects the Project site. Dominant species in this habitat include scalebroom (*Lepidospartum squamatum*) and California buckwheat. Additional species observed within the habitat include brittlebush, California sagebrush, deerweed, and white

sage. The understory was composed of mostly weedy non-native herbaceous species such as red-stem filaree, shortpod mustard, and brome grasses. (VCS, 2018, p. 16)

6. Disturbed Riversidean Sage Scrub – Encelia Dominant

A total of 0.14 acre of disturbed Riversidean sage scrub – encelia dominated was mapped within the Project site and 1.59 acres within the off-site improvement area. This habitat is located on the slopes found along the northern edge of the off-site improvement area within the future Nichols Road right-of-way. Vegetation observed within the habitat consists of high density weedy, non-native mustard, as well as a low to moderate density of scattered native brittlebush. Additional native species in this habitat include valley cholla (*Cylindropuntia californica* var. *parkeri*), doveweed, and California buckwheat. (VCS, 2018, p. 16)

7. Open Streambed

A total of 0.14 acre of open streambed are located within the downstream portion of the on-site drainage channel. The open streambed is composed of sandy wash substrate and is essentially void of vegetation. This area is wider than other section of open sandy wash; there are narrow sections of open sandy wash that are included in the Riversidean alluvial fan sage scrub habitat since the width is small and it is considered part of that habitat type. (VCS, 2018, p. 16)

8. Disturbed/Developed

A total of 36.47 acres of the land within the Project site and 3.44 acres within the off-site improvement area is considered disturbed/developed. Disturbed/developed habitat includes areas of bare ground (e.g. dirt roads), paved roads, active mine/reclamation activities (construction/grading), and other built facilities. (VCS, 2018, p. 16)

9. Ornamental

A total of 0.47 acre of ornamental vegetation was identified within the Project site. The ornamental vegetation includes a few trees along the eastern boundary including regrowth of Peruvian peppertrees (*Schinus molle*) near Nichols Road and the northeastern corner of the site, the canopy of adjacent landscaping trees including eucalyptus (*Eucalyptus sp.*), pine (*Pinus sp.*), palo verde (*Parkinsonia sp.*), and Mexican fan palm (*Washingtonia robusta*), as well as in the southeastern portion of the site including Peruvian peppertrees, eucalyptus, olive (*Olea europaea*), tamarisk (*Tamarix aphylla*), jacaranda (*Jacaranda sp.*), and African sumac (*Rhus lancea*). (VCS, 2018, pp. 16-17)

B. Critical Habitat

The United States Fish and Wildlife Service's (USFWS) online service for information regarding Threatened and Endangered Species Final Critical Habitat designation within California was reviewed to determine if the Project occurs within any species' designated Critical Habitat. Portions of the Project site (particularly the MSHCP-Excluded Project Area) and the Offsite Improvements Area occur within designated Coastal California Gnatcatcher Critical Habitat, as shown on Figure 6 of the Project's Biological Technical Report (*Technical Appendix C*). (VCS, 2018, p. 17)

C. Special Status Vegetation Communities

The California Natural Diversity Database (CNDDB) did not identify any special-status vegetation communities within two miles of the Survey Area. The Special Status Plant Species Survey report (included as Appendix D to *Technical Appendix C*) notes three special status plant communities on-site including Riversidean sage scrub, Riversidean alluvial fan sage scrub, and ephemeral wash. The areas of exposed sandy ephemeral wash are included within the habitat designation of Riversidean alluvial fan sage scrub, and open streambed in the Project's Biological Technical Report (*Technical Appendix C*). (VCS, 2018, p. 17)

D. Sensitive Plant Species

Sensitive plant species include federally- or state-listed threatened or endangered species, and those species listed on the California Native Plant Society's rare and endangered plant inventory. Species with the potential to occur on site were analyzed based on distribution, habitat requirements, and existing site conditions, and are listed in Appendix G of *Technical Appendix C*. Focused surveys for special status plant species were conducted in spring 2017 within the MSHCP-Excluded Survey Area of the Project site only. No sensitive plant species were observed within the MSHCP-Excluded Survey Area during the focused plant surveys in 2017. One sensitive plant species, Robinson's peppergrass, was observed just north of the Project site (north of Nichols Road) within the MSHCP-Covered Road Area during the focused plant surveys. No additional sensitive plant species were observed within the southern portion of the Project site area (which is subject to the MSHCP) during the general survey of the area performed on December 8, 2017. While suitable habitat exists on-site for many of the plant species listed in Appendix G of *Technical Appendix C*, there is relatively low potential for occurrence based on the lack of observation during the 2017 focused plant surveys (in the MSHCP-Excluded Survey Area) and disturbed nature within a majority of the site. (VCS, 2018, pp. 17-18)

E. Sensitive Wildlife Species

Sensitive wildlife species include the following classifications: federally or state listed threatened or endangered species, California species of special concern, fully protected, and protected species (as designated by CDFW). Species with the potential to occur on-site were analyzed based on distribution, habitat requirements, and existing site conditions. VCS identified two special-status animal species at the Project site: coastal whiptail and coast horned lizard. Both are species are California species of special concern and were observed during the June 1, 2017 survey and focused plant surveys, respectively, within the MSHCP-Excluded Survey Area of the Project site. (VCS, 2018, pp. 18-19)

Based on focused surveys conducted on the Project site in 2017, VCS determined that the MSHCP-Excluded Survey Area was not occupied by Quino checkerspot butterfly (QCB) or coastal California gnatcatcher (CAGN). During burrowing owl surveys in 2018, CAGN were incidentally observed. However, since the 2017 focused surveys determined the MSHCP-Excluded Survey Area to be unoccupied, the incidental observations in 2018 support the condition of CAGN potentially dispersing through the MSHCP-Excluded Project Area to the MSHCP Project Area. (VCS, 2018, p. 18)

The MSHCP-Project Area and MSHCP-Covered Road Area are not subject to QCB and CAGN focused surveys but are subject to burrowing owl (BUOW) focused surveys because the areas are included within the MSHCP. Suitable BUOW habitat is present within the MSHCP-Project Area and the 500 feet surrounding the

Survey Area. Focused BUOW surveys were conducted by VCS on May 22, June 26, July 12, and July 26. No BUOWs were observed within the Project site or off-site improvement area during the focused surveys. (VCS, 2018, pp. 18-19)

F. Wildlife Movement/Nesting/Maternity Roost

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Corridors effectively act as links between different populations of a species. An increase in a population's genetic variability is generally associated with an increase in a population's health. The Project Study Area is located near and on the edge of a large contiguous area of open space and the Project site includes an incised drainage with native sage scrub habitat present. Therefore, there is the potential that the Project site provides some value in very local wildlife movement, such as dispersal and foraging. However, the Project site also is surrounded by residential and school development to the south and east, the Interstate 15 (I-15) freeway to the west, and intensive mining operations to the north. The off-site improvement area is largely developed and located within and along a well-used paved road. These conditions decrease the likelihood for the Project Study Area to function as a regional movement corridor or as a large-scale wildlife movement area. (VCS, 2018, pp. 19-20)

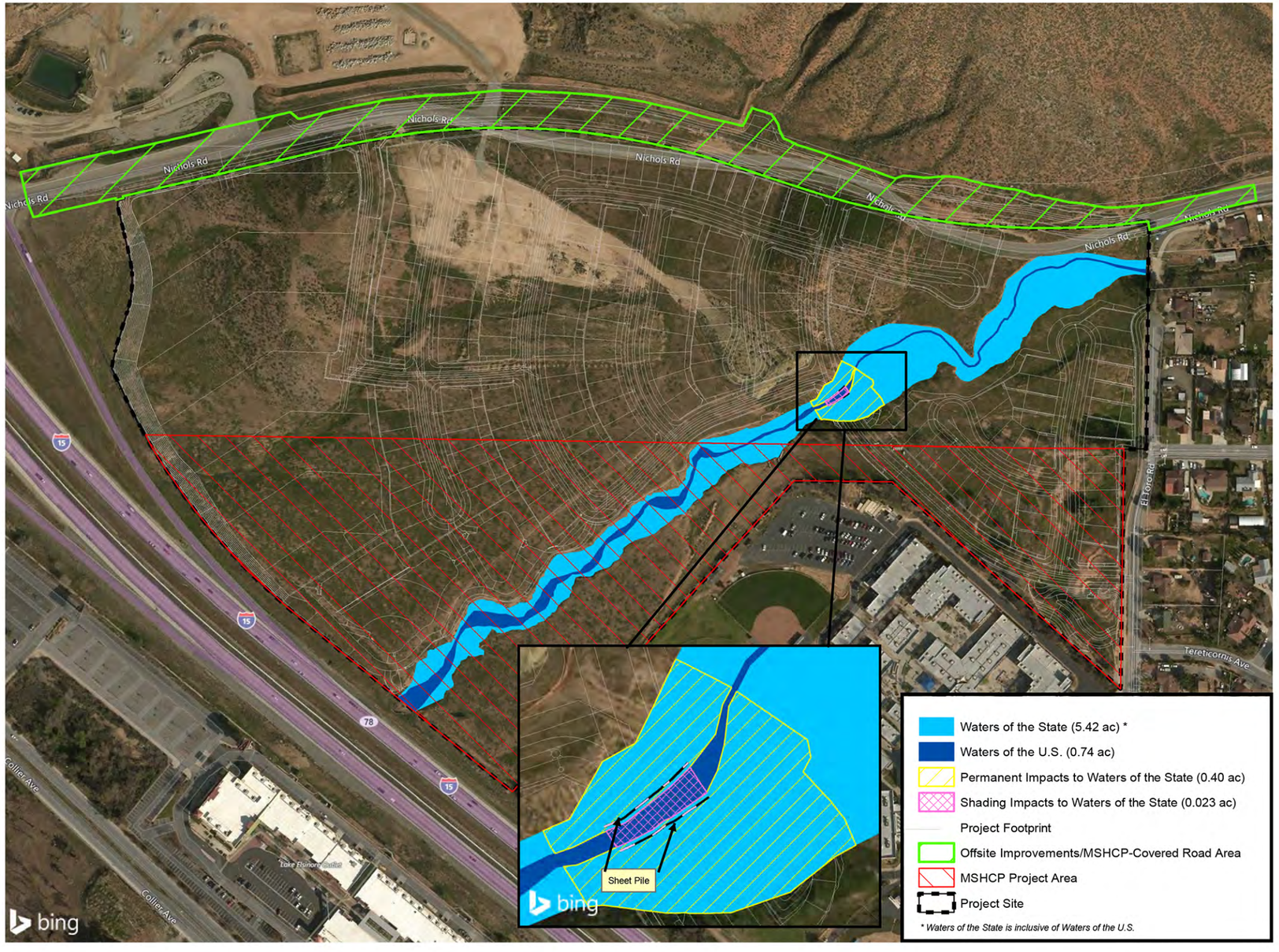
The Project site contains habitat including trees and shrubs that could support nesting birds and/or roosting bats, as common to any location containing such features. The off-site improvement area contains habitat that could support nesting birds. While a focused survey for bird nesting and bat roosting was not conducted at the time of the general biological survey and were not required, no active bird nests or bat maternity roosts were incidentally observed during the general biological surveys. (VCS, 2018, p. 20)

G. Jurisdictional Water and Wetlands

The Project Study Area was assessed for jurisdictional wetland and non-wetland Waters of the United States and Waters of the State. Jurisdictional non-wetland Waters of the United States are typically determined through the observation of an Ordinary High Water Mark (OHWM). Projects with impacts to Waters of the United States and non-wetland Waters of the United States are regulated under Sections 401 and 404 of the Clean Water Act through the ACOE and the Regional Water Quality Control Board (RWQCB). The California Department of Fish and Wildlife (CDFW) and RWQCB have jurisdiction over Waters of the State pursuant to Section 1602 of the California Fish and Game Code. (VCS, 2018, pp. 22-23)

1. ACOE/RWQCB Jurisdiction

The Project site contains Stovepipe Creek, which is an ephemeral drainage that bisects the Project site in a northeast-to-southwest alignment and is considered jurisdictional by the ACOE and RWQCB, as identified in Figure 4.3-3, *Jurisdictional Delineation Map*. This drainage contains approximately 0.74 acre of Waters of the United States subject to ACOE and RWQCB jurisdiction on site, as summarized in Table 4.3-2, *Waters of the United States*. No signs of wetlands were observed by VCS within Stovepipe Creek; therefore, the entire drainage is considered non-wetland Waters of the United States. There are no Waters of the United States within the off-site improvement area. (VCS, 2018, p. 22)



Source(s): VCS Environmental (September 2018)

Figure 4.3-3

NOT TO SCALE

JURISDICTIONAL DELINEATION MAP

Table 4.3-2 Waters of the United States

Feature	Total Acreage
Non-wetland Waters of the US	0.74

(VCS, 2018, Table 2)

2. CDFW Jurisdiction

The Project site contains approximately 5.42 acres of CDFW jurisdiction, including 1.68 acres of Riversidean alluvial fan sage scrub habitat located within and along the adjacent banks of Stovepipe Creek, as shown in Figure 4.3-2 and Figure 4.3-3. There are no areas of CDFW jurisdiction within the off-site improvement area. Table 4.3-3, *Summary of CDFW Jurisdiction*, summarizes CDFW jurisdiction for the Project site. (VCS, 2018, p. 24)

Table 4.3-3 Summary of CDFW Jurisdiction

Feature*	Total Acreage
Total Waters of the State	5.42
Riversidean Alluvial Fan Sage Scrub	1.68

(VCS, 2018, Table 3)

H. MSHCP Riparian/Riverine Areas and Vernal Pools

The Project site is located within the Western Riverside County MSHCP. However, in 2004, the owners of the northern 45.4 acres of the Project site, along with other landowners, entered into a Settlement Agreement and Memorandum of Understanding ("Agreement") with the County of Riverside which, among other things, explicitly exempted the northern 45.4 acres of the Project site from all provisions of the MSHCP. Although the northern 45.4 acres of the Project site are exempt from the MSHCP, the 45.4 acres are located within Cell Group W and includes Criteria Cell 4070 and a small portion of Criteria Cell 4067. Criteria Cells 4070 and 4067 are intended to conserve riparian scrub, woodland, and forest habitat associated Alberhill Creek and adjacent coastal sage scrub and grassland habitat, with conservation focused on 80-90 percent of the Cells in the northwestern portion of the Cells. However, the conservation criteria for Criteria Cells 4070 and 4067 would not apply because the northern 45.4 acres of the Project site are exempted from the requirements of the MSHCP. Information regarding the Criteria Cells is provided for informational purposes only. (RCA, 2003)

As a result of the Agreement, the MSHCP only applies to the southern 27.1 acres of the Project site. The southern 27.1 acres of the Project site are located within Criteria Cell 4169 and a small portion of Criteria Cell 4166. Cells 4166 and 4169 are stand-alone Cells that arenot located within an MSHCP Criteria Cell Group. According to the MSCHP, Criteria Cell 4169 is intended for conservation of meadow and marsh habitat along Alberhill Creek and adjacent grassland habitat, with conservation focused on 10-20 percent of the Cell in the

southwest portion of the Cell. Criteria Cell 4166 is intended to conserve meadow, marsh, riparian scrub, woodland, and forest habitat along Alberhill Creek and adjacent grassland habitat, with conservation in 15-25 percent of the Cell focusing on the northeastern portion of the Cell. The southern 27.1 acres of the Project site are not located within the areas targeted for conservation in Criteria Cells 4166 or 4169. These areas of focus for conservation are located west of I-15. The southern 27.1 acres of the Project site are located on the east side of I-15 and are not located within or near Alberhill Creek. The 27.1 acres of the Project site is not designated as part of the MSHCP Reserve System, although individual MSHCP policies apply to the southern 27.1 acres of the site. (RCA, 2003)

1. Riparian/Riverine Areas

The Project site contains approximately 2.26 acres of MSHCP-defined riparian/riverine areas as shown on Figure 4.3-4, *MSHCP Riparian/Riverine Areas Map*. These features do not support riparian habitat and only include riverine resources. No riparian/riverine areas are located within the off-site improvement areas for the proposed Project. Table 4.3-4, *Summary of MSHCP Riverine Areas*, summarizes MSHCP Riverine Areas for the Project site. (VCS, 2018, p. 24)

Table 4.3-4 Summary of MSHCP Riverine Areas

Feature	Total Acreage
Riverine	2.26
Riparian	0

(VCS, 2018, Table 4)

2. Vernal Pools

No vernal pools or seasonal depressions were observed within the Project site or off-site improvement area. (VCS, 2018, p. 24)

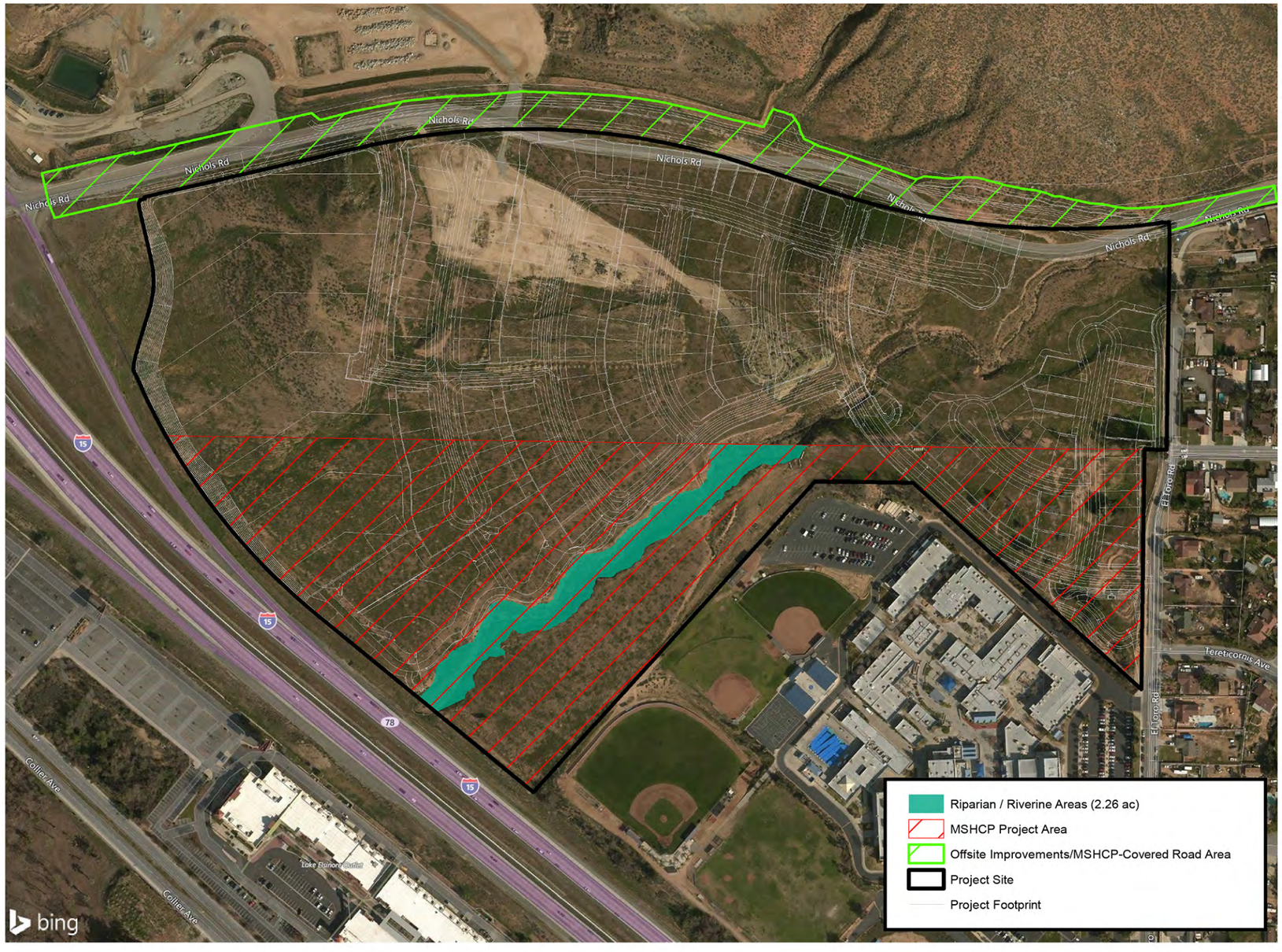
4.3.2 APPLICABLE ENVIRONMENTAL REGULATIONS

The following is a brief description of the federal, State, and local environmental laws and related regulations governing the protection of biological resources.

A. Federal Regulations

1. Endangered Species Act (ESA)

The purpose of the federal Endangered Species Act (ESA) is to protect and recover imperiled species and the ecosystems upon which they depend. It is administered by the U.S. Fish and Wildlife Service (USFWS) and the Commerce Department's National Marine Fisheries Service (NMFS). The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. Under the ESA, species may be listed as either



Source(s): VCS Environmental (September 2018)

Figure 4.3-4

NOT TO SCALE

MSHCP RIPARIAN/RIVERINE AREAS MAP

endangered or threatened. "Endangered" means a species is in danger of extinction throughout all or a significant portion of its range. "Threatened" means a species is likely to become endangered within the foreseeable future. All species of plants and animals, except pest insects, are eligible for listing as endangered or threatened. (USFWS, 2013)

The ESA makes it unlawful for a person to take a listed animal without a permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Through regulations, the term "harm" is defined as "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." Listed plants are not protected from take, although it is illegal to collect or maliciously harm them on federal land. Protection from commercial trade and the effects of federal actions do apply for plants. (USFWS, 2013)

Section 7 of the ESA requires federal agencies to use their legal authorities to promote the conservation purposes of the ESA and to consult with the USFWS and NMFS, as appropriate, to ensure that effects of actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species. During consultation, the "action" agency receives a "biological opinion" or concurrence letter addressing the proposed action. In the relatively few cases in which the USFWS or NMFS makes a jeopardy determination, the agency offers "reasonable and prudent alternatives" about how the proposed action could be modified to avoid jeopardy. It is extremely rare that a project ends up being withdrawn or terminated because of jeopardy to a listed species. (USFWS, 2013)

Section 10 of the ESA may be used by landowners including private citizens, corporations, tribes, states, and counties who want to develop property inhabited by listed species. Landowners may receive a permit to take such species incidental to otherwise legal activities, provided they have developed an approved habitat conservation plan (HCP). HCPs include an assessment of the likely impacts on the species from the proposed action, the steps that the permit holder will take to avoid, minimize, and mitigate the impacts, and the funding available to carry out the steps. HCPs may benefit not only landowners but also species by securing and managing important habitat and by addressing economic development with a focus on species conservation. (USFWS, 2013)

2. Clean Water Act Section 401

Clean Water Act (CWA) § 401 water quality certification provides states and authorized tribes with an effective tool to help protect water quality, by providing them an opportunity to address the aquatic resource impacts of federally issued permits and licenses. Under § 401, a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the U.S. until the state or tribe where the discharge would originate has granted or waived § 401 certification. The central feature of CWA § 401 is the state or tribe's ability to grant, grant with conditions, deny, or waive certification. Granting certification, with or without conditions, allows the federal permit or license to be issued consistent with any conditions of the certification. Denying certification prohibits the federal permit or license from being issued. Waiver allows the permit or license to be issued without state or tribal comment. States and tribes make their decisions to deny, certify, or condition permits or licenses based in part on the proposed project's compliance with Environmental Protection Agency (EPA)-approved water quality standards. In addition, states and tribes

consider whether the activity leading to the discharge will comply with any applicable effluent limitations guidelines, new source performance standards, toxic pollutant restrictions, and other appropriate requirements of state or tribal law. (EPA, 2010, p. 1)

Many states and tribes rely on § 401 certification to ensure that discharges of dredge or fill material into a water of the U.S. do not cause unacceptable environmental impacts and, more generally, as their primary regulatory tool for protecting wetlands and other aquatic resources. However, § 401 is limited in scope and application to situations involving federally-permitted or licensed activities that may result in a discharge to a water of the U.S. If a federal permit or license is not required, or would authorize impacts only to waters that are not waters of the U.S., the activity is not subject to the CWA § 401. (EPA, 2010, p. 2)

3. Clean Water Act Section 404

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Wetlands subject to Clean Water Act Section 404 are defined as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Activities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g. certain farming and forestry activities). (EPA, n.d.)

The basic premise of the program is that no discharge of dredged or fill material may be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment; or (2) the nation's waters would be significantly degraded. Applications for permits must, to the extent practicable: (l) demonstrate steps have been taken to avoid wetland impacts; (2) demonstrate that potential impacts on wetlands have been minimized; and (3) provide compensation for any remaining unavoidable impacts. Proposed activities are regulated through a permit review process. (EPA, n.d.)

An individual permit is required for potentially significant impacts. Individual permits are reviewed by the U.S. Army Corps of Engineers (ACOE), which evaluates applications under a public interest review, as well as the environmental criteria set forth in the CWA Section 404(b)(1) Guidelines. However, for most discharges that will have only minimal adverse effects, a general permit may be suitable. General permits are issued on a nationwide, regional, or State basis for particular categories of activities. The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that the general or specific conditions for the general permit are met. States also have a role in Section 404 decisions, through state program general permits, water quality certification, or program assumption. (EPA, n.d.)

4. Executive Order 11990 – Protection of Wetlands

The purpose of Executive Order (EO) 11990 is to "minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands." To meet these objectives, the

Order requires federal agencies, in planning their actions, to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided. (FEMA, 2018a) The Order applies to:

- Acquisition, management, and disposition of federal lands and facilities construction and improvement projects which are undertaken, financed, or assisted by federal agencies;

- Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities. (FEMA, 2018a)

The procedures require the determination of whether or not the proposed project will be in or will affect wetlands. If so, a wetlands assessment must be prepared that describes the alternatives considered. The procedures include a requirement for public review of assessments. (FEMA, 2018a)

5. Migratory Bird Treaty Act (16 USC Section 703-712)

The Migratory Bird Treaty Act (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. The migratory bird species protected by the MBTA are listed in 50 CFR 10.13. The USFWS has statutory authority and responsibility for enforcing the MBTA (16 USC 703-712). The MBTA implements Conventions between the United States and four countries (Canada, Mexico, Japan, and Russia) for the protection of migratory birds. (USFWS, 2017)

B. State Regulations

1. California Endangered Species Act (CESA)

The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. The California Department of Fish and Wildlife (CDFW) works with interested persons, agencies, and organizations to protect and preserve such sensitive resources and their habitats. CESA prohibits the take of any species of wildlife designated by the California Fish and Game Commission as endangered, threatened, or candidate species. CDFW may authorize the take of any such species if certain conditions are met. (CDFW, 2018a)

Section 2081 subdivision (b) of the California Fish and Game Code (CFGC) allows CDFW to authorize take of species listed as endangered, threatened, candidate, or a rare plant, if that take is incidental to otherwise lawful activities and if certain conditions are met. These authorizations are commonly referred to as incidental take permits (ITPs). (CDFW, 2018a)

If a species is listed by both the federal ESA and CESA, CFGC Section 2080.1 allows an applicant who has obtained a federal incidental take statement (federal Section 7 consultation) or a federal incidental take permit (federal Section 10(a)(1)(B)) to request that the Director of CDFW find the federal documents consistent with

CESA. If the federal documents are found to be consistent with CESA, a consistency determination (CD) is issued and no further authorization or approval is necessary under CESA. (CDFW, 2018a)

A Safe Harbor Agreement (SHA) authorizes incidental take of a species listed as endangered, threatened, candidate, or a rare plant, if implementation of the agreement is reasonably expected to provide a net conservation benefit to the species, among other provisions. SHAs are intended to encourage landowners to voluntarily manage their lands to benefit CESA-listed species. California SHAs are analogous to the federal safe harbor agreement program and CDFW has the authority to issue a consistency determination based on a federal safe harbor agreement. (CDFW, 2018a)

2. Natural Community Conservation Planning Act (NCCP)

CDFW's Natural Community Conservation Planning (NCCP) program takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. The NCCP program began in 1991 as a cooperative effort to protect habitats and species. It is broader in its orientation and objectives than the California and Federal Endangered Species Acts, as these laws are designed to identify and protect individual species that have already declined in number significantly. (CDFW, 2018b)

An NCCP identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. Working with landowners, environmental organizations, and other interested parties, a local agency oversees the numerous activities that compose the development of an NCCP. CDFW and the U.S. Fish and Wildlife Service provide the necessary support, direction, and guidance to NCCP participants. (CDFW, 2018b)

There are currently 13 approved NCCPs (includes 6 subarea plans) and 22 NCCPs in the active planning phase (includes 10 subarea plans), which together cover more than 7 million acres and will provide conservation for nearly 400 special status species and a wide diversity of natural community types throughout California. (CDFW, 2018b)

3. California Fish and Game Code, Section 1600, et seq.

CFGC section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or (3) deposit debris, waste or other materials that could pass into any river, stream, or lake. The CFGC indicates that "any river, stream or lake" includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. (CDFW, 2018c)

CDFW requires a Lake and Streambed Alteration (LSA) Agreement when it determines that the activity, as described in a complete LSA Notification, may substantially adversely affect existing fish or wildlife resources. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify a project that would eliminate or reduce harmful impacts to fish and wildlife resources. Before issuing an LSA Agreement, CDFW must comply with CEQA. (CDFW, 2018c)

4. Native Plant Protection Act (NPPA) of 1977

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations. (CDFW, 2018d)

5. Unlawful Take or Destruction of Nests or Eggs (CFGC Sections 3503.5-3513)

Section 3503.5 of the CFGC specifically protects birds of prey, stating: "It is unlawful to take, possess, or destroy any . . . [birds-of-prey] or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Section 3513 of the CFGC duplicates the federal protection of migratory birds, stating: "It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act."

6. Porter-Cologne Water Quality Act

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution.

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of National Pollutant Discharge Elimination System (NPDES) permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. A number of statewide water quality control plans have been adopted by the State Water Board. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. Statewide and regional water quality control plans include enforceable prohibitions against certain types of discharges, including those that may pertain to nonpoint sources. Portions of water quality control plans, the water quality objectives and beneficial use designations, are subject to review by the EPA, when approved they become water quality standards under the CWA. (SWRCB, 2014)

C. Local Regulations

1. Western Riverside County Multiple Species Habitat Conservation Plan

The Project site is located within the Elsinore Area Plan portion of the Western Riverside County MSHCP, which is a comprehensive habitat conservation/planning program for Western Riverside County. However, in

2004, the owners of the northern 45.4 acres of the Project site, along with other landowners, entered into a Settlement Agreement and Memorandum of Understanding ("Agreement") with the County of Riverside which, among other things, explicitly exempted the northern 45.4 acres of the Project site from all provisions of the MSHCP. Although the northern 45.4 acres of the Project site are exempt from the MSHCP, the 45.4 acres are located within Cell Group W and encompass portions of Criteria Cell 4070 and a small portion of Criteria Cell 4067. As a result of the Agreement, the MSHCP only applies to the southern 27.1 acres of the Project site. The southern 27.1 acres of the Project site are located within Criteria Cell 4169 and a small portion of Criteria Cell 4166. (RCA, 2003)

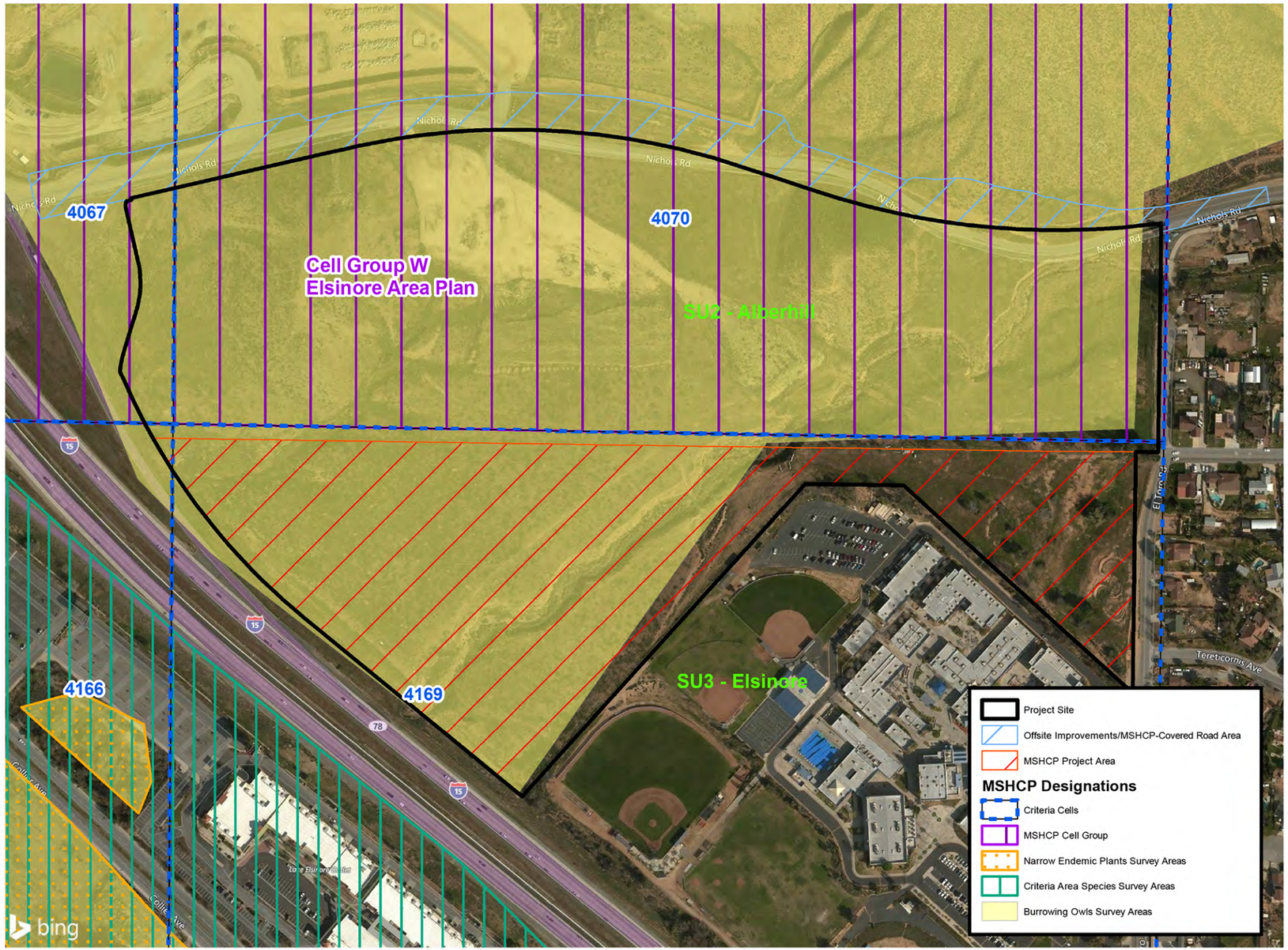
The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to special-status species and associated native habitats.

Through agreements with the USFWS and CDFW, the MSHCP designates 146 special-status animal and plant species as Covered Species, of which the majority have no project-specific survey/conservation requirements. The MSHCP provides mitigation for project-specific impacts to these species for Projects that are compliant/consistent with MSHCP requirements, such that the impacts are reduced to below a level of significance pursuant to CEQA.

The Covered Species that are not yet adequately conserved have additional requirements in order for these species to ultimately be considered "adequately conserved." A number of these species have survey requirements based on a project's occurrence within a designated MSHCP survey area and/or based on the presence of suitable habitat. These include Narrow Endemic Plant Species (MSHCP Volume I, Section 6.1.3), as identified by the Narrow Endemic Plant Species Survey Areas (NEPSSA); Criteria Area Plant Species (MSHCP Volume I, Section 6.3.2) identified by the Criteria Area Plant Species Survey Areas (CAPSSA); animal species (BUOW, mammals, amphibians) identified by survey areas (MSHCP Volume I, Section 6.3.2); and species associated with riparian/riverine areas and vernal pool habitats (i.e., least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, and three species of listed fairy shrimp) (MSHCP Volume I, Section 6.1.2). An additional 28 species (MSHCP Volume I, Table 9.3) not yet adequately conserved have species-specific objectives in order for the species to become adequately conserved. However, these species do not have project-specific survey requirements.

As shown on Figure 4.3-5, *MSHCP Overlay Map*, the Study Area is not located within the MSHCP Criteria Area MSHCP NEPSSA, or the MSHCP CAPSSA. The Study Area also is not located within the MSHCP Mammal or Amphibian Survey Areas. However, the MSHCP Project Area is located within Criteria Cells 4166 and 4169 and located partially within the BUOW Survey Area.

Within the designated Survey Areas, the MSHCP requires habitat assessments, and focused surveys within areas of suitable habitat. For locations within the MSHCP Criteria Area with positive survey results, the MSHCP requires that 90 percent of those portions of the property that provide for long-term conservation value for the identified species shall be avoided until it is demonstrated that conservation goals for the particular



Source(s): VCS Environmental (September 2018)

Figure 4.3-5

NOT TO SCALE

MSHCP OVERLAY MAP

species have been met throughout the MSHCP. Findings of equivalency shall be made demonstrating that the 90-percent standard has been met, if applicable. If equivalency findings cannot be demonstrated, then "biologically equivalent or superior preservation" must be provided. Accordingly, the biological resources assessment entailed the performance of habitat assessments, and site-specific biological surveys, to evaluate the presence/absence of special-status species in accordance with the requirements of CEQA and the MSHCP; performance of a focused survey for the BUOW; and performance of a jurisdictional delineation of aquatic resources. All projects subject to the MSHCP must demonstrate compliance with applicable MSHCP requirements pursuant to the following sections of the MSHCP: Section 6.1.2, "Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools;" Section 6.1.3, "Protection of Narrow Endemic Plant Species;" Section 6.1.4, "Guidelines Pertaining to the Urban/Wildland Interface;" and Section 6.3.2, "Additional Survey Needs and Procedures." (VCS, 2018, p. 31)

2. Stephen's Kangaroo Rat Habitat Conservation Plan

The SKR HCP was prepared under the direction of the Riverside County Habitat Conservation Agency (RCHCA) Board of Directors, in consultation with USFWS and CDFW. The City of Lake Elsinore is a member agency of the RCHCA. The 30-year SKR HCP was designed to acquire and permanently conserve, maintain and fund the conservation, preservation, restoration, and enhancement of Stephens' kangaroo rat-occupied habitat. The SKR HCP covers approximately 534,000 acres within the member jurisdictions and includes an estimated 30,000 acres of occupied Stephens' kangaroo rat habitat. The SKR HCP requires members to preserve and manage 15,000 acres of occupied habitat in seven Core Reserves encompassing over 41,000 acres. (RCHCA, n.d.)

On May 3, 1996, the USFWS issued a permit to the Riverside County Habitat Conservation Agency to incidentally take the federally endangered Stephens' kangaroo rat (*Dipodomys stephensi*). Similarly, the CDFW issued a California Endangered Species Act Management Authorization for Implementation of the Stephens' kangaroo rat on May 6, 1996. To date, more than $50 million has been dedicated to the establishment and management of a system of regional preserves designed to ensure the survival of SKR in the plan area. This effort resulted in the permanent conservation of approximately 50% of the SKR-occupied habitat remaining in the HCP area. Through direct funding and in-kind contributions, SKR habitat in the regional reserve system is managed to ensure its continuing ability to support the species. Core reserves were deemed complete in December of 2003. (RCHCA, n.d.)

3. City of Lake Elsinore Municipal Code Chapter 14.08

Chapter 14.08 of the Lake Elsinore Municipal Code intends to protect and enhance the water quality of City watercourses, water bodies, groundwater, and wetlands in a manner pursuant to and consistent with the Federal Clean Water Act. (VCS, 2018, p. 7)

4. City of Lake Elsinore Municipal Code Chapter 16.85

Chapter 16.85 of the Lake Elsinore Municipal Code establishes a local development mitigation fee to be paid as part of the City's implementation of the MSHCP. Fees are collected for any development within the City. (VCS, 2018, p. 7)

5. City of Lake Elsinore Municipal Code Chapter 19.04

Chapter 19.04 of the Lake Elsinore Municipal Code addresses the implementation of the SKR HCP in the City of Lake Elsinore. Chapter 19.04 requires all applicants for development permits within the boundaries of the SKR HCP area to pay an impact and mitigation fee. Chapter 19.04 states that no development permit for real property located within the boundaries of the SKR HCP area will be issued or approved without payment of the impact and mitigation fee and the submission of the biological survey as required by the code. (VCS, 2018, p. 7)

4.3.3 BASIS FOR DETERMINING SIGNIFICANCE

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 Wildlife 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, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;*

c. *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;*

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; or*

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.*

The above listed thresholds are derived directly from Section IV of Appendix G to the CEQA Guidelines and address typical adverse effects to biological resources (OPR, 2018).

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 Wildlife or U.S. Fish and Wildlife Service?

Special Status Plants

During the field studies conducted within the Project's Study Area by VCS, one special-status plant species, Robinson's pepper-grass, was identified just north of the Project site (north of Nichols Road) within the MSHCP-Covered Road Area during the spring 2017 focused plant surveys. There were no other special status plant species identified within the MSHCP-Excluded Survey Area. Robinson's pepper-grass has a California Rare Plant Ranking (CRPR) ranking of 4.3, which means it is a watch list plant of limited distribution and "not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)." While Project implementation may impact Robinson's pepper-grass, impacts would be less than significant based on the species' low CRPR ranking. There is low or very low potential for other special status plants to occur on the Project site; therefore, impacts to special status plants would be less than significant. (VCS, 2018, p. 27)

Special Status Wildlife

During the field studies conducted within the Project's Study Area by VCS, two special status wildlife species, coastal whiptail and coast horned lizard, were observed in the MSHCP-Excluded Survey Area. Both species are California species of special concern. A majority of the habitat suitable for both species would be preserved on-site (i.e., Stovepipe Creek and associated habitat); therefore, potential impacts to the species would be limited. Potential impacts to habitat suitable for these species within the MSHCP-Excluded Project Area would be potentially significant prior to mitigation. Notwithstanding, the coastal whiptail and coast horned lizard are both covered species under the MSHCP; therefore, conservation of this species would be addressed on a regional level around the Project site on properties that are subject to the MSHCP. (VCS, 2018, p. 27)

Based on focused surveys conducted by VCS, QCB does not occupy the MSHCP-Excluded Project Area; therefore, no impact would occur to the QCB. Additionally, CAGN were not observed during 2017 focused surveys within the MSHCP-Excluded Project Area but have been incidentally observed within the Project site during focused burrowing owl surveys in 2018. However, because the 2017 focused surveys determined the MSHCP-Excluded Survey Area to be unoccupied and the incidental observations in 2018 in and adjacent to areas subject to an active mine reclamation operation support the condition of CAGN potentially dispersing through the MSHCP-Excluded Project Area to the MSHCP Project Area, no "take" is anticipated to occur. For these reasons, there is substantial evidence to support that the CAGN does not occupy the MSHCP-Excluded Project Area and no impacts to this species are expected within the MSHCP-Excluded Project Area. Additionally, Project compliance with the MSHCP within the MSHCP Project Area would address long-term conservation of the species on a regional scale. Impacts to the QCB and the CAGN would be less than significant. (VCS, 2018, pp. 27-28)

Several special status animal species have a moderate potential to occur within the Project Study Area within their respective suitable habitats as listed in Appendix G of *Technical Appendix C*. Most of these species are covered species under the MSHCP. An MSHCP Covered Species is a species that is conserved by MSHCP implementation. There are 146 Covered Species in the MSHCP, of which 40 species are identified as requiring additional surveys. Only two wildlife species with at least moderate potential to occur on the Project site are

not covered by the MSHCP: California glossy snake and coast patch-nosed snake, which are both CDFW Species of Special Concern. Neither of these species was observed on-site during field surveys conducted by VCS. Both species have moderate potential to occur on the Project site. Potential impacts to these species would be minimized through preservation of the majority of the suitable on-site habitat (i.e. Stovepipe Creek and associated habitat). Although these species were not observed on site, the Project would impact suitable habitat for these species within the MSHCP-Excluded Project Area; this is evaluated as a potentially significant impact for which mitigation, in the form of habitat-based mitigation, would be required. Because the MSHCP Project Area would comply with the MSHCP, which in turn would provide for the long-term conservation of habitat for these species, Project impacts to these species within the MSHCP Project Area would be less than significant. (VCS, 2018, p. 28)

Portions of the MSHCP Project Area and MSHCP-Covered Road Area are located within the MSHCP BUOW Survey Area, as shown previously in Figure 4.3-5. Suitable habitat was identified on the Project site and within the off-site improvement area. Focused surveys for the BUOW were conducted on May 22, June 26, July 12, and July 26, 2018. No BUOW or signs of BUOW were observed within the Project site, the off-site improvement area, or the surrounding 500-foot survey buffer. The MSHCP-Excluded Project Area occurs within the 500-foot survey buffer for the areas within the MSHCP Project Area and the Offsite Improvements Area subject to BUOW surveys. Even though the 2018 focused surveys were negative, the BUOW is migratory and has the potential to locate on the property prior to construction. A significant impact could occur if construction activities were to occur during the nesting season and if any BUOW individuals were present. (VCS, 2018, pp. 28-29)

Special Status Wildlife Critical Habitat

The northern portion of the Project Study Area falls within a designated CAGN Critical Habitat area under the federal Endangered Species Act, however, because the Project does not require federal agency actions or federally-funded or permitted activities, the Project is not subject to the Critical Habitat designation. Furthermore, a majority of the area identified as CAGN Critical Habitat occurs in the MSHCP-Excluded Project Area, which is undergoing reclamation activities for a previous mining operation that have disturbed or eliminated much of the potential CAGN habitat. Additionally, 2017 focused surveys were negative for the CAGN within the northern portions of the site not subject to reclamation activities. Incidental sightings of CAGN in 2018 are attributed to the species crossing the mine reclamation area to reach suitable habitat in the MSHCP Project Area. Therefore, Project impacts to CAGN Critical Habitat would be less than significant. (VCS, 2018, p. 27)

Nesting Birds, Bats, & Raptors

The Project site contains disturbed/maintained soils and habitat including several trees and shrubs that could support nesting birds and/or roosting bats. Due to the potential for onsite bird nesting and/or bat roosting, Project construction could result in impacts to nesting birds that would be in violation of the MBTA and CFGC and/or result in impacts to protected bat maternity roosts if construction activities are to take place during nesting or maternity roosting season or if a preconstruction nesting bird and roosting bat survey is not performed to clear the Project site prior to start of work. Thus, impacts would be potentially significant and require mitigation. (VCS, 2018, p. 29)

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, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

Potential impacts to vegetation communities/land cover types due to implementation of the proposed Project are shown in Figure 4.3-6, *Summary of Vegetation/Land Use Impacts*, and summarized in Table 4.3-5, *Summary of Vegetation/Land Use Impacts*. The proposed Project would permanently impact 2.58 acres of native vegetation types, including 0.38 acre of Riversidean sage scrub, 0.40 acre of disturbed Riversidean sage scrub, 0.07 acre of Riversidean alluvial fan sage scrub, and 1.73 acres of disturbed Riversidean sage scrub-encelia dominant. Impacts to native vegetation types within the MSHCP Project Area and MSHCP-Covered Road Area would be less than significant due to compliance with the MSHCP in this portion of the Project site. However, for the MSHCP-Excluded Project Area, Project impacts to 0.23 acre of Riversidean sage scrub, 0.14 acre of disturbed Riversidean sage scrub, 0.07 acre of Riversidean alluvial fan sage scrub, and 0.14 acres of disturbed Riversidean sage scrub-encelia dominant, would represent a significant impact for which mitigation would be required. (VCS, 2018, p. 26)

The Project also would result in direct impacts to non-native grassland, ornamental, ruderal, and disturbed/developed vegetation/land cover types are considered less than significant because these habitats/land covers are common in the surrounding vicinity and do not represent CNDDB or CDFW sensitive plant communities. (VCS, 2018, p. 26)

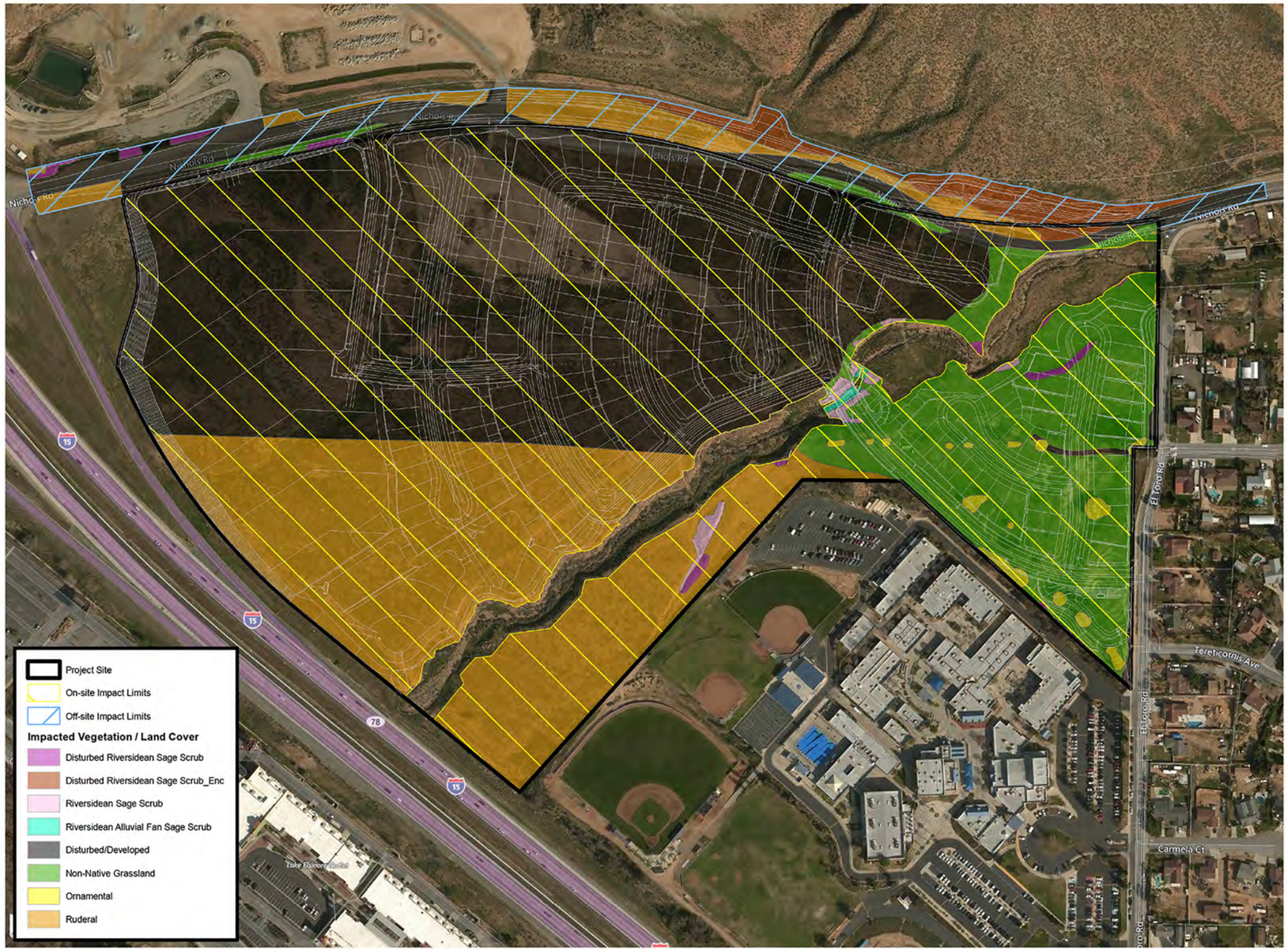
Construction and operational activities within the Project Study Area could result in indirect impacts to the vegetation communities surrounding the directly impacted areas. Examples of indirect temporary impacts to plant communities include the effects of fugitive dust created by construction activities and the spread of invasive species. With development, "edges" of vegetation communities may be exposed and more susceptible to invasion by invasive species (introduced by planted landscaping, seed dispersal from cars, people, and/or pets, and/or wind). Construction-related erosion, runoff, sedimentation, soil compaction, and alteration of drainage patterns that may affect plants by altering Project site conditions so that the location in which they are growing becomes unfavorable are prohibited by federal and state laws. However, development of the entire Project site would be subject to a Stormwater Pollution Prevention Plan (SWPPP) that would include BMPs to implement during the construction process. A Project-specific Stormwater Quality Management Plan (WQMP) (including as *Technical Appendix I2* to this EIR) has been prepared to establish the post-construction BMPs that would be implemented with the development to mitigate impacts to post-construction runoff due to the Project. The proposed BMPs include an extended detention basin, two sand filter basins and implementation of standard LID practices. A final WQMP would be prepared and approved prior to construction. Thus, indirect impacts to riparian areas or sensitive habitats would be less than significant. (VCS, 2018, pp. 26-27)

Implementation of the Project would not impact any riparian/riverine features within the MSCHP Project Area. Therefore, impacts to MSHCP sensitive riparian/riverine features would be less than significant. (VCS, 2018, p. 30)

Table 4.3-5 Summary of Vegetation/Land Use Impacts

Vegetation Communities	Permanent Impacts				
	Project Site Impacts Acreage			Offsite Improvements Impacts Acreage	Total Impacts (Onsite + Offsite)
	MSHCP Project Area	MSHCP-Excluded Project Area	Total Project Site		
Non-native grassland	5.20	5.87	**11.07**	0.32	**11.39**
Ruderal	17.99	0.15	**18.14**	2.25	**20.39**
Riversidean Sage Scrub	0.15	0.23	**0.38**	0	**0.38**
Disturbed Riversidean Sage Scrub	0.08	0.14	**0.22**	0.18	**0.40**
Riversidean Alluvial Fan Sage Scrub	0	0.07	**0.07**	0	**0.07**
Disturbed Riversidean Sage Scrub – Encelia dominant	0	0.14	**0.14**	1.59	**1.73**
Open Streambed	0	0	**0**	0	**0**
Disturbed/Developed	0.53	35.77	**36.30**	3.44	**39.74**
Ornamental	0.38	0.09	**0.47**	0	**0.47**
TOTAL	24.33	42.46	**66.79**	7.78	**74.57**

(VCS, 2018, Table 5)



Source(s): VCS Environmental (September 2018)

Figure 4.3-6

NOT TO SCALE

SUMMARY OF VEGETATION/LAND USE IMPACTS

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

As discussed above in Subsection 4.3.1, VCS conducted a jurisdictional delineation within the Project's Study Area. The Project would not impact any of the area subject to USFWS and RWQCB jurisdiction located on-site. The Project site also contains MSCHP riparian/riverine features; however, the Project would not impact any of these features located within the MSHCP Project Area. Thus, no impact would occur to USFWS/RWQCB jurisdictional features located on the entire Project Study Area nor MSCHP riparian/riverine features located within the MSCHP Project Area. However, as shown in Table 4.3-6, *Project Impacts to Waters of the State*, the Project would impact 0.42 acre of CDFW and RWQCB jurisdiction including 0.07 acre of Riversidean alluvial fan sage scrub. Impacts to 0.42 acre of CDFW/RWQCB jurisdictional features would be significant. (VCS, 2018, pp. 29-30)

Table 4.3-6 Project Impacts to Waters of the State

Feature	Permanent Impacts (acres)	Shading Impacts (acres)	Total Impacts (acres)
Waters of the State	0.40	0.02	0.42
Riversidean alluvial fan sage scrub	0.07	0.00	0.07

(VCS, 2018, Table 7)

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?***

The Project site lacks migratory wildlife corridors and wildlife nursery sites and does not occur within any MSHCP Cores or Linkages. Due to the infrastructure and development surrounding the Project site, the potential for wildlife movement is decreased. Thus, it is unlikely that the Project Study Area functions in regional wildlife movement or regional wildlife corridors. However, the Project Study Area occurs within an area that may serve a function in local wildlife movement such as dispersal and foraging. The Project would preserve and avoid the on-site portion of Stovepipe Creek and preserve the majority of the sage scrub habitats located on-site which serve as local wildlife corridors. Thus, due to relatively small size of area in which vegetation removal would occur as part of the proposed Project and the built nature of the area surrounding the Project site, long-term effects to wildlife movement would be less than significant. Furthermore, a large area of open space exists north of the Project site that would continue to serve as a corridor for resident and migratory wildlife species in the Project vicinity; thus, effects to wildlife movement due to Project implementation would be less than significant. (VCS, 2018, p. 29)

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

EIR Section 4.9, *Land Use & Planning*, provides an extensive analysis of the Project's consistency with all applicable local and regional policies, and concludes that the Project would not result in any significant conflicts with any policy, including policies related to the protection of biological resources.

As previously noted, the Project Applicant would be required to pay SKR fees pursuant to Lake Elsinore Municipal Code Chapter 19.04.

For the southern 27.1 acres of the Project site, the Project Applicant would be required to pay MSHCP fees pursuant to Lake Elsinore Municipal Code Chapter 16.85. As previously noted, pursuant to a March 2004 Settlement Agreement and MOU signed between Riverside County and the former landowner, the northern 45.4 acres of the Project site are fully exempt from the provisions and requirements of the MSHCP. As such, the Project Applicant would be exempt from the fee requirements of Lake Elsinore Municipal Code Chapter 16.85 for the northern 45.4 acres of the site because the Project's impacts in the northern portions of the site would not be covered under the MSHCP. In lieu of paying fees pursuant to Chapter 16.85, the Project Applicant would be required to implement compensatory mitigation and other measures for impacts to the northern 45.4 acres of the site (refer to subsection 4.3.7). Based on the foregoing, the Project would not conflict with the provisions of Lake Elsinore Municipal Code Chapter 16.85, and impacts would be less than significant.

In addition, the City has in place a palm tree preservation program (Chapter 5.116 of the Lake Elsinore Municipal Code). The purpose of the program is for the protection of the City's plant life heritage for the benefit of all citizens in Lake Elsinore. All residents who wish to remove a significant palm tree, as defined in Chapter 5.116, that exceeds five feet in height measured from the ground at the base of the trunk to the base of the crown must obtain a palm tree removal permit prior to removal of the tree. However, no palm trees subject to Chapter 5.116 occur on site; thus, the Project would not conflict with the provisions of Lake Elsinore Municipal Code Chapter 5.116.

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?***

The Project area is subject to two separate habitat conservation plans: the Stephens' Kangaroo Rat HCP and the Western Riverside County MSHCP. Each is discussed below.

A. Project Consistency with the SKR HCP

As previously noted, the SKR HCP was prepared under the direction of the RCHCA Board of Directors, in consultation with USFWS and CDFW. The City of Lake Elsinore is a member agency of the RCHCA. According to Figure S-1 of the SKR HCP, the Project site is not located within or adjacent to any SKR core reserve areas. Additionally, the Project Applicant would be required to contribute fees towards the establishment and long-term maintenance of the SKR HCP core reserve pursuant to Lake Elsinore Municipal

Code Chapter 19.04. The Project would not conflict with any provisions of the SKR HCP; thus, a less-than-significant impact would occur.

B. Project Consistency with the MSHCP

1. Project Compliance with MSHCP Cell Criteria

The Project site is located within the Elsinore Area Plan portion of the Western Riverside County MSHCP, which is a comprehensive habitat conservation/planning program for Western Riverside County. In 2004, the owners of the northern 45.4 acres of the Project site, along with other landowners, entered into a Settlement Agreement and Memorandum of Understanding ("Agreement") with the County of Riverside which, among other things, explicitly exempted the Project site from all provisions of the MSHCP. As a result of the Agreement, the MSHCP only applies to the southern 27.1 acres of the Project site. Provided below is an analysis of consistency for the MSHCP Cell Criteria MSHCP Project Area, the MSHCP-Covered Road Area, and the MSHCP-Excluded Project Area

MSHCP-Covered Road Area– MSHCP Cell Criteria Consistency

The majority of the MSHCP-Covered Road Area is located within Criteria Cells 4070 and 4067 which are located within Cell Group W. However, the off-site improvements proposed by the Project are related to the realignment of Nichols Road, which is a covered road in the MSHCP; therefore, the MSHCP-Covered Road Area is not subject to Reserve Assembly requirements. (VCS, 2018, p. 31)

MSHCP Project Area – MSHCP Cell Criteria Consistency

The southern 27.1 acres of the Project site are located within the Criteria Cell 4169 and a small portion of Criteria Cell 4166. The southern 27.1 acres of the Project site are not located within an MSHCP Criteria Cell Group. According to the MSCHP, Criteria Cell 4169 intends to conserve meadow and marsh habitat along Alberhill Creek and adjacent grassland habitat, with conservation focused on 10-20 percent of the Cell focusing on the southwest portion of the Cell. Criteria Cell 4166 intends to conserve meadow, marsh, riparian scrub, woodland, and forest habitat along Alberhill Creek and adjacent grassland habitat, with conservation focused on 15-25 percent of the Cell focusing on the northeastern portion of the Cell. The southern 27.1 acres of the Project site are not located within the areas targeted for conservation in Criteria Cells 4166 or 4169. These areas of focus are located west of the I-15. The southern 27.1 acres of the Project site are located on the east side of the I-15 and are not located within or near Alberhill Creek. The 27.1 acres of the Project site are not designated as part of the MSHCP Reserve System, although individual MSHCP policies would apply to the proposed Project, as discussed below. Therefore, Project impacts due to a conflict with the MSHCP Cell Criteria within the southern 27.1 acres of the Project site would be less than significant. (RCA, 2003)

MSHCP-Excluded Project Area – MSHCP Cell Criteria Consistency

Although exempt from the MSHCP, the northern 45.4 acres of the site are located within Cell Group W and include Criteria Cell 4070 and a small portion of Criteria Cell 4067. Criteria Cells 4070 and 4067 would otherwise intend to conserve riparian scrub, woodland, and forest habitat associated Alberhill Creek and adjacent coastal sage scrub and grassland habitat, with conservation focused on 80-90 percent of the Cells focusing on the northwestern portion of the Cells.

Impacts to habitat, sensitive species, and jurisdictional areas within the MSHCP-Excluded Project Area would be mitigated to below a level of significance through the implementation of the mitigation measures identified in subsection 4.3.7, which includes a requirement for the Project Applicant to provide compensatory mitigation for site-specific impacts to 0.23 acre of Riversidean sage scrub, 0.14 acre of disturbed Riversidean sage scrub, 0.07 acre of Riversidean alluvial fan sage scrub, and 0.14 acres of disturbed Riversidean sage scrub-encelia dominant. Additionally, the Project would require a Section 1600 Streambed Alteration Agreement from the CDFW, and would be required to comply with the RWQCB's Waste Discharge Requirements (WDR). Thus, the Project would provide direct mitigation for impacts to biological resources on-site and would not rely on the take coverage granted by the MSHCP. As such, payment of MSHCP fees is not required and would not serve to mitigate any of the Project's direct, indirect, or cumulatively-considerable impacts to biological resources.

However, the MSHCP-Excluded Project Area is located within Cell Group W and encompasses portions of Criteria Cell 4070 and a small portion of Criteria Cell 4067. Pursuant to the MSHCP, conservation within Cell Group W is intended to encompass 80%-90% of the Cell Group focusing in the northwestern portion of the Cell Group. The MSHCP-Excluded Project Area occurs in the eastern portion of Group W. Notwithstanding the fact that the mitigation identified in EIR Subsection 4.3.7 would reduce the Project's impacts to biological resources to below a level of significance, the Project would nonetheless not comply with the MSHCP objectives for Cell Group W because strict compliance with the MSHCP would require the conservation of most or all of the MSHCP-Excluded Project Area, which inherently conflicts with the Project's primary objective to develop the site with residential, commercial, and recreational land uses. Moreover, mining and reclamation activities within the MSHCP-Excluded Project Area have fully disturbed most of the areas proposed for disturbance by the Project and that are intended for conservation under the MSHCP. Thus, even if the MSHCP-Excluded Project Area were to be conserved, the site still would not meet the objectives for Cell Group W and any preserved habitat would be disconnected from the portions of Cell Group W located west or north of the Project site due to the presence of I-15 and Nichols Road. The option of conserving the entire MSHCP-Excluded Project Area is considered as part of the No Project Alternative in EIR Subsection 6.3.1. Accordingly, the Project's direct impact due to a non-compliance with the MSHCP conservation requirements for the site represent significant impacts of the proposed Project that cannot be mitigated to below a level of significance. However, because the vast majority of properties within the MSHCP area and that are subject to Chapter 16.85 of the Lake Elsinore Municipal Code (or other the implementing ordinance of other local jurisdictions) would be required to comply with the provisions of the MSHCP and all MSHCP-related requirements, the Project's non-compliance with the MSHCP would be less-than-cumulatively considerable.

2. Project Consistency with MSHCP Requirements

In addition to the Cell Criteria as discussed above, all projects must demonstrate compliance with applicable MSHCP requirements pursuant to the following sections of the MSHCP: Section 6.1.2, "Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools;" Section 6.1.3, "Protecting Narrow Endemic Plant Species," Section 6.1.4, "Guidelines Pertaining to the Urban/Wildland Interface;" and Section 6.3.2, "Additional Survey Needs and Procedures." Additionally, because the Project includes roadway improvements within MSCHP Criteria Cells, the following section of MSHCP applies to the Project: Section 7.3.5 "Planned

Roads Within the Criteria Area." Provided below is a discussion of the Project's conformance to these sections of the MSHCP. (VCS, 2018, p. 31)

Project Compliance with MSHCP Section 6.1.2

As described in EIR Subsection 4.3.1, VCS determined that the Project Study Area contains 2.26 acres of MSHCP riverine areas. The Project would avoid all of the on-site riverine resources and none of the riverine species identified in Section 6.1.2 of the MSHCP were observed within the MSHCP Project Area. Therefore, preparation of a Determination of Biological Equivalence or Superior Preservation (DBESP) pursuant to Section 6.1.2 of the MSHCP would not be required. Additionally, riverine areas do not contain riparian/riverine habitat with the potential to support riparian species, including the least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, riverside fairy shrimp, Santa Rosa Plateau fairy shrimp, vernal pool fairy shrimp, and smooth tarplant. There is low potential or no potential for suitable habitat to occur for these species within the Project Study Area, including the MSHCP Project Area. Thus, the Project would comply with MSHCP Section 6.1.2. (VCS, 2018, pp. 33-36)

Project Compliance with MSHCP Section 6.1.3

The MSHCP Project Area and the MSHCP-Covered Road Area are not located within the Narrow Endemic Plant Survey Area; therefore, narrow endemic plant surveys were not required for these portions of the Study Area. The Project would not conflict with MSHCP Section 6.1.3. (VCS, 2018, p. 32)

Project Compliance with MSHCP Section 6.1.4

The Western Riverside County MSHCP Urban/Wildland Interface Guidelines (Section 6.1.4) are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. The MSHCP Project Area is located approximately 1300 feet away from proposed Linkage 2 (Alberhill Creek), and while the sites are separated by the I-15, Stovepipe Creek on the Project site drains into Alberhill Creek (downstream). Thus, the Project could result in indirect effects to areas targeted for conservation. The Project would comply with the guidelines to minimize indirect impacts to Proposed Linkage 2 as outlined below (VCS, 2018, p. 36):

- Drainage: Development within the MSHCP Project Area and the MSHCP-Covered Road Area would be subject to the standard best management practices (BMPs) outlined in Volume I, Appendix C of the MSHCP to address any potential drainage effects. There is a potential that drainage associated with the MSHCP-Excluded Project Area could result in indirect impacts to downstream areas, as these areas are not subject to the MSHCP-identified BMPs. However, all development areas on and off site would be subject to the City's NPDES permit, which would require preparation of a post-construction management program, such as a WQMP, to identify BMPs to ensure ongoing protection of drainages by requiring structural and programmatic controls. A Project-specific Stormwater Quality Management Plan (WQMP) (including as *Technical Appendix I2* to this EIR). The proposed BMPs include an extended detention basin, two sand filter basins and implementation of standard LID practices. Mandatory compliance with the provisions of the NPDES permit would ensure that indirect drainage impacts to MSHCP Conservation Areas would be reduced to less-than-significant levels. (VCS, 2018, p. 36)

- Toxics: Pre-construction BMPs listed in Appendix C of the MSHCP would be required for development within the MSHCP Project Area and MSHCP-Covered Road Area, where appropriate, to ensure that no discharge of toxics during construction would occur on-site. Furthermore, development of the entire Project site would be subject to a Stormwater Pollution Prevention Plan (SWPPP) that would include BMPs to implement during the construction process. A Project-specific Stormwater Quality Management Plan (WQMP) (including as *Technical Appendix I2* to this EIR) has been prepared to establish the post-construction BMPs that would be implemented with the development to mitigate impacts to post-construction runoff due to the Project. The proposed BMPs include an extended detention basin, two sand filter basins and implementation of standard LID practices. A final WQMP would be prepared and approved prior to construction. Therefore, discharge of products that are potentially toxic to or might adversely affect wildlife species would not occur. (VCS, 2018, pp. 36-37)
- Lighting: The Project site is not located adjacent to any MSHCP Conservation Areas; therefore, no lighting effects to Conservation Areas would occur. Additionally, lighting would be directed away from the preserved on-site drainage and associated habitat in accordance with the City's lighting regulations (refer to EIR Subsection 4.1) and the lighting requirements of the Nichols Ranch Specific Plan (NRSP). (VCS, 2018, p. 37)
- Noise: The Project site is not located adjacent to MSHCP Conservation Areas; therefore, no indirect noise effects to Conservation Areas would occur. Additionally, noise generated from the planned residential uses located adjacent to the preserved on-site drainage would not be anticipated to exceed the noise levels of the active mining uses that historically occurred on the northern portions of the site. Thus, significant indirect impacts to wildlife within the preserved onsite drainage/habitat would be less than significant. (VCS, 2018, p. 37)
- Invasive Species: Although the Project site is not adjacent to an MSHCP Conservation Area, the on-site drainage does drain downstream into Alberhill Creek where MSHCP conservation is targeted. Landscaping within 100 feet of the on-site preserved drainage and associated habitat is required by the Nichols Ranch Specific Plan (NRSP) to avoid the use of species included within Table 6-2 of the MSHCP, as identified in NRSP Table IV-2, *Prohibited Plant List.* Impacts would be less than significant. (VCS, 2018, p. 37)
- Barriers: As noted above, the Project site and off-site improvement areas are not located within 1,000 feet of an MSHCP Conservation Area; therefore, barriers would not need to be incorporated into the Project's design. (VCS, 2018, p. 37)
- Grading/Land Development: As noted above, the MSHCP Project Area and MSHCP-Covered Road Area are not located within 1,000 feet of an MSHCP Conservation Area; therefore, graded/manufactured slopes associated with the proposed Project would not extend into the MSHCP Conservation Area. (VCS, 2018, p. 37)

As noted above, the Project is not located adjacent to a MSHCP Conservation Area therefore, the Project is not subject to the Urban/Wildland Interface Guidelines. Furthermore, as demonstrated above, the Project would comply with MSHCP guidelines, regulatory requirements, and the provisions of the NRSP to reduce

indirect impacts to Proposed Linkage 2 and impacts would be less than significant. The Project would not conflict with Section 6.1.4 of the MSHCP and impacts would be less than significant. (VCS, 2018, pp. 34-37)

Project Compliance with MSHCP Section 6.3.2

A portion of the MSHCP Project Area and the majority of the MSHCP-Covered Road Area are located within the BUOW Survey Area, as shown previously on Figure 4.3-5. The MSHCP Project Area does have suitable habitat for BUOW; however, no BUOWs or sign of BUOWs were observed within the MSHCP Project Area, MSHCP-Covered Road Area, or the 500-foot surrounding buffer (which includes a majority of the MSHCP-Excluded Project Area) during focused surveys conducted by VCS in May through July, 2018. However, due to the fact that the Project site contains suitable habitat for burrows, the proposed development of the site would result in a potentially significant impact to the BUOW and suitable habitat for the species if the site were to be occupied before Project construction activities. Mitigation of the Project's impacts to BUOW and suitable habitat for BUOW would be required in order to ensure consistency with MSHCP Section 6.3.2. (VCS, 2018, pp. 32-33)

Project Compliance with MSCHP Section 7.3.5

The MSHCP-Covered Road Area for the Project includes the widening and realignment of Nichols Road. Nichols Road occurs within MSHCP Criteria Cells and is considered a covered (planned) road by the MSHCP. Nichols Road is identified by the City of Lake Elsinore General Plan and the Riverside County General Plan as an Urban Arterial roadway. Nichols Road is not identified in MSHCP Section 7.3.5 as a road with special environmental issues due to its location, which would otherwise require specific considerations for design and alignment (refer to Table 7-4 of the MSHCP). (VCS, 2018, pp. 37-38)

The realignment and widening of Nichols Road would occur within the Nichols Road right-of-way and along the currently existing, paved Nichols Road, within predominantly developed and disturbed habitats. While there is one sensitive plant species located within the MSHCP-Covered Road Area (Robinson's peppergrass), impacts to this species is not considered significant due to the plant's relatively low CRPR Ranking. Additionally, there is generally low potential for any other special status wildlife and/or plants (including Covered species) to occur in the MSHCP-Covered Road Area. The MSHCP-Covered Road Area does not occur within the Narrow Endemic Plant Survey Area and there is low potential for those plant species to occur within the MSHCP-Covered Road Area. Conservation land would not be located adjacent to the roadway and wildlife movement is not expected to be impacted by the road realignment and widening. Vegetation clearing would be avoided during the breeding and roosting seasons as required by Mitigation Measures listed below in Subsection 4.3.7 and if avoidance is not possible then pre-construction surveys for nesting birds, roosting bats, and/or BUOWs would be required to ensure no impacts to those resources. Construction of the road widening and alignment would follow the standard MSHCP BMPs described in Appendix C of the MSHCP (included in Appendix H of *Technical Appendix C*). Thus, the Project would comply with MSHCP Section 7.3.5 and impacts would be less than significant. (VCS, 2018, pp. 37-38)

C. *Conclusion*

Impacts due to a conflict with the SKR HCP would be less than significant with mandatory compliance with City Regulations and Design Requirements incorporated, which require the payment of applicable fees (refer to Subsection 4.3.7 of the EIR).

As indicated above, the southern 27.1 acres of the Project site would be fully consistent with the MSHCP and proposed Project activities within the MSHCP areas (MSHCP Project Area and MSHCP-Covered Road Area) would be considered consistent with the MCHSP. Impacts due to a conflict with the MSHCP would be less than significant on the southern 27.1 acres of the Project site with mandatory compliance with City Regulations and Design Requirements incorporated, requiring payment of applicable fees (refer to Subsection 4.3.7 of the EIR).

Proposed development within the northern 45.4 acres of the Project site would conflict with the MSHCP conservation criteria for Cells 4070 and 4067, which includes a target conservation of 80%-90% of the Cell Group focusing in the northwestern portion of the Cell Group. Notwithstanding the fact that the mitigation identified in EIR Subsection 4.3.7 would reduce the Project's impacts to below a level of significance, the Project would nonetheless not comply with the MSHCP objectives for Cell Group W because strict compliance with the MSHCP would require the conservation of the northern 45.4 acres of the Project site, which inherently conflicts with the Project's primary objective to provide residential and commercial uses on-site. Moreover, historic mining operations at the site have fully disturbed the northern 45.4 acres that are intended for conservation under the MSHCP. Thus, even if the northern 45.4 acres of the Project site were to be conserved, the site still would not meet the objectives for Cell Group W and any preserved habitat would be disconnected from the portions of Cell Group W located west of the Project site. Accordingly, the Project's direct impact due to a non-compliance with the MSHCP conservation requirements for the 45.4 acres of the Project site represent a significant impact of the proposed Project. However, because the vast majority of properties within the MSHCP area are subject to Chapter 16.85 of the Municipal Code (or other the implementing ordinance of other local jurisdictions) and would be required to comply with the provisions of the MSHCP and all MSHCP-related requirements, the Project's non-compliance with the MSHCP would be less-than-cumulatively considerable.

4.3.5 Cumulative Impact Analysis

Although only a portion of the Project site is subject to the MSHCP, the cumulative impact analysis considers development of the Project in conjunction with other development projects located within the purview of the Western Riverside County MSHCP. This Study Area for cumulatively-considerable impacts to biological resources is appropriate because the MSHCP encompasses a large area surrounding the Project site, and provides for the long-term protection of sensitive plant, animal, and plant communities throughout the MSHCP area. Additionally, most cumulative development projects within the Project vicinity would be subject to the provisions of the MSHCP, and the general range of habitats, species, climate, etc. are fairly consistent throughout the MSHCP.

As discussed under Threshold a, the Project contains Robinson's pepper grass within the MSHCP-Covered Road Area; however, impacts were evaluated as less than significant because of this species' low CRPR ranking. Thus, Project impacts to special status plants would be less-than-cumulatively considerable.

The Project site also contains coastal whiptail and coast horned lizard in the MSHCP-Excluded Survey Area; however, a majority of the habitat suitable for both species would be preserved on-site and both species are covered by the MSHCP. As such, potential impacts to the species would be limited. Furthermore, both species were observed in the MSHCP-Excluded Survey Area, which is the portion of the Project site is not subject to the MSHCP; however, this area does fall within the MSHCP boundaries. The coastal whiptail and coast horned lizard are both covered species under the MSHCP; therefore, conservation of this species would be addressed on a regional level around the Project site and potential impacts due to Project implementation would be less-than-cumulatively considerable.

In addition, although the CAGN was not observed on the Project site during 2017 focused surveys within the MSHCP-Excluded Project Area, CAGN was incidentally observed within the Project site during focused burrowing owl surveys in 2018. Because the 2017 surveys determined the MSHCP-Excluded Survey Area to be unoccupied and the incidental observations in 2018 in and adjacent to an area undergoing active mine reclamation support the condition of CAGN potentially dispersing through the MSHCP-Excluded Project Area to the MSHCP Project Area, no "take" is anticipated to occur. Therefore, no impacts to this species are expected within the MSHCP-Excluded Project Area. Additionally, Project compliance with the MSHCP within the MSHCP Project Area would address long-term conservation of the species on a regional scale. Impacts to the CAGN would be less-than-cumulatively considerable.

The Project would also have the potential to impact several special status animal species with potential to occur on-site; however, the animal species would be covered under the MSCHP and addressed through payment of fees. The Project would have the potential to directly or indirectly impact the California glossy snake and coast patch-nosed snake which have moderate potential to occur on-site. Both species have moderate potential to occur on the Project site but are not covered by the MSHCP. Impacts would be minimized through preservation of the majority of the suitable on-site habitat (i.e. Stovepipe Creek and associated habitat). However, the Project would impact suitable habitat for these species within the MSHCP-Excluded Project Area. This is evaluated as a cumulatively-considerable impact of the proposed Project.

The Project has the potential to impact the burrowing owl (BUOW) if the site were to become occupied prior to commencement of construction activities. Other developments in the region also have the potential to impact the BUOW. Thus, the Project's potential construction-related impacts to the BUOW would be cumulatively considerable.

Potential impacts to other special status animals also would be less-than-cumulatively considerable due to the limited potential habitat to be impacted by the Project and their covered status under the MSHCP. Additionally, the Project site does not contain suitable nesting habitat for special-status birds; accordingly, impacts to special-status birds would be less-than-cumulatively considerable. The Project does, however, have the potential to result in impacts to nesting birds, roosting bats, and/or raptors during the breeding or maternity

roosting season; this is evaluated as a cumulatively-considerable impact for which mitigation would be required.

As discussed under Threshold b, the Project would impact 2.58 acres of native vegetation types, including 0.38 acre of Riversidean sage scrub, 0.40 acre of disturbed Riversidean sage scrub, 0.07 acre of Riversidean alluvial fan sage scrub, and 1.73 acres of disturbed Riversidean sage scrub-encelia dominant. Impacts to native vegetation types within the MSHCP Project Area would be less than significant due to compliance with the MSHCP in this portion of the Project site. However, for the MSHCP-Excluded Project Area, Project impacts to 0.23 acre of Riversidean sage scrub, 0.14 acre of disturbed Riversidean sage scrub, 0.07 acre of Riversidean alluvial fan sage scrub, and 0.14 acres of disturbed Riversidean sage scrub-encelia dominant would not be addressed by the MSHCP because the MSHCP does not apply to this portion of the Project site. However, because the vast majority of cumulative developments would be subject to the MSHCP, Project impacts to jurisdictional drainages would be less-than-cumulatively considerable.

Construction and operational activities within the Project Study Area could result in indirect impacts to the vegetation communities surrounding the directly impacted areas. With development, "edges" of vegetation communities may be exposed and more susceptible to invasion by invasive species (introduced by planted landscaping, seed dispersal from cars, people, and/or pets, and/or wind). Construction-related erosion, runoff, sedimentation, soil compaction, and alteration of drainage patterns that may affect plants by altering Project site conditions so that the location in which they are growing becomes unfavorable are prohibited by federal and state laws. Compliance with the requirements under applicable state and federal laws would reduce indirect impacts to sensitive vegetation communities. Nonetheless, because other developments within the region could also result in indirect impacts to drainages, the Project's potential to result in indirect impacts represents a cumulatively-considerable impact for which mitigation would be required.

As discussed under Threshold c, the results of the jurisdictional delineation concluded that the Project would impact 0.44 acre of CDFW and RWQCB jurisdiction including 0.07 acre of Riversidean alluvial fan sage scrub. The Project would not impact any of the area subject to USFWS and RWQCB jurisdiction located on-site. The Project site also contains MSCHP riparian/riverine features; however, the Project would not impact any of these features located within the MSHCP Project Area. Thus, no impact would occur to USFWS/RWQCB jurisdictional features located on the entire Project Study Area nor MSCHP riparian/riverine features located within the MSCHP Project Area. Because other developments within the region also are likely to impact drainages subject to CDFW or RWQCB jurisdiction, Project impacts to 0.44 acre of CDFW/RWQCB jurisdictional features would be cumulatively-considerable.

As discussed under Threshold d, the Project site lacks migratory wildlife corridors and wildlife nursery sites and does not occur within MSHCP Cores or Linkages. However, the Project site could serve a function in local wildlife movement such as dispersal and foraging. The Project would preserve and avoid the on-site portion of Stovepipe Creek and preserve the majority of the sage scrub habitats located on-site which serve as local wildlife corridors. Thus, due to relatively small size of area in which vegetation removal would occur as part of the proposed Project and the built nature of the area surrounding the Project site, long-term effects to wildlife movement would be less than significant. Furthermore, a large area of open space exists north of the Project site that would continue to serve as a corridor for resident and migratory wildlife species in the Project

vicinity; thus, effects to wildlife movement or established resident or migratory wildlife corridors due to Project implementation would be less-than-cumulatively considerable

As discussed under Threshold e, the northern 45.4 acres of the Project would not comply with City of Lake Elsinore Municipal Code Chapter 16.85 which requires payment of MSHCP fees. The northern 45.4 acres of the Project are not subject to compliance with the MSHCP (and thus not subject to compliance with Municipal Code Chapter 16.85) because the MSHCP would not provide coverage for impacts within the MSHCP-Excluded Project Area; thus, impacts would be less than significant. Because the vast majority of properties within the MSHCP area are subject to the provisions of the MSHCP and would be required to comply with all MSHCP-related requirements including payment of MSHCP fees, the Project's partial exemption from Municipal Code Chapter 16.85 would be less-than-cumulatively considerable.

As discussed above under Threshold f, the Project site is located within the Western Riverside County MSHCP and SKR HCP. The Project and cumulative developments would be subject to compliance with the SKR HCP, including the payment of fees, pursuant to locally-implementing ordinances; as such, a conflict with the SKR HCP would not occur and impacts would be less-than-cumulatively considerable. However, as previously noted, the MSHCP only applies to the southern 27.1 acres of the Project site. Impacts due to a conflict with the MSHCP would be less than significant for the southern 27.1. However, because the Project would not comply with the MSHCP conservation requirements for the northern 45.4 acres of the site, the Project would result in a direct impact due to a conflict with the MSHCP. Although the Project would result in a significant direct impact due to a non-compliance with the MSHCP for the northern 45.4 acres of the Project site, the vast majority of properties within the 1.26 million-acre MSHCP area are subject to the provisions of the MSHCP and would be required to comply with all MSHCP-related requirements. The Project's 45.4 acres that would not comply with the MSHCP represents 0.00004% of the overall 1.26 million-acre MSHCP area. Thus, the Project's non-compliance with the MSHCP would be less-than-cumulatively considerable. As such, the Project would not result in a cumulatively-considerable impact due to a conflict with applicable habitat conservation plans or natural community conservation plans. Impacts would be less than cumulatively-considerable.

4.3.6 Significance of Impacts Before Mitigation

Threshold a: Significant Direct and Cumulatively-Considerable Impact. The Project would result in significant direct and cumulatively-considerable impacts to biological resources. Specifically, the Project would result in impacts to burrowing owl habitat during the breeding season, which requires mitigation to ensure impacts do not occur to nesting burrowing owls. Additionally, the Project also has the potential to impact active native bird nests protected by the MBTA and active bat roosts if vegetation is removed during the nesting season (February 1 to August 31 for birds and April 1 to August 31 for bats.) Furthermore, the Project would result in direct impacts to habitat for the California glossy snake and coast patch-nosed snake within the MSHCP-Excluded Project Area, which represents a direct impact of the proposed Project. In addition, the Project has the potential to impact nesting BUOWs if they occupy the site prior to the commencement of construction activities.

Threshold b: Significant Direct Impact. The Project would permanently impact 2.58 acres of native vegetation types, including 0.38 acre of Riversidean sage scrub, 0.40 acre of disturbed Riversidean sage scrub, 0.07 acre of Riversidean alluvial fan sage scrub, and 1.73 acres of disturbed Riversidean sage scrub-encelia dominant.

Impacts to native vegetation types within the MSHCP Project Area would be less than significant due to compliance with the MSHCP in this portion of the Project site. However, for the MSHCP-Excluded Project Area, Project impacts to 0.23 acre of Riversidean sage scrub, 0.14 acre of disturbed Riversidean sage scrub, 0.07 acre of Riversidean alluvial fan sage scrub, and 0.14 acres of disturbed Riversidean sage scrub-encelia dominant, would represent a significant impact for which mitigation would be required.

Threshold c: Significant Direct and Cumulatively-Considerable Impact. Project implementation would result in direct impacts to 0.44 acre of CDFW and RWQCB jurisdiction including 0.07 acre of Riversidean alluvial fan sage scrub. Accordingly, the Project would have a substantial adverse effect on federally-protected waters as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means, and impacts are evaluated as significant on both a direct and cumulatively-considerable basis.

Threshold d: Less-than-Significant Impact. The Project site lacks migratory wildlife corridors and wildlife nursery sites and does not occur within MSHCP Cores or Linkages. However, the Project Study Area occurs within an area that may serve a function in local wildlife movement such as dispersal and foraging. The Project would preserve and avoid the on-site portion of Stovepipe Creek and preserve the majority of the sage scrub habitats located on-site which serve as local wildlife corridors. Therefore, the Project would have a less-than-significant impact on native resident or migratory wildlife corridors or wildlife nursery sites.

Threshold e: Less-than-Significant Impact. The Project Applicant would be required to pay SKR fees pursuant to Lake Elsinore Municipal Code Chapter 19.04. For the southern 27.1 acres of the Project site, the Project Applicant would be required to pay MSHCP fees pursuant to Lake Elsinore Municipal Code Chapter 16.85. The Project Applicant would be exempt from the fee requirements of Lake Elsinore Municipal Code Chapter 16.85 for the northern 45.4 acres of the site because the Project's impacts in the northern portions of the site would not be covered under the MSHCP. In addition, the Project would not conflict with the City's palm tree preservation program (Chapter 5.116 of the Lake Elsinore Municipal Code).

Threshold f: Significant Direct and Cumulatively Considerable Impact. The Western Riverside County MSHCP and SKR HCP are the only habitat conservation plans or natural community conservation plans applicable to the Project site. The analysis concluded that impacts due to a conflict with the SKR HCP would be less than significant, and impacts due to a conflict with the MSHCP on the southern 27.1 acres of the Project site would be less than significant with mandatory compliance with Municipal Code Chapter 16.85 and applicable MSHCP requirements. The northern 45.4 acres are exempt from the Western Riverside County MSHCP; nonetheless, because the Project would not implement the MSHCP conservation goals for MSHCP Cell Group W, the Project's non-compliance with the MSHCP on the northern 45.4 acres of the site represents a significant direct impact. The southern 27.1 acres of the Project site located within the MSHCP contains suitable habitat for burrowing owls. Impacts to nesting owls would represent a significant impact due to a conflict with MSHCP policies related to the burrowing owl, and mitigation is required. Impacts due to a conflict with the MSHCP's adjacency guidelines would be less than significant.

4.3.7 CITY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable City Regulations and Design Requirements

The following are application regulations and design requirements within the City of Lake Elsinore. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable City regulations and design requirements.

- The Project Applicant shall make payment of Western Riverside County MSHCP fees pursuant to City of Lake Elsinore Municipal Code Chapter 16.85 for the southern 27.1 acres. Fees shall be paid in compliance with Municipal Code Chapter 16.85.
- The Project Applicant shall make payment of SKR HCP fees pursuant to City of Lake Elsinore Municipal Code Chapter 19.04. Fees shall be paid in compliance with Municipal Code Chapter 19.04.
- To ensure compliance with the Western Riverside County MSHCP, the following shall be required:
    - As part of its review of implementing discretionary applications (e.g., building permits), the City of Lake Elsinore shall assure that landscaping plans do not include the use of invasive plant species listed in Volume I, Table 6-2 of the MSHCP or in Table IV-2, *Prohibited Plant List*, of the Nichols Ranch Specific Plan.
    - Prior to approval of grading permits, the Project's construction contractor shall develop and implement a Storm Water Pollution Prevention Program (SWPPP) to address runoff and potential water quality degradation during construction.
    - All construction plans (i.e., grading permits, building permits, etc.) shall include the following note, compliance with which shall be assured by the construction contractor:

      "During any nighttime construction activities, all lighting shall direct lighting away from the preserved on-site drainage and associated habitat."

Mitigation

MM 4.3-1 Prior to the issuance of grading permits, the City of Lake Elsinore shall ensure that the following note is included on the Project's grading plans. Project contractors shall be required to ensure compliance with this note and permit periodic inspection of the construction site by City of Lake Elsinore staff or its designee to confirm compliance. This note also shall be specified in bid documents issued to prospective construction contractors.

"Vegetation clearing shall be conducted outside of the bird nesting season (February 1 to August 31) to the extent feasible. If avoidance of the nesting season is not feasible, a nesting bird survey shall be conducted by a qualified biologist within no more than 72 hours of such scheduled disturbance, to determine the presence of nests or nesting birds. If active nests are identified, the biologist shall establish appropriate buffers around the vegetation (typically 500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers shall be halted until the nesting effort is finished (i.e. the juveniles are surviving independent from the nest).

The biologist shall review and verify compliance with these nesting boundaries and shall verify the nesting effort has finished. Work may resume within the buffer area when no other active nests are found. Alternatively, a qualified biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the City of Lake Elsinore for mitigation monitoring compliance record keeping. If vegetation removal is not completed within 72 hours of a negative survey during nesting season, the nesting survey must be repeated to confirm the absence of nesting birds."

MM 4.3-2 In accordance with MSHCP Objective 6, prior to issuance of grading permits or other permits authorizing ground disturbance, the Project Applicant shall retain a qualified biologist to perform a pre-construction burrowing owl survey. The pre-construction burrowing owl survey shall occur within the Burrowing Owl Survey Area where suitable habitat is present within 30 days prior to Project commencement of any ground-disturbing activities at the Project site. If active burrowing owl burrows are detected during the breeding season, all work within an appropriate buffer (typically a minimum 300 feet) of any active burrow shall be halted until that nesting effort is finished. The on-site biologist shall review and verify compliance with these boundaries and shall verify the nesting effort has finished. Work can resume in the buffer when no other active burrowing owl burrows nests are found within the buffer area. If active burrowing owl burrows are detected outside the breeding season or during the breeding season and its determined nesting activities have not begun, then passive and/or active relocation may be approved following consultation with CDFW. The installation of one-way doors may be installed as part of a passive relocation program. Burrowing owl burrows shall be excavated with hand tools by a qualified biologist when determined to be unoccupied, and back filled to ensure that animals do not re-enter the holes/dens. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to CDFW. A copy of the results of the pre-construction survey (and all additional surveys), as well as copies of the Burrowing Owl Management Plan, if required, shall be provided to the City of Lake Elsinore Planning Division for review and approval (in the case of the Burrowing Owl Management Plan) prior to any vegetation clearing and ground disturbance activities.

MM 4.3-3 Prior to issuance of grading permits or other permits authorizing ground disturbance that would commence during the breeding season of bat species potentially utilizing the site (April 1 through August 31), the Project Applicant shall retain a qualified biologist to conduct a pre-construction survey to determine if active bat roosts are present on the Project site. The survey shall be conducted no earlier than 72 hours prior to commencement of vegetation removal that would occur during the bat breeding season. If work begins outside of breeding season, no roosting bats are found, or if bats have not established an active maternity roost, no further mitigation is required. If an established maternity roost is found, either (1) postpone or halt construction within 200 feet of the roost until the roost is vacated and juveniles have fledged, or (2) require that a qualified biologist develop alternative measures, such as biological

monitoring during active construction within the 200-foot buffer to ensure established maternity roosts are not impacted. In the event ground-disturbing activities do not commence within 72 hours of the most recent survey, an additional survey shall be conducted within 72 hours of ground-disturbing activities. A copy of the results of the pre-construction survey(s) (and all additional surveys), shall be provided to the City of Lake Elsinore Planning Division for review prior to any vegetation clearing and ground disturbance activities.

MM 4.3-4 Prior to the issuance of grading permits, the Project Applicant shall provide evidence to the City of Lake Elsinore Planning Division that impacts to 0.23 acre of Riversidean Sage Scrub and 0.07 acre of Riversidean Alluvial Fan Sage Scrub have been compensated for at a minimum 2:1 ratio (impact:mitigation) through off-site mitigation at an agency-approved mitigation bank, with an in-lieu fee program, on-site mitigation, or at an off-site permittee sponsored location. It should be noted that the 0.14-acre compensatory mitigation required by this mitigation measure for impacts to Riversidean Alluvial Fan Sage Scrub is included in, and is not in addition to, the mitigation requirements specified by Mitigation Measure MM 4.3-6.

MM 4.3-5 Prior to the issuance of grading permits, the Project Applicant shall provide evidence to the City of Lake Elsinore Planning Division that impacts to 0.28 acres of disturbed Riversidean sage scrub (including Disturbed Riversidean Sage Scrub – Encelia dominant) have been compensated for at a minimum 1:1 ratio (impact:mitigation) through off-site mitigation at an agency-approved mitigation bank, with an in-lieu fee program, on-site mitigation, or at an off-site permittee sponsored location.

MM 4.3-6 Prior to the issuance of grading permits, the Project Applicant shall provide evidence to the City of Lake Elsinore Planning Division that impacts to 0.42 acre of streambed waters of the State have been compensated for at a minimum 2:1 ratio through off-site mitigation at an agency-approved mitigation bank, with an in-lieu fee program, on-site mitigation, or at an off-site permittee sponsored location. It should be noted that the 0.14-acre of Riversidean Alluvial Fan Sage Scrub mitigation required by Mitigation Measure MM 4.3-4 is included within (and not in addition to) the 0.84-acre of compensatory mitigation for streambed waters required by this mitigation measure.

MM 4.3-7 Prior to the issuance of a grading permit, the proposed Project shall obtain the necessary authorizations from the regulatory agencies for proposed impacts to jurisdictional waters subject to Regional Water Quality Control Board and the California Department of Fish and Wildlife. Authorizations anticipated for this Project include, but are not necessarily limited to, Waste Discharge Requirements from the RWQCB and a Section 1600 Streambed Alteration Agreement from the CDFW.

4.3.8 Significance of Impacts After Mitigation

Threshold a: Less-than-Significant Impact with Mitigation Incorporated. Implementation of City Regulations and Design Requirements would ensure payment of fees pursuant to Chapter 16.85 of the Lake Elsinore Municipal Code for the southern 27.1 acres of the Project site, which would mitigate the Project's impacts to

habitats within this portion of the Project site. Mitigation Measure MM 4.3-1 would preclude potential impacts to nesting birds protected by the MBTA. Implementation of Mitigation Measure MM 4.3-2 would ensure that pre-construction surveys are conducted to determine the presence of burrowing owl within the on- or off-site improvement areas, and to implement appropriate avoidance/relocation measures to preclude significant impacts to this species; with implementation of the required mitigation, Project impacts with respect to burrowing owl would be reduced to less-than-significant levels. Implementation of Mitigation Measure MM 4.3-3 would preclude potential impacts to breeding bats. Implementation of Mitigation Measures MM 4.3-4 and MM 4.3-5 would provide compensatory mitigation for impacts to potential habitat for the California glossy snake and coast patch-nosed snake within the MSHCP-Excluded Project Area, and would reduce Project impacts to less-than-significant levels. With implementation of the required mitigation, Project impacts to species identified as a candidate, sensitive, or special status species are mitigated to less-than-significant levels.

Threshold b: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.3-4 would ensure that impacts to 0.23 acre of Riversidean Sage Scrub and 0.07 acre of Riversidean Alluvial Fan Sage Scrub have been compensated for at a minimum 2:1 ratio through off-site mitigation at an agency-approved mitigation bank, with an in-lieu fee program, on-site mitigation, or at an off-site permittee sponsored location, and would reduce Project impacts to less-than-significant levels. Implementation of Mitigation Measure MM 4.3-5 requires mitigation for impacts to 0.28 acres of disturbed Riversidean sage scrub (including Disturbed Riversidean Sage Scrub – Encelia dominant) to be mitigated at a 1:1 ratio through off-site mitigation at an agency-approved mitigation bank, with an in-lieu fee program, on-site mitigation, or at an off-site permittee sponsored location, and would reduce Project impacts to less-than-significant levels. Implementation of Mitigation Measure MM 4.3-6 would ensure that impacts to 0.42 acre of streambed waters of the State are compensated for at a minimum 2:1 ratio through off-site mitigation at an agency-approved mitigation bank, with an in-lieu fee program, on-site mitigation, or at an off-site permittee sponsored location, and would reduce Project impacts to less-than-significant levels. Mitigation Measure MM 4.3-7 also would ensure that the Project Applicant obtains the required state permits, as appropriate. With implementation of the required mitigation, impacts to riparian habitat and other sensitive natural communities would be reduced to less-than-significant levels.

Threshold c: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measures MM 4.3-4 and MM 4.3-6 require mitigation of 0.44 acre of Streambed Waters of the State at a 2:1 ratio (including 0.14 acre of Riversidean Alluvial Fan Sage Scrub) through off-site mitigation at an agency-approved mitigation bank, with an in-lieu fee program, on-site mitigation, or at an off-site permittee sponsored location. Implementation of the required mitigation would reduce to less-than-significant levels the Project's impacts to federally-protected wetlands as defined by Section 404 of the Clean Water Act.

Threshold f: Significant and Unavoidable Direct Impact. As previously indicated, in 2004 the owners of the northern 45.4 acres of the Project site, along with other landowners, entered into a Settlement Agreement and Memorandum of Understanding ("Agreement") with the County of Riverside which, among other things, explicitly exempted the northern 45.4 acres of the Project site from all provisions of the MSHCP. Notwithstanding, the northern 45.4 acres of the site are located within MSHCP Cell Group W and encompass portions of Criteria Cell 4070 and a small portion of Criteria Cell 4067. Pursuant to the MSHCP, conservation within Cell Group W is intended to encompass 80%-90% of the Cell Group focusing in the northwestern

portion of the Cell Group. The 45.4-acre MSHCP-Excluded Project Area occurs in the eastern portion of Group W. Although the mitigation identified in EIR Subsection 4.3.7 would reduce the Project's impacts to biological resources to below a level of significance, the Project would nonetheless not comply with the MSHCP objectives for Cell Group W because strict compliance with the MSHCP Conservation Criteria would require the conservation of most or all of the 45.4-acre MSHCP-Excluded Project Area, which inherently conflicts with the Project's primary objective to develop the site with residential, commercial, and recreational land uses. Moreover, mining and reclamation activities within the MSHCP-Excluded Project Area have fully disturbed most of the areas proposed for disturbance by the Project and that are intended for conservation under the MSHCP. Thus, even if the MSHCP-Excluded Project Area were to be conserved, the site still would not meet the objectives for Cell Group W and any preserved habitat would be disconnected from the portions of Cell Group W located west or north of the Project site due to the presence of I-15 and Nichols Road. The option of conserving the entire MSHCP-Excluded Project Area is considered as part of the No Project Alternative in EIR Subsection 6.3.1. Accordingly, the Project's direct impact due to a non-compliance with the MSHCP conservation requirements for the site represents a significant impact of the proposed Project that cannot be mitigated to below a level of significance.

4.4 ENERGY

4.4.1 EXISTING CONDITIONS

Under existing conditions, the Project site is largely vacant, although the northern 45.4 acres of the Project site are undergoing on-going mining reclamation activities. Thus, energy demands for the Project site under existing conditions consist of fuel consumption for reclamation equipment. It should be noted that all reclamation activities would cease prior to implementation of the proposed Project; thus, for purposes of analysis, it is assumed that the Project site does not produce a demand for energy under existing conditions.

4.4.2 APPLICABLE ENVIRONMENTAL REGULATIONS

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.

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 Lake Elsinore is the SCAG. SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is the applicable planning document for the area.

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 (IEPR).

The 2017 IEPR focuses on next steps for transforming transportation energy use in California. The 2017 IEPR addresses the role of transportation in meeting state climate, air quality, and energy goals; the transportation

fuel supply; the Alternative and Renewable Fuel and Vehicle Technology Program; current and potential funding mechanisms to advance transportation policy; transportation energy demand forecasts; 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.

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.

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 2016 Standards for building construction, which went into effect on January 1, 2017, improved upon the former 2013 Standards for residential and nonresidential buildings.

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.

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.

4.4.3 BASIS FOR DETERMINING SIGNIFICANCE

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

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The above listed thresholds are derived directly from Section VI of Appendix G to the CEQA Guidelines and address typical adverse effects to biological resources (OPR, 2018).

4.4.4 IMPACT ANALYSIS

Threshold a:	***Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***
Threshold b:	***Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?***

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 the cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines (CARB, 2011,p. D-28). Construction workers also would consume fuel traveling to and from the site. 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 2017 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 168 residential units, 14.5 acres of commercial retail uses, and 8.3 acres of recreational facilities on the Project site would be consistent with other residential, commercial, and recreational uses similar in scale and configuration as reflected in the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Ed., 2017); and CalEEMod v2016.3.2. 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. On the contrary, the Project's proposed residential and commercial mixed-uses would reduce VMT because Project residents would have access to nearby commercial retail uses.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of cars and trucks 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 trails, sidewalks, and bicycle lanes that would facilitate and encourage pedestrian and bicycle access and subsequently reduce VMT and associated energy consumption. As supported by the preceding discussions, the Project's 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 Southern California Gas Company 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 F), Urban Crossroads, Inc. calculated the Project's mitigated operational energy demands to be 22,606,463 kBTU/year of natural gas and 6,536,276 kWh/year of electricity (Urban Crossroads, 2018b, 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 and commercial 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 is expected be comparable to, or less than, energy consumed by other residential and commercial uses of similar scale and intensity that are constructed and operating in California.

C. Consistency with Energy Conservation Plans and Regulations

Under existing conditions, there are no adopted state or local plans for renewable energy or energy efficiency in the Project area. Thus, the Project would have no potential to conflict with such plans, and no impact would occur. Additionally, and as discussed below, the Project would be consistent with or otherwise would not conflict with any of the environmental regulations listed above in subsection 4.4.2.

Project Consistency with Intermodal Surface Transportation Efficiency Act of 1991: 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 Section 4.10, *Land Use and Planning*, the Project would not conflict with the SCAG's RTP/SCS.

Project Consistency with the California Integrated Energy Policy Report (Senate Bill 1389): The 2017 IEPR is a State Policy report. An individual development proposal such as the proposed Project has no ability to comply with or conflict with this report.

Project Consistency with State Energy Plan: 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; provide pedestrian and bicycle infrastructure and the collocation of residential and commercial retail uses to promote walking as an alternative form of transportation to reduce vehicle miles traveled by automobile; and promote land use compatibility through the development of residential and commercial uses in close proximity to similarly planned uses. The Project therefore supports the urban design principles identified under the State of California Energy Plan and is thus consistent with or would not otherwise interfere with implementation of the State of California Energy Plan.

Project Consistency with California Code Title 24, Part 6 (California Energy Code): 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.

Project Consistency with Pavley Fuel Efficiency Standards (AB 1493): 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 or otherwise obstruct implementation of AB 1493.

Project Consistency with California Renewable Portfolio Standards (SB 1078): Energy directly or indirectly supplied to the Project by electric corporations is required by law to comply with SB 1078. Thus, the Project would be consistent with SB 1078.

D. Conclusion

Based on the preceding analysis, 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. Additionally, the Project would not conflict with any adopted state or local plans for renewable energy or energy efficiency. Impacts due to the Project's energy demands would therefore be less than significant.

4.4.5 Cumulative Impact Analysis

As indicated above, there are no adopted state or local plans for renewable energy or energy efficiency in effect in the Project area, and no cumulatively-considerable impact would occur as a result of such conflict. With respect to energy consumption, the analysis above demonstrates that the Project's construction and operational characteristics would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. Other developments in the region would be subject to CEQA and would similarly be required to demonstrate that no wasteful, inefficient, or unnecessary consumption of energy resources would occur. Accordingly, the Project's impacts due to energy consumption would be less-than-cumulatively considerable.

4.4.6 Significance of Impacts Before Mitigation

Thresholds a and b: Less-than-Significant Impact. There are no adopted state or local plans for renewable energy or energy efficiency in the Project area. Additionally, the Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. Impacts due to energy demand would be less than significant.

4.4.7 City Regulations, Design Requirements, and Mitigation

Impacts due to the Project's energy demands would be less than significant and mitigation is not required.

4.5 GEOLOGY AND SOILS

This subsection 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 subsection is based, in part, on information from the report titled "Geotechnical Investigation and Geologic Evaluation Report" (CHJ Consultants, 2018) by CHJ Consultants, Inc. (herein, CHJ Consultants), dated February 2, 2018. This report is included as *Technical Appendix D* to this EIR.

As noted in Section 2.0, *Environmental Setting*, the northern 45.4 acres of the Project site are currently undergoing reclamation activities, pursuant to Amendment No. 2 to Reclamation Plan 2006-01 (Reclamation Plan 2006-01A2). Reclamation activities include the grading of and disturbance to most of the northern 45.4 acres of the Project site. In May 2016, CHJ Consultants performed a geotechnical investigation on the northern 45.4 acres of the Project site as part of the planned reclamation activities. In April 2017 grading of the western portion of the 45.4 began on-site and was in progress during preparation of the current 2018 Geotechnical Investigation prepared for the proposed 72.5-acre Project site. CHJ Consultants, provided observation and compaction testing services during grading. (CHJ Consultants, 2018, p. 3)

4.5.1 EXISTING CONDITIONS

A. Regional Geology

The Project site is situated in an uplifted and dissected bedrock terrain in the Peninsular Ranges geomorphic province. The Peninsular Ranges include plutonic and metamorphic crystalline rocks of Cretaceous and older age. The crystalline basement rocks are locally mantled by colluvial soils and older sediments. Geologic units in the Project site area include Mesozoic age metasedimentary and metavolcanic rocks coeval with the plutonic rocks of the Peninsular Ranges batholith and younger alluvial fan sediments of Holocene and late-Pleistocene age. (CHJ Consultants, 2018, p. 5)

B. Site Geologic Units

CHJ Consultants reviewed aerial imagery dated from 1938 to 2017 for indications of past site usage and potential geologic hazards. The images examined between 1938 and 2005 show the Project site undeveloped except for dirt roads, which crossed the Project site. Stockpiles in the northern portion of the site were present in the 2009 aerial image. These stockpiles primarily consisted of revegetation plots prepared for the Nichols Road Mine located north of the site. No other pertinent features were observed on the aerial images. (CHJ Consultants, 2018, p. 5)

The surficial soils of the Project site are younger alluvial deposits that are underlain by crystalline bedrock units including Mesozoic-age metavolcanics. As previously noted, the northern portion of the Project site is undergoing reclamation in accordance with recommendations provided by CHJ Consultants in a previous report (CHJ Consultants, 2017). The field exploration conducted by CHJ Consultants indicated the southern portion of the Project site is primarily underlain by silty sand, sand, sandy silt, and bedrock recovered as sandy gravel underlain by bedrock. (CHJ Consultants, 2018, pp. 5-6)

C. Site Topography

Under existing conditions, the topography of the Project site is relatively flat with elevations ranging from approximately 1,294 feet above mean sea level (amsl) in the southwestern portion of the site to approximately 1,370 feet amsl in the eastern portion of the site; however, following reclamation elevations on-site would range from 1,294 to 1,323 feet amsl (Google Earth, 2016). Please refer to Figure 2-3 in Section 2.0, *Environmental* Setting, which depicts the Project site's topographic conditions.

D. Groundwater

The Project site is located in Section 25 of Township 5 South, Range 5 West, and is located near the Elsinore Groundwater Basin. The nearest known well is greater than 1.5 miles south of the Project site and is situated in valley sediments. The Project site is underlain at relatively shallow depth by crystalline bedrock. CHJ Consultants observed no seepage, springs, or other evidence for a groundwater table within the Project site boundary during geologic mapping. Previous investigations on the Project site in 2005 by Geotechnics, Incorporated reported groundwater as seepage in bedrock or perched on clay layers at depths ranging from 18 to 35 feet below ground surface. Groundwater was not encountered during CHJ Consultant's subsurface evaluation, which had a maximum depth of approximately 51.5 feet below existing ground surface. (CHJ Consultants, 2018, pp. 6-7)

The depth to groundwater on the Project site is likely to vary seasonally, and perched groundwater may occur at the soil-bedrock contact. The historic high groundwater level for the Project site has been estimated to be 40 feet below ground surface. The 40-foot historic high is consistent with the depth to groundwater of approximately 40 feet depicted by geological contours mapped for the Project area in 1915. (CHJ Consultants, 2018, p. 7)

E. Faulting

The geologic structure of the entire southern California area is dominated by northwest-trending faults. The San Jacinto Fault Zone, Elsinore Fault Zone, and Cucamonga Fault Zone are the major active faults located in the general vicinity of the Project site. Of the faults within the vicinity of the Project site, the Temecula segment of the Elsinore Fault Zone is located in the closest proximity to the Project site, approximately 1.5 miles southwest of the Project site. No active or inactive fault traces are known to traverse the Project site, and no evidence of on-site faulting was observed by CHJ Consultants during site investigation and aerial photo review. The Project site is not within a currently-designated Alquist-Priolo Earthquake Fault Zone. (CHJ Consultants, 2018, p. 10)

F. Seismic Hazards

Secondary hazards associated with earthquakes include fault rupture, ground shaking, ground failure, unstable soils and slopes, and other natural phenomenon. Each of these hazards is briefly detailed below.

1. Ground Shaking

Strong ground shaking could be expected at the site during moderate to severe earthquakes in the Project site's general region. This is common to virtually all of southern California. Intensity of ground shaking at a given

location depends primarily upon earthquake magnitude, site distance from the source, and site response (soil type) characteristics. (CHJ Consultants, 2018, p. 9)

2. Surface Fault Rupture

Surface rupture is a break in the ground surface during, or as a consequence of, seismic activity. Fault rupture occurs most often along pre-existing fault traces. No faults have been mapped onsite, nor in the immediate site vicinity. Accordingly, the potential for surface rupture is low. (CHJ Consultants, 2018, pp. 10, 13)

3. Seismicity

The Project site is within the tectonically active southern California area, and is approximately 1.5 miles from the active Elsinore fault zone. The potential exists for strong ground motion that may affect future improvements on site. Non-critical structures (commercial, residential, and industrial) are required to be designed according to the California Building Code (2016) and that of the controlling local agency. However, liquefaction/seismic slope stability analyses, critical structures, water tanks, and unusual structural designs would likely require site-specific ground motion input. (CHJ Consultants, 2018, p. 9)

4. Liquefaction

Liquefaction is a phenomenon in which saturated, low cohesion soils lose strength during relatively severe earthquake ground motions, with potential for adversely affecting buildings and road structures. In general, during ground motion, saturated fine sands and silty sands tend to compact and decrease in volume, resulting in an increase in pore water pressure if drainage is impeded. If the pore water pressure becomes equal to or greater than the overburden pressure, the effective stress becomes zero and, consequently, the soil loses its shear strength and is considered to be in a liquefied state. Factors known to influence the potential for liquefaction include soil type and depth, grain-size, relative density, groundwater level, degree of saturation, and both the intensity and duration of ground shaking. The Project site is located within an area identified as having a moderate potential for liquefaction. According to a previous report conducted by CHJ Consultants (2016), there is potential for liquefaction to occur within thin localized layers in the northern portion of the Project site. (CHJ Consultants, 2018, pp. 16-17)

5. Landslides

With exception of steep slopes to the north of the Project site, the Project site and the immediate vicinity are relatively flat and preclude the potential for instability of natural slopes. Areas north of the Project site contain bedrock outcroppings that reduce the potential for landslides that could affect the site. No evidence of on-site landslides/debris flow or rock fall was observed during CHJ Consultant's site investigation. (CHJ Consultants, 2018, p. 10)

6. Lateral Spreading

Lateral spreading is closely associated with liquefaction and is characterized by the finite lateral displacement of gently sloping ground during an earthquake. Deformation due to lateral spreading generally occurs on sloping ground that is underlain by potentially liquefiable soil layers. Due to the lack of shallow groundwater the potential for lateral spreading is remote. (CHJ Consultants, 2018, pp. 6, 20-22)

G. Rippability

Rippability is the ease with which soil or rock can be mechanically excavated. Two hills consisting primarily of metamorphic bedrock were removed during site reclamation, located in the northern portion of the Project site. Difficulty in ripping of the larger, western hill was encountered during site reclamation activities. Jack hammering of hard marble exposures in this area was on-going at the time site visits were conducted by CHJ Consultants. Oversize rock on the Project site has already been generated as part of grading activities associated with the reclamation areas. All oversized rock encountered on-site was reduced in size when necessary and transported to the Nichols North Mine located north of the Project site. (CHJ Consultants, 2018, p. 29)

H. Soil Hazards

1. Erosion Potential

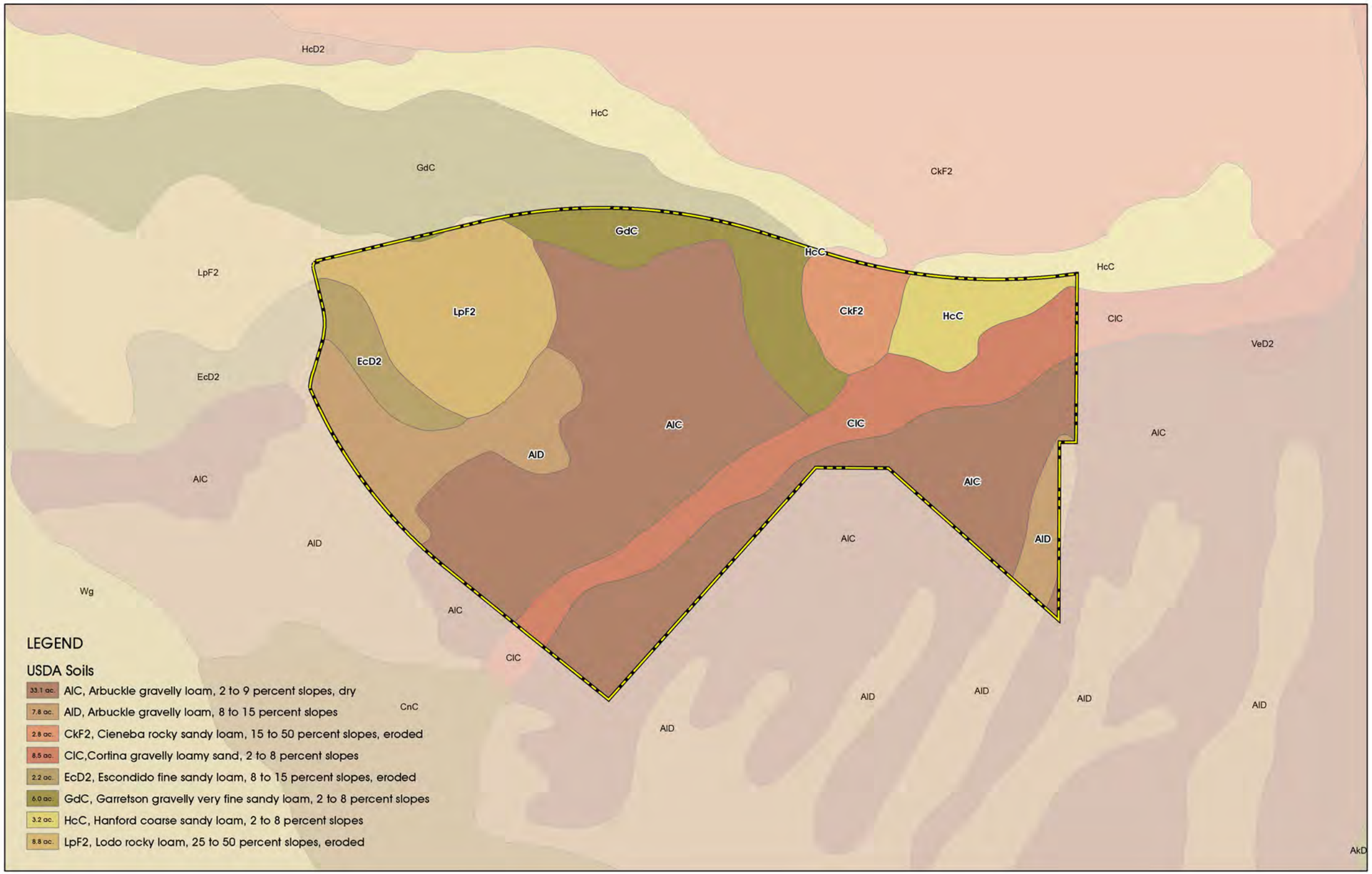
Erosion is the process by which the upper layers of the surface (such as soils) are worn and removed by the movement of water or wind. Soils with characteristics such as low permeability and/or low cohesive strength are more susceptible to erosion than those soils having higher permeability and cohesive 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.

Wind erosion can damage land and natural vegetation by removing soil from one place and depositing it in another. Wind erosion mostly affects dry, sandy soils in flat, bare areas, but it may occur wherever soil is loose, dry, and finely granulated. Under existing conditions, the Project site has the potential to contribute windblown or water-borne soil and sand because the Project site is undeveloped and portions of the Project site contain limited vegetative cover.

As shown on Figure 4.5-1, *Soils Map*, and as summarized in Table 4.5-1, *Summary of Project Area Soils*, 54.8% of the Project site has a "slight to moderate" erosion susceptibility, 13.9% of the Project site has a "moderate" erosion susceptibility, 15.6% of the Project site has a "high" erosion susceptibility, and 12.2% of the Project site has a "very high" erosion susceptibility. Very high susceptibility areas occur in the northwest portion of the Project site. High susceptibility areas are located along Stovepipe Creek and within the northeast portion of the Project site.

2. Expansive Soils

Expansive soils are soils that exhibit cyclic shrink and swell patterns in response to variations in moisture content. Based on expansion index testing of soil samples taken from the Project site by CHJ Consultants, it was determined that the site's soils were sufficiently granular to be non-critically expansive. (CHJ Consultants, 2018, p. 8)



Source(s): USDA (09-12-2017)

Figure 4.5-1

NOT TO SCALE

SOILS MAP

Table 4.5-1 Summary of Project Area Soils

Map Symbol	Map Unit Name	Rate of Runoff	Erosion Susceptibility	Acres in AOI	Percent of AOI
AlC	Arbuckle gravelly loam, 2 to 9 percent slopes, dry, MLRA 19	Slow to Medium	Slight to Moderate	33.1	45.60%
AlD	Arbuckle gravelly loam, 8 to 15 percent slopes	Medium	Moderate	7.8	10.80%
CkF2	Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded	Rapid	High	2.8	3.90%
ClC	Cortina gravelly loamy sand, 2 to 8 percent slopes	Slow to Medium	High	8.5	11.70%
EcD2	Escondido fine sandy loam, 8 to 15 percent slopes, eroded	Medium	Moderate	2.2	3.10%
GdC	Garretson gravelly very fine sandy loam, 2 to 8 percent slopes	Slow to Medium	Slight to Moderate	6.0	8.30%
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes	Slow to Medium	Slight to Moderate	3.2	4.40%
LpF2	Lodo rocky loam, 25 to 50 percent slopes, eroded	Very Rapid	Very High	8.8	12.20%
Totals for Area of Interest:		--	--	**72.5**	**100%**

AOI = Area of Interest (i.e., the 72.5-acre Project site)
Source: (NRCS, n.d.; USDA, 1971)

3. Collapsible Soils

Collapsible soils are soils that exhibit gradual settling or sudden sinking of the ground surface. The previous investigation conducted by CHJ Consultants (2016) recommended removal of collapsible soils located in the northern portion of the Project site, which occurred during reclamation activities in 2017. The southern portion of the Project site contains soils that are generally granular and dense; therefore, the potential for collapsible soils is considered low. (CHJ Consultants, 2018, p. 7)

4. Soil Types

Review of readily available published geologic literature found that the Project site contains eight surface soil types, each of which is described below, summarized in Table 4.5-1, and shown graphically on Figure 4.5-1. (NRCS, n.d.; USDA, 1971)

❑ Arbuckle Gravelly Loam – 2 to 9 percent slopes, dry (AlC)

Arbuckle Gravelly Loam (2 to 9 percent slopes) consists of well-drained soil on alluvial fans. The Arbuckle gravelly loam soil has a brown gravelly loam and pale-brown gravelly very fine sandy loam surface layer about 12 inches thick. The subsoil is brown gravelly loam and gravelly clay loam that extends to a depth of about 45 inches. This soil type exhibits moderately slow permeability, runoff is slow to medium, and the hazard of erosion is slight to moderate. Arbuckle gravelly loam (2 to 9 percent slopes) is present across approximately

33.1 acres (45.6%) of the Project site. The Arbuckle gravelly loam is found mostly in the southern area of the Project site beneath Stovepipe Creek, and in the central portion of the Project site. (NRCS, n.d.; USDA, 1971, p. 12)

❑ Arbuckle Gravelly Loam – 8 to 15 percent slopes (AlD)

Similar to Arbuckle Gravelly Loam – 2 to 9 percent slopes (AlC), Arbuckle Gravelly Loam (8 to 15 percent slopes) consists of well-drained soil on alluvial fans. Included within this soil are very small areas that have a gravelly very fine sandy loam surface layer, and a gravelly loam subsoil. Runoff is medium and the hazard of erosion is moderate. Arbuckle gravelly loam (eight to 15 percent slopes) is present across approximately 7.8 acres which encompasses 10.8% of the Project site. The Arbuckle gravelly loam is found mostly in the western portion of the Project site east of I-15, and the southeastern corner of the Project site west of Wood Mesa Court. (NRCS, n.d.; USDA, 1971, p. 12)

❑ Cieneba Rocky Sandy Loam – 15 to 50 percent slopes, eroded (CkF2)

Cieneba Rocky Sandy Loam (15 to 50 percent slopes. eroded) consists of somewhat excessively drained soil on uplands. This soil is used for dryland grain, pasture, and range, for irrigated citrus, and for homesites. The Cieneba soils have a brown sandy loam surface layer about 14 inches thick. Underlying the surface layer is light yellowish-brown gravelly coarse sand. At a depth of approximately 22 inches is slightly acid, weathered granodiorite. Cieneba rocky sandy loam (15 to 50 percent slopes, eroded) is present across approximately 2.8 acres, which encompasses 3.9% of the Project site. The Cieneba rocky sandy loam is found mostly in the northeastern portion of the Project site south of Nichols Road. (NRCS, n.d.; USDA, 1971, p. 23)

❑ Cortina Gravelly Loamy Sand – 2 to 8 percent slopes (ClC)

Cortina Gravelly Loamy Sand (2 to 8 percent slopes) consists of somewhat excessively drained and excessively drained soils on alluvial fans and in valley fills. The Cortina soils have a grayish-brown gravelly coarse sandy loam surface layer about 10 inches thick. Underneath the surface layer is grayish-brown gravelly sandy loam and very gravelly coarse sandy loam. At a depth of approximately 38 inches is light brownish-gray very gravelly coarse sand. Permeability of this soil is rapid, and the available water holding capacity is 1.0 to 1.5 inches. Runoff is rapid, and the hazard of erosion is high. Cortina gravelly loamy sand (2 to 8 percent slopes) is present across approximately 8.5 acres, which encompasses 11.7% of the Project site. The Cortina gravelly loamy sand is located at Stovepipe Creek, which traverses the southern portion of the Project site in a northeast-to-southwest orientation. (NRCS, n.d.; USDA, 1971, pp. 23-24)

❑ Escondido Fine Sandy Loam – 8 to 15 percent slopes, eroded (EcD2)

Escondido Fine Sandy Loam (8 to 15 percent slopes, eroded) consists of well-drained soils on uplands. The Escondido soils have a brown fine sandy loam and very fine sandy loam surface layer about 11 inches thick. The subsoil is brown very fine sandy loam. At a depth of approximately 34 inches is weathered, metamorphosed, fine-grained sandstone and schist. This soil has moderate permeability. Runoff is medium, and the hazard of erosion is moderate. Escondido fine sandy loam (8 to 15 percent slopes, eroded) is present across approximately 2.2 acres, which encompasses 3.1% of the Project site. The Escondido fine sandy loam

is found mostly in the northwestern portion of the Project site near the I-15 off ramp. (NRCS, n.d.; USDA, 1971, p. 30)

- **Garretson Gravelly Very Fine Sandy Loam – 2 to 8 percent slopes (GdC)**

Garretson Gravelly Very Fine Sandy Loam (2 to 8 percent slopes) consists of well-drained soils on alluvial fans. The Garretson gravelly very fine sandy loam soils have a brown and yellowish-brown, gravelly very fine sandy loam and gravelly loam surface layer about 29 inches thick. The underlying material is yellowish-brown, brown, and grayish-brown gravelly loam and loam, and it extends to a depth of more than 60 inches. Permeability of this soil is moderate. Runoff is slow to medium, and the hazard of erosion is slight to moderate. Garretson gravelly very fine sandy loam (2 to 8 percent slopes) is present across approximately 6.0 acres, which encompasses 8.3% of the Project site. The Garretson gravelly very fine sandy loam is found mostly central portion of the Project site along Nichols Road. (NRCS, n.d.; USDA, 1971, p. 34)

- **Hanford Coarse Sandy Loam – 2 to 8 percent slopes (HcC)**

Hanford Coarse Sandy Loam (2 to 8 percent slopes) consists of well-drained and somewhat excessively drained soils on alluvial fans. The Hanford coarse sandy loam soils have a grayish-brown coarse sandy loam within the upper eight inches of the Project site. Underlying this soil is brown, stratified coarse sandy loam and loamy sand. This soil is well drained. Its permeability is moderately rapid. Runoff is slow to medium, and the hazard of erosion is slight to moderate. Hanford coarse sandy loam (2 to 8 percent slopes) is present across approximately 3.2 acres, which encompasses 4.4% of the Project site. The Hanford coarse sandy loam is found mostly in the northwestern portion of the Project site south of Nichols Road and west of Wood Mesa Court. (NRCS, n.d.; USDA, 1971, pp. 39-40)

- **Lodo Rocky Loam – 25 to 50 percent slopes, eroded (LpF2)**

Lodo Rocky Loam (25 to 50 percent slopes, eroded) consists of somewhat excessively drained upland soils. The Lodo rocky loam soils have a brown gravelly loam about eight inches thick. Underlying this soil is brown shattered and weathered fine-grained metamorphosed sandstone. Depth to the sandstone varies from eight to 15 inches. The hazard of erosion is very high on this soil, and runoff is very rapid. Lodo rocky loam (25 to 50 percent slopes, eroded) is present across approximately 8.8 acres, which encompasses 12.2% of the Project site. The Lodo rocky loam is found mostly in the northwestern corner of the Project site along Nichols Road. (NRCS, n.d.; USDA, 1971, pp. 42-43)

4.5.2 Applicable Environmental Regulations

The following is a brief description of the federal, state, and local environmental laws and related regulations governing issues related to geology and soils.

A. Federal Regulations

1. Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially

reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2018)

B. State Regulations

1. Alquist-Priolo Earthquake Fault Zoning Act (A-P Act)

The Alquist-Priolo Earthquake Fault Zoning Act (A-P Act) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The A-P Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The A-P Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. (CGS, 2017a)

The A-P Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. ["Earthquake Fault Zones" were called "Special Studies Zones" prior to January 1, 1994.] The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy. Single family wood-frame and steel-frame dwellings up to two stories not part of a development of four units or more are exempt. However, local agencies can be more restrictive than state law requires. (CGS, 2017)

Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet). (CGS, 2017a)

2. Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code, Chapter 7.8, § 2690-2699.6) directs the Department of Conservation, California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the SHMA is to minimize loss of life and property through the identification, evaluation, and mitigation of seismic hazards. (CGS, n.d.)

Staff geologists in the Seismic Hazard Zonation Program gather existing geological, geophysical, and geotechnical data from numerous sources to produce the Seismic Hazard Zone Maps. They integrate and interpret these data regionally in order to evaluate the severity of the seismic hazards and designate as Zones

of Required Investigation (ZORI) those areas prone to liquefaction and earthquake–induced landslides. Cities and counties are then required to use the Seismic Hazard Zone Maps in their land use planning and building permit processes. (CGS, n.d.)

The SHMA requires site-specific geotechnical investigations be conducted within the Zones of Required Investigation to identify and evaluate seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy. (CGS, n.d.)

3. Natural Hazards Disclosure Act

The Natural Hazards Disclosure Act, effective June 1, 1998 (as amended June 9, 1998), requires that sellers of real property and their agents provide prospective buyers with a "Natural Hazard Disclosure Statement" when the property being sold lies within one or more state-mapped hazard areas, including a Seismic Hazard Zone. (CGS, 2017b)

The law requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps). These maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling construction and development. Single-family frame dwellings up to two stories not part of a development of four or more units are exempt from the state requirements. However, local agencies can be more restrictive than state law requires. (CGS, 2017b)

Before a development permit can be issued or a subdivision approved, cities and counties must require a site-specific investigation to determine whether a significant hazard exists at the site and, if so, recommend measures to reduce the risk to an acceptable level. The investigation must be performed by state-licensed engineering geologists and/or civil engineers. (CGS, 2017b)

4. Building Earthquake Safety Act

In 1986, the California Legislature determined that buildings providing essential services should be capable of providing those services to the public after a disaster. Their intent in this regard was defined in legislation known as the Essential Services Buildings Seismic Safety Act of 1986 and includes requirements that such buildings shall be "…designed and constructed to minimize fire hazards and to resist…the forces generated by earthquakes, gravity, and winds." This enabling legislation can be found in the California Health and Safety Code, Chapter 2, § 16000 through 16022. In addition, the California Building Code defines how the intent of the act is to be implemented in Title 24, Part 1 of the California Building Standards Administrative Code, Chapter 4, Articles 1 through 3. (CAB, 2018)

5. California Building Standards Code (Title 24)

California Code of Regulations (CCR) Title 24 is reserved for state regulations that govern the design and construction of buildings, associated facilities, and equipment. These regulations are also known as building standards (reference California Health and Safety Code § 18909). Health and Safety Code (state law) § 18902 gives CCR Title 24 the name California Building Standards Code (CBSC). (CBSC, 2018, p. 7)

The CBSC in CCR Title 24 is published by the California Building Standards Commission and it applies to all building occupancies (see Health and Safety Code §§ 18908 and 18938) throughout the State of California. Cities and counties are required by state law to enforce CCR Title 24 (reference Health and Safety Code §§ 17958, 17960, 18938(b), and 18948). Cities and counties may adopt ordinances making more restrictive requirements than provided by CCR Title 24, because of local climatic, geological, or topographical conditions. Such adoptions and a finding of need statement must be filed with the California Building Standards Commission (Reference Health and Safety Code §§ 17958.7 and 18941.5). (CBSC, 2018, pp. 7-9)

6. Porter-Cologne Water Control Act

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code § 13000 *et seq.*), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected;
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation. (SWRCB, 2014)

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The State Water Board and Regional Water Boards have numerous non-point source (NPS) related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of NPDES permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The Storm Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions. (SWRCB, 2014)

The Porter-Cologne Act also implements many provisions of the Clean Water Act, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain

the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. (SWRCB, 2014) The Project site is located in the Santa Ana Watershed, which is within the purview of Santa Ana RWQCB. The Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Plan is the governing water quality plan for the region.

C. Local Regulations

1. City of Lake Elsinore Municipal Code

The City of Lake Elsinore Municipal Code (Chapter 14.08, "City of Lake Elsinore Stormwater/Urban Runoff Management and Discharge Controls Ordinance") protects and enhances the water quality of City watercourses, waterbodies, groundwater, and wetlands in a manner pursuant to and consistent with the California Water Code Sections 13000 *et. seq.* (Lake Elsinore, 2018)

4.5.3 Basis for Determining Significance

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

a. *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:*

   i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

   ii) *Strong seismic ground shaking.*

   iii) *Seismic-related ground failure, including liquefaction.*

   iv) *Landslides.*

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-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 (since renamed as the California Building Code), creating substantial direct or indirect risks to life or property; or*

e. *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.*

The above listed thresholds are derived directly from Section VII of Appendix G to the CEQA Guidelines and address typical adverse effects due to geological conditions (OPR, 2018).

As a general matter, CEQA does not require the analysis of the environment's impact on the proposed Project (see the decision reached by the Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, Case No. S213478). Therefore, CEQA does not require that the potential geology impacts from the environment (unrelated to the Project) be analyzed with respect to their effect(s) on future residents of the proposed Project. Thus, impacts to the Project from geological sources are provided for information purposes only.

4.5.4 IMPACT ANALYSIS

Threshold a:	***Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:***
i)	***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***
ii)	***Strong seismic ground shaking?***
iii)	***Seismic-related ground failure, including liquefaction?***
iv)	***Landslides?***

A. Potential for Earthquake Fault Rupture

The Project site is not located in an Alquist-Priolo Earthquake Fault Zone nor any regional or local fault zones, including Elsinore Fault Zone, San Jacinto Fault Zone, San Andreas Fault Zone, and San Joaquin Hills Thrust Fault Zone. The nearest Alquist-Priolo Earthquake Fault Zone is the Elsinore Fault, which is located approximately 1.5 miles southwest of the Project site. No active or inactive fault traces are known to traverse the Project site, and no evidence of on-site faulting was observed by CHJ Consultants during site investigation and aerial photo review. Because the Project site is not located on an Alquist-Priolo Earthquake Fault Zone or any regional or local fault zone, there is no potential for the Project to expose people or structures to substantial adverse effects associated with rupture of any Alquist-Priolo Fault Zones. (CHJ Consultants, 2018, p. 11) Impacts due to Alquist-Priolo Fault Zones would not occur.

B. Potential for Strong Seismic Ground Shaking

The Project site is located in a seismically active area of southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. The ground-shaking risk is not considered substantially different than that of other similar properties in the southern California area. The Project area is within a seismically-active region containing major fault zones. As mentioned above, there are no active or inactive fault traces are known to traverse the Project site, and no evidence of on-site faulting was observed by CHJ Consultants during site investigation and aerial photo review. The nearest fault zone, Elsinore Fault Zone, occurs approximately 1.5 miles southwest from the Project site. Some additional major active nearby faults that could produce ground-shaking effects include the Cucamonga, San Jacinto, and San Andreas Fault Zones, among others. The potential rupture of any of these faults could result in significant

structural damage and human injury or casualty. The Project would be required to construct all proposed structures in accordance with the CBC (Title 24) and Title 15 (Buildings and Construction) of the City of Lake Elsinore Municipal Code. The CBC and Municipal Code Title 15 have been designed to preclude significant adverse effects associated with strong seismic ground shaking.

However, a significant impact could occur if the Project did not comply with the site-specific recommendations of the Project's geotechnical study (*Technical Appendix D*). The Project's Geotechnical Evaluation includes recommendations that would reduce seismic risks to "acceptable level" as defined by the California Code of Regulations. Accordingly, prior to mitigation implementing the geotechnical study recommendations, the proposed Project has the potential to expose people or structures to substantial adverse effects, including, loss, injury, or death, as a result of strong seismic ground shaking. This is evaluated as a significant impact for which mitigation is required.

C. *Potential for Seismic-Related Ground Failure/Liquefaction*

As mentioned in Subsection 4.5.1F.4, the proposed Project site is located in an area identified as having a "moderate" potential for liquefaction hazards (Lake Elsinore, 2011b, Figure 3.11-3; CHJ Consultants, 2018, p. 16). Based on a previous report conducted by CHJ Consultants (2016), liquefaction has the potential to occur within thin localized layers in the northern portion of the Project site (CHJ Consultants, 2018, p. 17). However, due to the Project site's upper non-liquefiable layer, the potential for significant manifestation after grading is limited. Moreover, the Project site is underlain with bedrock and sandy gravel (CHJ Consultants, 2018, p. 6). In these areas, it is anticipated that less than 1½ inches of seismic-induced settlement in saturated sand would occur within development of the Project site, and the impact of seismic settlement is considered to be low (CHJ Consultants, 2018, p. 18). Additionally, because there are no known faults located on the Project site or seismic-related ground failure, there is no potential for the Project to expose people or structures to substantial adverse effects related to ground rupture or seismic-related ground failure. Additionally, the Project is required to be designed and constructed in accordance with the most recent applicable seismic safety guidelines, including the CBC and Title 15 (Buildings and Construction) of the City of Lake Elsinore Municipal Code. However, there is a remote potential that future structures on-site would be subject to liquefaction hazards in the event that future implementing developments do not comply with the recommendations of the Project's geotechnical study (*Technical Appendix D*). Accordingly, impacts due to seismic-related ground failure, including liquefaction, would be potentially significant prior to mitigation.

D. *Landslide Potential*

As shown on Figure 3.5, *Percent Slope* of the Lake Elsinore General Plan, the Project site is located in an area with a 0-15% percent slope grade, with a small portion of the Project site falling in the 15%-25% percent slope range. However, areas immediately to the north of the Project are shown on Figure 3.5 as having slopes exceeding 35% in gradient. (Lake Elsinore, 2011a, Figure 3.5) Although the slopes to the north of the Project site consist of vegetated slopes with rock outcroppings, CHJ Consultants did not observe any evidence of landslides, indicating there is little potential that future buildings on site could be affected by landslide hazards. Additionally, the Project site exhibits relatively flat topography, and all slopes created by the Project would be constructed at a maximum gradient of 2:1 (horizontal:vertical). However, the Project proposes slopes in the western portion of the site that exceed ten feet in height. Although these slopes likely would not be subject to

landslide hazards, there is a remote potential for landslides to occur if the Project were to fail to comply with the site-specific recommendations of the Project's geotechnical study (Technical Appendix D). This is evaluated as a significant impact for which mitigation is required.

Threshold b: ***Would the Project result in substantial soil erosion or the loss of topsoil?***

Implementation of the proposed Project has the potential to result in soil erosion. The analysis below summarizes the likelihood of the Project to result in substantial soil erosion during temporary construction activities and long-term operation. As shown in Table 4.5-1, 54.8% of the Project site has a "slight to moderate" erosion susceptibility, 13.9% of the Project site has a "moderate" erosion susceptibility, 15.6% of the Project site has a "high" erosion susceptibility, and 12.2% of the Project site has a "very high" erosion susceptibility. Very high susceptibility areas occur in the northwest portion of the Project site. High susceptibility areas are located at Stovepipe Creek and within the northeast portion of the Project site.

1. Impact Analysis for Temporary Construction-Related Activities

Proposed grading, and construction activities to the Project site would expose underlying soils and disturb surficial coils on the respective properties. Exposed soils would be subject to erosion during rainfall events or high winds due to the removal of stabilizing vegetation and exposure of these erodible materials to wind and water.

Pursuant to the requirements of the State Water Resources Control Board, the Project Applicant is required to obtain a Nation Pollutant Discharge Elimination System (NPDES) permit for construction activities, including proposed grading. The NPDES permit is required for all projects that include construction activities such as clearing, grading, and/or excavation that disturb at least one (1) acre of total land area. The City's Municipal Separate Storm Sewer System (MS4) NPDES Permit requires the Project Applicant to prepare and submit to the City for approval a Project-specific Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would identify a combination of erosion control and sediment control measure (i.e., Best Management Practices (BMPs)) to reduce or eliminate sediment discharge to surface water from storm water and non-stormwater source discharges during construction. In addition, proposed construction activities would be required to comply with SCAQMD Rule 403, which would reduce the amount of particulate matter in the air and minimize the potential for wind erosion. Rule 403 requires that certain construction practices be following that limit dust and dirt from leaving the construction site. For example, no dust is allowed to be tracked out of the site by more than 25 feet. In addition, proposed construction activities would be required to comply with the City's Municipal Code (Chapter 14.08) to protect and enhance the water quality of the City, and Municipal Code (Chapter 15.04), which requires the Project to prepare an erosion control plan to be used during the rainy season. With mandatory compliance to the requirements noted in the Project's SWPPP, as well as mandatory compliance to applicable regulatory requirements including but not limited to SCAQMD Rule 403, and Municipal Code Chapter 14.08 and 15.04, the potential for water and/or wind erosion impacts during Project construction would be reduced to less-than-significant levels.

2. Impact Analysis for Long-Term Operations

Following construction, wind and water erosion on the Project site would be minimized, as the disturbed areas would be landscaped or covered with impervious surfaces, and drainage would be controlled through a storm

drain system. As discussed in detail in EIR Subsection 4.8, *Hydrology and Water Quality*, the Project would not substantially increase the rate or amount of runoff leaving the site, as compared to existing conditions. As part of the Project, the City is requiring the construction of stormwater facilities (such as detention basins) to reduce on-site runoff flows to pre-development conditions. As discussed in Subsection 4.8, construction of detention basins and water quality basins on-site would ensure that post-development rates and amounts of runoff are similar or slightly reduced as compared to those occurring under existing conditions. Accordingly, implementation of the Project would not increase the risk of siltation or erosion in stormwater discharged from the Project site. In addition, the WQMP for the Project requires post-construction measures to ensure on-going protection against erosion. Compliance with the WQMP would be required as a condition of Project approval, and long-term maintenance of on-site water quality features also would be required. Based on the foregoing, implementation of the Project would not significantly increase the risk of long-term wind or water erosion on- or off-site, and impacts 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-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?***

As indicated under the analysis of Threshold a, impacts associated with liquefaction hazards, seismic-related ground failure, and landslides would be significant prior to mitigation. Following mitigation requiring compliance with the recommendations of the Project's geotechnical study (*Technical Appendix D*), impacts would be reduced to less-than-significant levels.

Liquefaction-induced lateral spreading is defined as the finite, lateral displacement of gently sloping ground as a result of pore pressure build-up or liquefaction in a shallow underlying deposit during an earthquake. Due to the lack of shallow ground water, the potential for lateral spreading is identified by CHJ Consultants as being "remote." Nonetheless, a significant impact could occur in the event that future implementing developments do not comply with the recommendations of the Project's geotechnical study (*Technical Appendix D*). Accordingly, impacts due to lateral spreading would be potentially significant prior to mitigation.

According to the County of Riverside, portions of the Project site are located in areas identified as potentially susceptible to subsidence associated with groundwater or petroleum fluid withdrawal, peat oxidation, or hydro-consolidation. Due to the lack of peat or petroleum-associated deposits, petroleum withdrawal and peat oxidation do not appear to be hazards. Based on observations during reclamation activities in 2017 conducted by CHJ Consultants, the alluvial materials within the northern portion of the Project site are classified as late Pleistocene; therefore, subsidence due to groundwater withdrawal is considered minimal. Moreover, hydro-collapsible soils were removed and recompacted during reclamation activities. The southern portion of the Project site is underlain with generally granular and dense soils; therefore, hydro-consolidation is considered low. However, impacts would be potentially significant if the Project didn't comply with the geotechnical study (CHJ Consultants, 2018, p. 7)

In summary, impacts due to unstable geologic units or soils that could potentially result in on-or off-site lateral spreading, liquefaction, landslide, subsidence, and collapse would be potentially significant prior to mitigation requiring compliance with geotechnical study recommendations.

Threshold d: ***Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (since renamed as the California Building Code), creating substantial direct or indirect risks to life or property?***

Appendix G of the CEQA Guidelines references Table 18-1-B of the 1994 Uniform Building Code (UBC). This Table no longer exists. The adopted 2001 California Building Code included a "Classification of Expansive Soil" that correlated an expansion index with the potential for soil expansion. The subsequent updates to the California Building Code (2007 and 2010), contained information on expansive soils, but no longer included a reference to Table 18-1-B. The Building Code currently in effect, the 2016 CBC, references ASTM D-4829, a standard procedure for testing and evaluating the expansion index (or expansion potential) of soils established by ASTM International, which was formerly known as the American Society for Testing and Materials (ASTM).

Based on laboratory test results, the on-site soils are primarily silty sand to sand and are expected to have a very low potential for expansion. Accordingly, the Project would not create substantial risks to life or property from exposure to expansive soils, and a less-than-significant impact would occur.

Threshold e: ***Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?***

The proposed Project would be required to connect to the City's municipal wastewater system and would not be permitted to use septic tanks or alternative wastewater disposal systems. Accordingly, the Project would result in no impact related to the use or performance of septic tanks and/or alternative wastewater systems.

4.5.5 Cumulative Impact Analysis

With exception of erosion hazards, potential geologic and soils effects are inherently restricted to the areas proposed for development and would not contribute to cumulative impacts associated with other existing, planned, or proposed development. That is, thresholds including fault rupture, seismic ground shaking, liquefaction, landslides, expansive soils and other geologic hazards would involve effects to (and not from) the proposed development and are specific to on-site conditions. Accordingly, addressing these potential hazards for the proposed development would involve using measures to conform to existing requirements, and/or 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. Cumulatively-considerable impacts would be less than significant.

For purposes of evaluating potential erosion hazards, the cumulative study area is defined as the Santa Ana River Watershed, as areas outside this watershed have no potential to contribute to any erosion impacts that may result from the Project. As discussed under Threshold b, during both near-term construction and long-term operation, measures would be incorporated into the Project's design to ensure that significant erosion hazards do not occur. Other developments within the cumulative study area would be required to comply with

similar requirements, such as the need to obtain an NPDES permit and mandatory compliance with the resulting SWPPPs and WQMPs. All projects in the cumulative study area also would be required to demonstrate that measures have been incorporated to ensure that development does not result in substantial increases in the amount or rate of runoff, which could in turn increase soil erosion. Further, all projects in the cumulative study area also would be required to comply with Chapter 15.02 of the City of Lake Elsinore's Municipal Code (or similar City or County ordinances) and SCAQMD Rule 403, which would preclude wind-related erosion hazards during construction. Therefore, because the Project would not result in significant erosion impacts, and because other projects within the cumulative study area would be subject to similar requirements to control erosion hazards during construction and long-term operation, cumulatively-considerable impacts associated with wind and water erosion hazards are evaluated as less than significant.

4.5.6 Significance of Impacts Before Mitigation

Threshold a: Significant Direct Impact. The Project site is not located within a mapped Alquist-Priolo Earthquake Fault Zone or a County Fault Hazard Zone. Although the Project site is located in a seismically active area of southern California, this risk is not considered substantially different than that of other similar properties in the southern California area. As a mandatory condition of Project approval, the Project would be required to construct proposed structures in accordance with the CBC (Title 24) and Title 15 (Buildings and Construction) of the City of Lake Elsinore Municipal Code. The CBC and Title 15 of the City's Municipal Code have been designed to attenuate the risk to life or property to less than significant levels. Nonetheless, the Project's site-specific geotechnical study (*Technical Appendix D*) identifies a number of design recommendations to attenuate the potential for seismic ground shaking hazards. The Project's potential to expose people or structures to substantial adverse effects, including loss, injury, or death, as a result of strong seismic ground shaking is evaluated as a potentially significant impact prior to mitigation.

Threshold b: Less-than-Significant Impact. The Project would not result in substantial soil erosion or loss of topsoil. The Project Applicant would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities and adhere to a Storm Water Pollution Prevention Plan (SWPPP) as well as SCAQMD Rule 403 and City of Lake Elsinore Municipal Code Chapters 14.08 and 15.04. With mandatory compliance to these regulatory requirements, the potential for water and wind erosion impacts during construction would be less than significant. Following development, 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 and drainage would be controlled through a storm drain system. Furthermore, the Project is required by law to implement a WQMP during operation, which would preclude substantial erosion impacts in the long-term.

Threshold c: Significant Direct Impact. Impacts due to unstable geologic units or soils that could potentially result in on- or off-site lateral spreading, liquefaction, landslide, subsidence, and collapse would be potentially significant prior to mitigation.

Threshold d: Less-Than-Significant Impact. The Project site contains soils with low susceptibility to expansion. Potential hazards associated with expansive soils would, thus, be less than significant.

Threshold e: No Impact. No septic tanks or alternative wastewater disposal systems are proposed to be installed on the Project site. Accordingly, no impact would occur associated with soil compatibility for wastewater disposal systems.

4.5.7 City Regulations, Design Requirements, and Mitigation

A. *Applicable County Regulations and Design Requirements*

The following are applicable regulations and design requirements within the City of Lake Elsinore. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable City regulations and design requirements.

- The Project is required to comply with the provisions of City Municipal Code Chapters 15.02 and 15.04, which incorporate the 2016 California Building Standards Code (California Code of Regulations, Title 24).
- The Project shall comply with all applicable provisions of Chapter 14.08 of the City of Lake Elsinore Municipal Code related to stormwater runoff.
- The Project is required to comply with the provisions of SCAQMD Rule 403 by addressing blowing dust from the Project's construction activities.
- The Project is required to comply with the provisions of the Project's National Pollution Discharge Elimination System (NPDES) permit, and the Project's Storm Water Pollution Prevention Plan (SWPPP). Compliance with the NPDES permit and the SWPPP would identify and implement an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) to reduce or eliminate discharge to surface water from storm water and non-storm water discharges.

B. *Mitigation*

The Project would follow the recommendations contained in the Project's geotechnical report, appended to this EIR as *Technical Appendix D*. Pursuant to the recommendations included in *Technical Appendix D*, following mitigation measures shall apply to preclude potential impacts due to geological and/or soil conditions:

MM 4.4-1 Prior to issuance of grading or building permits, the City Building and Safety Division shall verify that all of the recommendations given in the Project's February 2. 2018 "Geotechnical Investigation and Geologic Evaluation Report Tentative Tract No. 37305 Lake Elsinore, California" by CHJ Consultants, are incorporated into the construction and grading plans. The recommendations shall include, but not be limited to the following:

- Perform earthwork in accordance with the General Earthwork and Grading Specifications in *Technical Appendix D*. The recommendations contained in *Technical Appendix D*, are general grading specifications provided for typical grading projects and some of the recommendations may not be strictly applicable to the proposed Project.

The contract between the Project Applicant and earthwork contractor shall be worded such that it is the responsibility of the contractor to place fill properly in accordance with the recommendations of the Geotechnical Report, the specifications in Appendix D of the Geotechnical Report, applicable City Grading Ordinances, notwithstanding the testing and observation of the geotechnical consultant during construction.

- Existing vegetation, trash, debris, and other deleterious materials shall be removed and wasted from the site prior to commencing removal of unsuitable soils and placement of compacted fill materials. Additionally, all pre-existing foundations elements, standpipes, irrigation lines, and utility conduits shall be removed and wasted off-site. Concrete can be placed in the fill provided it is broken down into pieces smaller than 12 inches (largest dimension). Cesspools and septic systems shall be properly removed and/or backfilled in accordance with the local governing agency.

- Soil, undocumented fills, alluvium, weathered portions of the older alluvium, and bedrock shall be removed in areas planned to receive compacted fill intended to support settlement-sensitive structures such as buildings, roads and underground improvements. The resulting undercuts shall be replaced with engineered fill. It shall be noted that local variations can be expected requiring an increase in the depth of removal for unsuitable and weathered deposits. The extent of removals can best be determined in the field during grading when observation and evaluation can be performed by the soil engineer and/or engineering geologist. Removal bottoms shall expose saturated (S>85%) alluvium, very old alluvial fan deposit, and/or bedrock. The removal bottom shall be observed and mapped by the engineering geologist prior to fill placement. The bottoms shall be scarified to a depth of approximately six (6) inches, brought to near optimum moisture content and recompacted to at least 93 percent relative compaction in accordance with ASTM D1557.

- Footings for any structures shall not be allowed to span from cut to fill or from shallow fill to deep fill soil conditions. Should grading result in a situation where footings bear on more than eight (8) feet of compacted fill, the sub-excavation of the building pad shall be deepened as necessary so as to provide a uniform fill mat below bottom of footing. The deepening of sub-excavation will involve additional removals of older alluvium or bedrock. The uniform mat shall not vary in thickness from one (1) side of the building pad area to the other by more than 50 percent, 10 feet maximum. The “building pad area” includes the structure footprint and the zone of influence consisting of a 1(h):1(v) downward projection from the structure footing.

  All footing shall rest entirely upon competent native soils or minimum of 12 inches of properly compacted fill material. The sub-excavation shall extend at least two (2) feet laterally beyond the footing lines, where possible. Foundation concrete shall be placed in neat excavations with vertical sides, or the concrete shall be formed and the excavations properly backfilled as recommended for compacted fill.

  The on-site soils shall provide adequate quality fill material, provided they are free from roots, other organic matter and deleterious materials. Rock or similar irreducible material with a maximum dimension greater than six (6) inches shall not be buried or placed within

the top 10 feet of fills. Import fill shall be inorganic, non-expansive, granular soil free from rocks or lumps greater than six (6) inches in maximum dimension. The contractor shall notify the geotechnical engineer of import sources sufficiently ahead of their use so that the sources can be observed and approved as to the physical characteristic of the import material. Fills shall be spread in near-horizontal layers, approximately eight (8) inches in thickness.

- The contractor shall make their own investigations and estimates of shrinkage. Final grades shall be adjusted and/or contingency plans to import or export material shall be made to accommodate possible variations in actual quantities during site grading.
- Materials between approximately 12 and 48 inches in size may be placed in areas of fill depth greater than approximately 20 feet below finish grade with the approval of the building official. Areas shall be designated on plans as rock disposal areas. The oversized rock shall be placed in windrows and adequately spaced to prevent nesting. Then, sandy matrix material shall be flooded between the rocks to fill any void spaces. Continuous observation of the rock placement and flooding operation shall be conducted by the geotechnical engineer.
- All grades shall provide effective drainage away from the buildings during and after construction and shall be maintained throughout the life of the structures. Water retained next to the building can result in soil movements greater than those discussed in the Project's geotechnical report. Greater movements can result in unacceptable differential floor slab and/or foundation movements, cracked slabs and walls, and roof leaks. The roofs shall have gutters/drains with downspouts that discharge onto splash blocks at a distance of at least 10 feet from the buildings. The Project shall have a minimum horizontal setback distance of 10 feet from the perimeter of any building and the high-water elevation of the nearest stormwater retention basin. Setbacks for structures shall be maintained from the steep slopes in Stovepipe Wash. The Project shall have a minimum horizontal distance equivalent to 1.5 times the height of the slope be maintained for all structures from the top of the slope. If significant erosion/scour is expected to occur along Stovepipe Wash, greater setbacks would be necessary.
- Exposed ground should be sloped and maintained at a minimum three (3) percent away from the buildings for at least 10 feet beyond the perimeter of the buildings. After building construction and landscaping, final grades shall be verified to document effective drainage has been achieved. Grades around the structures shall also be periodically inspected and adjusted as necessary as part of the structures' maintenance program.
- Shallow excavations for the proposed building structures are anticipated to be accomplished with conventional construction equipment except for the area of hard bedrock in the west portion of the Nichols Road grading project. Upon completion of filling and grading, care shall be taken to maintain the subgrade water content prior to construction of floor slabs. Construction traffic over the completed subgrades shall be avoided. The site shall be graded to prevent ponding of surface water on the prepared subgrades or in excavations. Water collecting over, or adjacent to, construction areas shall

be removed. If the subgrade freezes, desiccates, saturates, or is disturbed, the affected material shall be removed, or the materials shall be scarified, moisture conditioned, and recompacted, prior to floor slab or pavement construction. At a minimum, excavations shall be performed in accordance with OSHA 29 CFR, Part 1926, Subpart P, "Excavations" and its appendices, and in accordance with any applicable local, and/or State regulations.

- The earthwork efforts shall be monitored under the direction of the geotechnical engineer. Monitoring shall include documentation of adequate removal of vegetation and top soil, proof-rolling and mitigation of areas delineated by the proof-roll to require mitigation.

  Each lift of compacted fill shall be tested, evaluated, and reworked as necessary until approved by the geotechnical engineer prior to placement of additional lifts. Each lift of fill shall be tested for density and water content at a frequency of at least one (1) test for every 2,500 square feet of compacted fill in the structure areas and 5,000 square feet in pavement areas. One density and water content test shall be performed for each 1-foot of backfill, for every 250 linear feet of compacted utility trench backfill.

- Seismic design shall be designed in accordance with 2016 CBC guidelines and recommendations provided in the seismic design parameters table on pages 15-16 in *Technical Appendix D*.

- Shallow foundation of the Project site shall be designed in accordance with 2016 CBC guidelines and recommendations provided in the shallow foundation design parameters table on page 19 in *Technical Appendix D*.

  The base of all foundation excavations shall be free of water and loose soil, prior to placing concrete. Concrete shall be placed soon after excavating to reduce bearing soil disturbance. Care shall be taken to prevent wetting or drying of the bearing materials during construction. Excessively wet or dry material or any loose/disturbed material in the bottom of the footing excavations shall be removed/reconditioned before foundation concrete is placed. Over-excavation for structure fill placement below footings shall be conducted as shown on page 20 in *Technical Appendix D*.

- Structures with unbalanced backfill levels on opposite sides shall be designed for earth pressures at least equal to values indicated in the lateral earth pressure design parameters table on page 21 in *Technical Appendix D*.

  Backfill placed against structures shall consist of granular soils or low plasticity cohesive soils. Granular backfill must extend out and up from the base of the wall at an angle of at least 45 and 60 degrees from vertical for the active and passive cases, respectively.

  Backfill behind retaining walls shall consist of a soil of sufficient granularity that the backfill will properly drain. Surface drainage shall be provided to prevent ponding of water behind walls. A drainage system consisting of either or both of the following shall be installed behind all retaining walls: a 4-inch diameter perforated PVC (Schedule 40) pipe or equivalent at the base of the stem encased in 2 cubic feet of granular drain material per linear foot of pipe or synthetic drains such as Enkadrain, Miradrain, Hydraway 300 or equivalent. Perforations in the PVS shall be 3/8 inch in diameter and shall be placed facing

down. Granular drain material shall be wrapped with filter cloth to prevent clogging of the drains with fines. Walls shall be waterproofed to prevent nuisance seepage and damage.

- Floor slabs shall bear on compacted fills or competent native soils. For slabs bearing on compacted fill, the top 12 inches of soil shall be compacted to 95 percent relative compaction. Finish-graded surfaces shall be rolled to provide smooth and dense surfaces. Slabs to receive moisture-sensitive coverings shall be provided with a vapor retarder/barrier. The vapor retarder/barrier shall be designed and constructed according to the American Concrete Institute 302.1R, Concrete Floor and Slab Construction, which addresses moisture vapor retarder/barrier construction. At a minimum, the vapor retarder/barrier shall comply with ASTM E1745 and have a nominal thickness of at least 10 mils. The vapor retarder/barrier shall be properly sealed, per the manufacturer's recommendations, and protected from punctures and other damage. The vapor barrier shall be placed directly on the compacted soil with a minimum 4-inch thick layer of dry sand on top of the vapor barrier.

- Presented on page 24 in *Technical Appendix D* are preliminary pavement sections for a range of traffic indices and an assumed Resistance-Value (R-Value) of 37 and 32 for asphalt concrete (AC) pavement. R-Value testing of the subgrade soils shall be performed during precise grading operations to verify the actual R-Value. The project Civil Engineer or Traffic Engineer shall select traffic indices that are appropriate for the anticipated pavement usage and level of maintenance desired through the pavement life. Final pavement structural sections will be dependent on the R-value of the subgrade materials and the traffic index for the specific street or area being addressed. The pavement sections are subject to the review and approval of the City of Lake Elsinore. Pavement subgrade soils shall be at or near optimum moisture content and shall be compacted to a minimum of 95 percent of the maximum dry density as determined by ASTM D1557 and should conform with the specification listed in Section 26 of the *Standard Specifications for the State of California Department of Transportation* (Caltrans) or Section 200-2 of the *Standard Specifications for Public Works Construction* (Green Book). The AC shall conform to Section 26 of the Caltrans Standard Specifications or Section 203-6 of the Green Book.

- Pavements shall be sloped to provide rapid drainage of surface water. The pavement subgrade shall be graded to provide positive drainage within the granular base section. Appropriate sub-drainage or connection to a suitable daylight outlet shall be provided to remove water from the granular subbase.

- The geotechnical engineer shall provide preventive maintenance to slow the rate of pavement deterioration and to preserve the pavement investment. Maintenance consists of both localized maintenance (e.g., crack and joint sealing and patching) and global maintenance (e.g., surface sealing).

- The geotechnical engineer shall provide the following recommendations in the design and layout of pavements:

- Final grade adjacent to paved areas shall slope down from the edges at a minimum 2 percent.
- Subgrade and pavement surfaces shall have a minimum 2 percent slope to promote proper surface drainage.
- Install below pavement drainage systems surrounding areas anticipated for frequent wetting.
- Install joint sealant and seal cracks immediately.
- Seal all landscaped areas in or adjacent to pavements to reduce moisture migration to subgrade soils.
- Place compacted, low permeability backfill against the exterior side of curb and gutter.
- Place curb, gutter, and/or sidewalk directly on clay subgrade soils rather than on unbound granular base course materials.

4.5.8 Significance of Impacts After Mitigation

Threshold a: Less-than-Significant Impact with Mitigation Incorporated: Implementation of Mitigation Measure MM 4.4-1 would ensure that the Project implements the recommendations of the Project's geotechnical study (*Technical Appendix D*), which in turn would ensure measures are implemented to address potential impacts due to the exposure of people or structures to adverse effects, including loss, injury, or death as a result of strong seismic ground shaking. Implementation of the required mitigation would ensure that impacts are reduced to less-than-significant levels.

Threshold c: Less-than-Significant Impact with Mitigation Incorporated: Implementation of Mitigation Measure MM 4.4-1 would ensure that the Project implements the recommendations of the Project's geotechnical study (*Technical Appendix D*), thereby ensuring that measures are incorporated into the Project's design to preclude impacts associated with lateral spreading, liquefaction, and collapse. With implementation of the required mitigation, impacts would be less than significant.

4.6 GREENHOUSE GAS EMISSIONS

The analysis in this Subsection is based in part on a greenhouse gas analysis (GHGA) prepared for the Project by Urban Crossroads, Inc., titled, "Nichols Ranch Greenhouse Gas Analysis, which is dated August 29, 2018 and appended to this EIR as *Technical Appendix E* (Urban Crossroads, 2018b).

4.6.1 EXISTING CONDITIONS

A. *Introduction to Global Climate Change*

Global Climate Change (GCC) is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. GCC is currently one of the most controversial environmental issues in the United States, and much debate exists within the scientific community about whether or not GCC is occurring naturally or as a result of human activity. Some data suggests that GCC has occurred in the past over the course of thousands or millions of years. 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 (1900) is occurring at a quicker rate and magnitude than in the past. Scientific 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, 2018b, p. 8)

An individual project like the proposed Project cannot generate enough greenhouse gas emissions to affect a discernible change in global climate. However, the proposed Project may participate in the potential for GCC by its incremental contribution of greenhouse gases combined with the cumulative increase of all other sources of greenhouse gases, which when taken together constitute potential influences on GCC. (Urban Crossroads, 2018b, p. 8)

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2 (carbon dioxide), N_2O (nitrous oxide), CH_4 (methane), 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. GCC can occur naturally as it has in the past with the previous ice ages. (Urban Crossroads, 2018b, p. 9)

Gases that trap heat in the atmosphere are often referred to as greenhouse gases. Greenhouse gases 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 it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature. (Urban Crossroads, 2018b, p. 9)

Although California's rate of growth of greenhouse gas emissions is slowing, the state is still a substantial contributor to the U.S. emissions inventory total. In 2004, California is estimated to have produced 492 million gross metric tons of CO_2e greenhouse gas emissions. Despite a population increase of 16 percent between 1990 and 2004, California has significantly slowed the rate of growth of greenhouse gas emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls. (Urban Crossroads, 2018b, pp. 9-10)

B. Greenhouse Gas Emissions Inventories

1. Global

Worldwide anthropogenic (human) GHG emissions are tracked by the Intergovernmental Panel on Climate Change (IPCC) for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2016, and are shown in Table 4.6-1, *Top GHG Producer Countries and the European Union*. For the Year 2016, the sum of these emissions totaled approximately 28,747,554 Gg CO_2e.[1] The GHG emissions in more recent years may differ from the inventories presented in Table 4.6-1; however, the data is representative of currently available inventory data. (Urban Crossroads, 2018b, p. 8)

Table 4.6-1 Top GHG Producer Countries and the European Union

Emitting Countries	GHG Emissions (Gg CO_2e)
China	11,895,765
United States	6,511,302
European Union (28 member countries)	4,291,252
India	2,643,817
Russian Federation	2,100,850
Japan	1,304,568
Total	**28,747,554**

(Urban Crossroads, 2018b, Table 2-1)

2. United States

As noted in Table 4.6-1, the United States, as a single country, was the number two producer of GHG emissions in 2016. The primary greenhouse gas emitted by human activities in the United States was CO_2, representing approximately 81.6 percent of total greenhouse gas emissions. Carbon dioxide from fossil fuel combustion, the largest source of US greenhouse gas emissions, accounted for approximately 93.5 percent of the GHG emissions. (Urban Crossroads, 2018b, p. 9)

[1] The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries without 2016 data, the UNFCCC data for the most recent year were used. United Nations Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF," The most recent GHG emissions for China were taken in 2012, while the most recent GHG emissions for India were taken in 2010.

3. State of California

CARB compiles GHG inventories for the State of California. Based upon the 2018 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2016 greenhouse gas emissions inventory, California emitted 429.4 $MMTCO_2e$ including emissions resulting from imported electrical power in 2015. (Urban Crossroads, 2018b, p. 9)

4. Project Site

At the time the Notice of Preparation (NOP) for this EIR was issued (May 25, 2018), the southern portions of the Project site were vacant, while the northern portions of the Project site were undergoing reclamation activities. Although GHG emissions were occurring in association with reclamation activities, all reclamation activities on the site will have ceased prior to implementation of the proposed Project. Therefore, for purposes of analysis, it is assumed that the Project produces only nominal GHG emissions under existing conditions.

C. Greenhouse Gases

For the purposes of this analysis, emissions of carbon dioxide, methane, and nitrous oxide were evaluated because these gasses are the primary contributors to GCC from development projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases. (Urban Crossroads, 2018b, p. 10)

Greenhouse gases have varying GWP values; GWP values represent the potential of a gas to trap heat in the atmosphere. Carbon dioxide is utilized as the reference gas for GWP, and thus has a GWP of 1. The atmospheric lifetime and GWP of selected greenhouse gases are summarized in Table 4.6-2, *Global Warming Potential and Atmospheric Lifetime of Select GHGs*. As shown in Table 4.6-2, GWP for the Second Assessment Report (SAR), the Intergovernmental Panel on Climate Change (IPCC)'s scientific and socio-economic assessment on climate change, range from 1 for carbon dioxide to 23,900 for sulfur hexafluoride and GWP for the IPCC's 4th Assessment Report (AR4) range from 1 for carbon dioxide to 22,800 for sulfur hexafluoride. (Urban Crossroads, 2018b, pp. 12-13)

Water Vapor: Water vapor (H_20) is the most abundant, important, and variable greenhouse gas 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. A climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change. (Urban Crossroads, 2018b, p. 10)

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 (thus allowing less energy to reach the earth's surface and heat it up). (Urban Crossroads, 2018b, p. 10)

Table 4.6-2 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	114	310	298
HFC-23	270	11,700	14,800
HFC-134a	14	1,300	1,430
HFC-152a	1.4	140	124
Sulfur Hexafluoride (SF_6)	3,200	23,900	22,800

(Urban Crossroads, 2018b, Table 2-2)

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, 2018b, p. 10)

Carbon Dioxide: Carbon dioxide (CO_2) is an odorless and colorless GHG. Outdoor levels of carbon dioxide are not high enough to result in negative health effects. Carbon dioxide is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. Carbon dioxide is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks. (Urban Crossroads, 2018b, pp. 10-11)

Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. 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.

Left unchecked, the concentration of carbon dioxide in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources. (Urban Crossroads, 2018b, p. 11)

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. No health effects are known to occur from exposure to methane. (Urban Crossroads, 2018b, p. 11)

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. (Urban Crossroads, 2018b, p. 11)

Nitrous Oxide: Nitrous oxide (N_2O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide 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 Olney's Lesions (brain damage). (Urban Crossroads, 2018b, p. 11)

Concentrations of nitrous oxide also began to rise at the beginning of the industrial revolution. In 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. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. Nitrous oxide can be transported into the stratosphere, be deposited on the earth's surface, and be converted to other compounds by chemical reaction. (Urban Crossroads, 2018b, p. 11)

Chlorofluorocarbons: Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C_2H_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 are no longer being used; therefore, it is not likely that health effects would be experienced. Nonetheless, in confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation. (Urban Crossroads, 2018b, p. 11)

CFCs have no natural source, but were first synthesized in 1928. They were used for refrigerants, aerosol propellants and cleaning solvents. Due to 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, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years. (Urban Crossroads, 2018b, p. 12)

Hydrofluorocarbons: Hydrofluorocarbons (HFCs) are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the greenhouse gases, they are one of three groups with the highest global

warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were of HFC-23. HFC-134a emissions are increasing due to its use as a refrigerant. The U.S. 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 health effects are known to result from exposure to HFCs, which are manmade for applications such as automobile air conditioners and refrigerants. (Urban Crossroads, 2018b, p. 12)

Perfluorocarbons: Perfluorocarbons (PFCs) have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above earth's surface, are able to destroy the compounds. 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 U.S. EPA estimates that concentrations of CF_4 in the atmosphere are over 70 ppt. No health effects are known to result from exposure to PFCs. The two main sources of PFCs are primary aluminum production and semiconductor manufacture. (Urban Crossroads, 2018b, p. 12)

Sulfur Hexafluoride: Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest global warming potential (GWP) of any gas evaluated (23,900). The U.S. EPA indicates that concentrations in the 1990s 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, 2018b, p. 12)

D. Effects of Climate Change in California

1. Public Health Effects

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35 percent under the lower warming range (3-5.5°F) to 75 to 85 percent under the medium warming range (5.5-8°F). In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced. (Urban Crossroads, 2018b, p. 13)

In addition, under the higher warming range scenario (8-10.5°F), there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat. (Urban Crossroads, 2018b, p. 13)

2. *Water Resources / 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. (Urban Crossroads, 2018b, p. 13)

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 to 90 percent. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding. (Urban Crossroads, 2018b, p. 14)

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is 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. (Urban Crossroads, 2018b, p. 14)

3. *Agriculture Effects*

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25 percent of the water supply they need. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate O_3 pollution, which makes plants more susceptible to disease and pests and interferes with plant growth. (Urban Crossroads, 2018b, p. 14)

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts. (Urban Crossroads, 2018b, p. 14)

In addition, continued global climate change could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued global

climate change could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates. (Urban Crossroads, 2018b, p. 14)

4. Forest and Landscape Effects

Global climate change 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. In contrast, wildfires in northern California could increase by up to 90 percent due to decreased precipitation. (Urban Crossroads, 2018b, pp. 14-15)

Moreover, continued global climate change has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of global climate change. (Urban Crossroads, 2018b, p. 15)

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 12-14 inches. (Urban Crossroads, 2018b, p. 15)

E. Human Health Effects

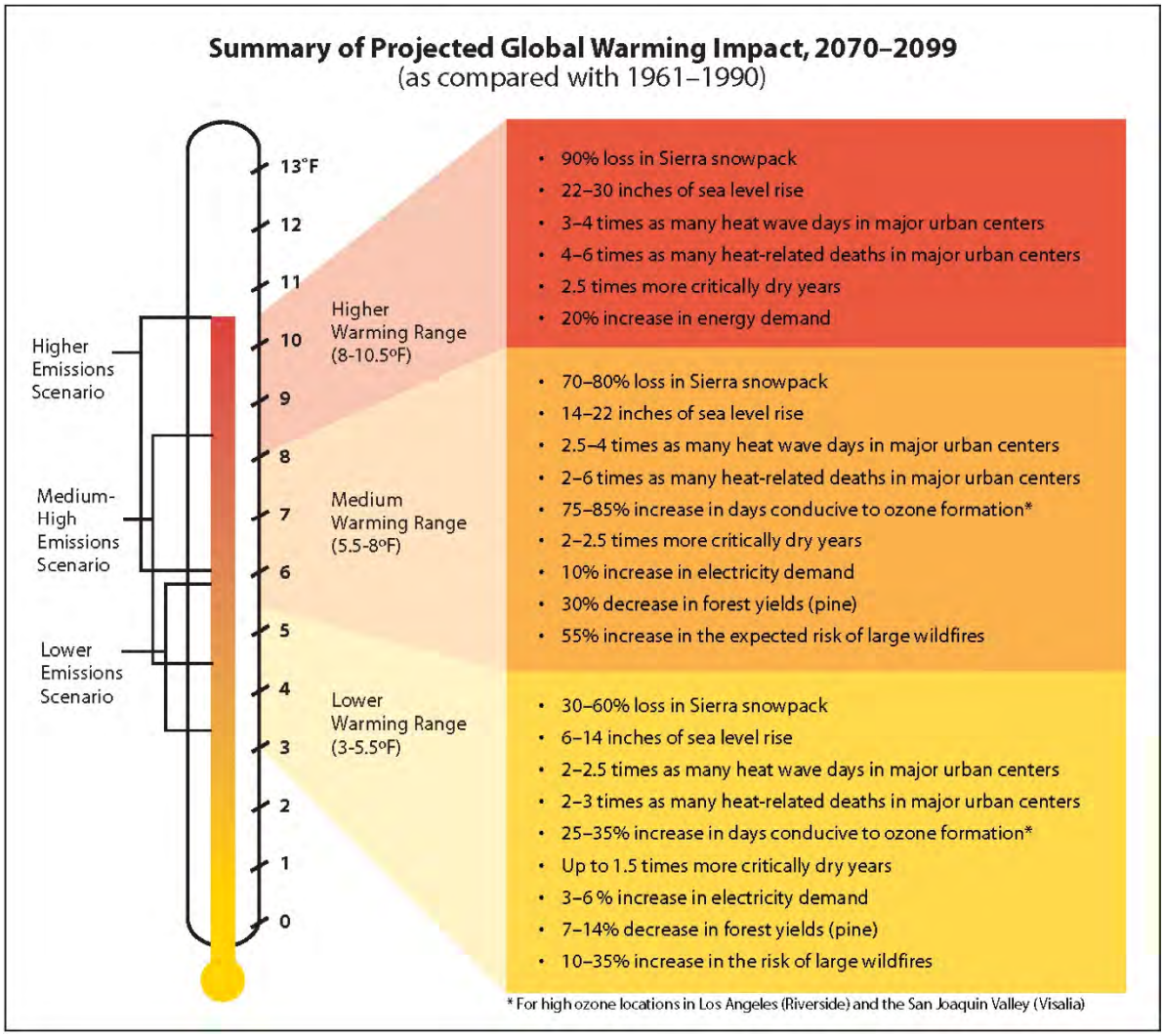
The potential health effects related directly to the emissions of carbon dioxide, methane, and nitrous oxide as they relate to development projects such as the proposed Project are still being debated in the scientific community. Their cumulative effects to global climate change have the potential to cause adverse effects to human health. Increases in 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 will likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas. Figure 4.6-1, *Summary of Projected Global Warming Impact*, presents the potential impacts of global warming. (Urban Crossroads, 2018b, p. 15)

Specific health effects associated with directly emitted GHG emissions are as follows:

- Water Vapor: There are no known direct health effects related to water vapor at this time. It should be noted however that when some pollutants react with water vapor, the reaction forms a transport

mechanism for some of these pollutants to enter the human body through water vapor. (Urban Crossroads, 2018b, p. 15)

Figure 4.6-1 Summary of Projected Global Warming Impact



(Urban Crossroads, 2018b, Exhibit 2-A)

- Carbon Dioxide: According to the National Institute for Occupational Safety and Health (NIOSH) high concentrations of carbon dioxide can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of carbon dioxide in the earth's atmosphere are estimated to be approximately 370 parts per million (ppm), the actual reference exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek and short-term reference exposure levels of 30,000 ppm averaged over a 15-minute period. (Urban Crossroads, 2018b, p. 16)

- Methane: Methane is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Methane is also an asphyxiant and may displace oxygen in an enclosed space. (Urban Crossroads, 2018b, p. 16)

- Nitrous Oxide: Nitrous Oxide is often referred to as laughing gas; it is a colorless greenhouse gas. The health effects associated with exposure to elevated concentrations of nitrous oxide include dizziness, euphoria, slight hallucinations, and in extreme cases of elevated concentrations nitrous oxide can also cause brain damage. (Urban Crossroads, 2018b, pp. 16-17)

- Fluorinated Gases: High concentrations of fluorinated gases can also result in adverse health effects such as asphyxiation, dizziness, headache, cardiovascular disease, cardiac disorders, and in extreme cases, increased mortality. (Urban Crossroads, 2018b, p. 17)

- Aerosols: The health effects of aerosols are similar to that of other fine particulate matter. Thus, aerosols can cause elevated respiratory and cardiovascular diseases as well as increased mortality. (Urban Crossroads, 2018b, p. 17)

4.6.2 Applicable Environmental Regulations

The following is a brief description of the federal, state, and local environmental laws and related regulations related to GHG emissions.

A. International Regulations

1. Kyoto Protocol

The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change, which commits its Parties by setting internationally binding emission reduction targets. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities." (UNFCCC, n.d.)

The Kyoto Protocol was adopted in Kyoto, Japan, on December 11, 1997 and entered into force on February 16, 2005. The detailed rules for the implementation of the Protocol were adopted at Conference of the Parties (COP) 7 in Marrakesh, Morocco, in 2001, and are referred to as the "Marrakesh Accords." Its first commitment period started in 2008 and ended in 2012. (UNFCCC, n.d.)

On December 8, 2012, in Doha, Qatar, the "Doha Amendment to the Kyoto Protocol" was adopted. The amendment includes:

- New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from January 1, 2013 to December 31, 2020;
- A revised list of greenhouse gases (GHG) to be reported on by Parties in the second commitment period; and

- Amendments to several articles of the Kyoto Protocol which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period. (UNFCCC, n.d.)

On December 21, 2012, the amendment was circulated by the Secretary-General of the United Nations, acting in his capacity as Depositary, to all Parties to the Kyoto Protocol in accordance with Articles 20 and 21 of the Protocol. (UNFCCC, n.d.)

During the first commitment period, 37 industrialized countries and the European Community committed to reduce GHG emissions to an average of five percent against 1990 levels. During the second commitment period, Parties committed to reduce GHG emissions by at least 18 percent below 1990 levels in the eight-year period from 2013 to 2020; however, the composition of Parties in the second commitment period is different from the first. (UNFCCC, n.d.)

2. The Paris Agreement

The Paris Agreement builds upon the Convention and – for the first time – brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort. (UNFCCC, n.d.)

The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework. (UNFCCC, n.d.)

The Paris Agreement requires all Parties to put forward their best efforts through "nationally determined contributions" (NDCs) and to strengthen these efforts in the years ahead. This includes requirements that all Parties report regularly on their emissions and on their implementation efforts. (UNFCCC, n.d.)

In 2018, Parties will take stock of the collective efforts in relation to progress towards the goal set in the Paris Agreement and to inform the preparation of NDCs. There will also be a global stock-taking every five years to assess the collective progress towards achieving the purpose of the Agreement and to inform further individual actions by Parties. (UNFCCC, n.d.)

The Paris Agreement entered into force on November 4, 2016, thirty days after the date on which at least 55 Parties to the Convention accounting in total for at least an estimated 55% of the total global greenhouse gas emissions have deposited their instruments of ratification, acceptance, approval, or accession with the Depositary. (UNFCCC, n.d.)

On June 1, 2017, President Donald Trump announced he would begin the process of withdrawing the United States from the Paris Agreement. In accordance with articles within the Paris Agreement, the earliest effective date for the United States' withdrawal from the Agreement is November 4, 2020.

B. Federal Regulations

1. 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.

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.

C. State Regulations

1. Title 24 Building Energy Standards

The California Energy Commission (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 latest revisions (2016 Building Energy Efficiency Standards) became effective on January 1, 2017. The 2016 Building Energy Efficiency Standards are 28 percent more efficient than the previous (2013) Building Energy Efficiency Standards for residential construction and 5 percent more efficient than the previous Standards for non-residential construction. (The 2013 Building Energy Efficiency Standards already were 25 percent more efficient for residential construction and 30 percent more efficient for nonresidential construction than the 2008 Building Energy Efficiency Standards they replaced.)

Part 11 of 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 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.

2. California Assembly Bill No. 1493 (AB 1493)

AB 1493 required CARB to adopt the nation's first GHG emission standards for automobiles. On September 24, 2009, CARB adopted amendments to the "Pavley" regulations that reduce greenhouse gas (GHG) emissions in new passenger vehicles from model year 2009 through 2016. These amendments were part of California's commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016. CARB's September amendments cement California's enforcement of the Pavley rule starting in 2009 while providing vehicle manufacturers with new compliance flexibility. The amendments also prepare California to harmonize its rules with the federal rules for passenger vehicles. (CARB, 2017a)

The U.S. EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles On June 30, 2009. The first California request to implement GHG standards for passenger vehicles, known as a waiver request, was made in December 2005, and was denied by the EPA in March 2008. That decision was based on a finding that California's request to reduce GHG emissions from passenger vehicles did not meet the CAA requirement of showing that the waiver was needed to meet "compelling and extraordinary conditions." (CARB, 2017a)

CARB's Board originally approved regulations to reduce GHGs from passenger vehicles in September 2004, with the regulations to take effect in 2009. These regulations were authorized by the 2002 legislation Assembly Bill 1493 (Pavley). (CARB, 2017a)

The regulations had been threatened by automaker lawsuits and were stalled by the EPA's delay in reviewing and then initially denying California's waiver request. The parties involved entered a May 19, 2009 agreement to resolve these issues. With the granting of the waiver on June 30, 2009, it is expected that the Pavley regulations reduced GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, all while improving fuel efficiency and reducing motorists' costs. (CARB, 2017a)

The CARB has adopted a new approach to passenger vehicles – cars and light trucks – by combining the control of smog-causing pollutants and greenhouse gas emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California. (CARB, 2017a)

3. Executive Order S-3-05

Executive Order (EO) S-3-05 documents GHG emission reduction goals, creates the Climate Action Team and directs the Secretary of the California EPA to coordinate efforts with meeting the GHG reduction targets with

the heads of other state agencies. The EO requires the Secretary to report back to the Governor and Legislature biannually to report: progress toward meeting the GHG goals; GHG impacts to California; and applicable Mitigation and Adaptation Plans. EO S-3-05 goals for GHG emissions reductions include: reducing GHG emissions to 2000 levels by the year 2010; reducing GHG emissions to 1990 levels by the year 2020; and reducing GHG emissions to 80 percent below 1990 levels by 2050. (CCC, n.d.)

4. California Assembly Bill 32 – Global Warming Solutions Act of 2006

In September 2006, Governor Schwarzenegger signed Assembly Bill 32 (AB 32), the California Climate Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020, which represents a reduction of approximately 15 percent below emissions expected under a "business as usual" scenario. Pursuant to AB 32, the CARB must adopt regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. The full implementation of AB 32 will help mitigate risks associated with climate change, while improving energy efficiency, expanding the use of renewable energy resources, cleaner transportation, and reducing waste. (CARB, 2014)

AB 32 specifically required that CARB do the following:

- Prepare and approve a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs by 2020, and update the Scoping Plan every five years.
- Maintain and continue reductions in emissions of GHG beyond 2020.
- Identify the statewide level of GHG emissions in 1990 to serve as the emissions limit to be achieved by 2020.
- Identify and adopt regulations for discrete early actions that could be enforceable on or before January 1, 2010.
- Adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit GHG emissions.
- Convene an Environmental Justice Advisory Committee to advise the Board in developing and updating the Scoping Plan and any other pertinent matter in implementing AB 32.
- Appoint an Economic and Technology Advancement Advisory Committee to provide recommendations for technologies, research, and GHG emission reduction measures. (CARB, 2014)

In November 2007, CARB completed its estimated calculations of Statewide 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 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) equivalent was established as the emissions limit for 2020. For comparison, CARB's estimate for baseline GHG emissions was 473 MMTCO2e for 2000 and without emissions reduction measures 2010 emissions were projected to be 532 $MMTCO_2e$. "Business as usual" conditions (without the reductions to be implemented by CARB regulations) for 2020 were projected to be 596 $MMTCO_2e$. (CARB, 2007)

AB 32 required CARB to develop a Scoping Plan which lays out California's strategy for meeting the goals. The Scoping Plan must be updated every five years. In December 2008, CARB approved the initial Scoping Plan, which included a suite of measures to sharply cut GHG emissions. Table 4.6-3, *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). (CARB, 2014)

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 Climate Action Team (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.

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 metric tons of carbon dioxide equivalent ($MTCO_2e$). 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.

In May 2014, CARB approved the First Update to the Climate Change Scoping Plan (Update), which builds upon the initial Scoping Plan with new strategies and recommendations. The Update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals, highlights the latest climate change science and provides direction on how to achieve long-term emission reduction goal described in Executive Order S-3-05. The Update 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, 2014)

Table 4.6-3 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

Source: CARB. 2008, MMTons CO2e: million metric tons of CO2e
[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 CO2e (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

In November 2017, CARB released the final Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update would reflect the 2030 target of a 40 percent reduction below 1990 levels, set by Senate Bill (SB) 32. Key GHG emissions reductions programs that the draft Second Update proposes to build upon include the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and much cleaner cars, trucks and freight movement, utilizing cleaner, renewable energy, and strategies to reduce

methane emissions from agricultural and other wastes. The 2017 Scoping Plan establishes a new emissions limit of 260 MMTCO2e for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030.

5. California Senate Bill No. 1368 (SB 1368)

In 2006, the State Legislature adopted Senate Bill (SB) 1368 (Perata, Chapter 598, Statutes of 2006), which directs the California Public Utilities Commission (CPUC) to adopt a GHG 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 specified emissions criteria. Accordingly, SB 1368 effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. SB 1368 will lead to dramatically lower GHG emissions associated with California energy demand. (CEC, n.d.)

6. Executive Order S-01-07

Executive Order (EO) S-01-07 is effectively known as the Low Carbon Fuel Standard (LCFS). The Executive Order seeks to reduce the carbon intensity of California's passenger vehicle fuels by at least 10 percent by 2020. The LCFS requires fuel providers in California to ensure that the mix of fuel they sell into the California market meet, on average, a declining standard for GHG emissions measured in CO_2e grams per unit of fuel energy sold. (CCC, n.d.)

7. Senate Bill 1078

Senate Bill (SB) 1078 establishes the California Renewables Portfolio Standard Program, which requires electric utilities and other entities under the jurisdiction of the California Public Utilities Commission to meet 20% of their renewable power by December 31, 2017 for the purposes of increasing the diversity, reliability, public health, and environmental benefits of the energy mix. (CCC, n.d.)

8. Senate Bill 107

SB 107 directed California Public Utilities Commission's Renewable Energy Resources Program to increase the amount of renewable electricity (Renewable Portfolio Standard) generated per year, from 17% to an amount that equals at least 20% of the total electricity sold to retail customers in California per year by December 31, 2010. (CCC, n.d.)

9. Executive Order S-14-08

On November 17, 2008, Governor Schwarzenegger signed Executive Order S-14-08, revising California's existing Renewable Portfolio Standard (RPS) upward to require all retail sellers of electricity to serve 33% of their load from renewable energy sources by 2020. In order to meet this new goal, a substantial increase in the development of wind, solar, geothermal, and other "RPS eligible" energy projects will be needed. Executive Order S-14-08 seeks to accelerate such development by streamlining the siting, permitting, and procurement processes for renewable energy generation facilities. To this end, S-14-08 issues two directives: (1) the existing Renewable Energy Transmission Initiative will identify renewable energy zones that can be developed as such with little environmental impact, and (2) the California Energy Commission (CEC) and the California

Department of Fish and Wildlife (CDFW) will collaborate to expedite the review, permitting, and licensing process for proposed RPS-eligible renewable energy projects.

10. Senate Bill 97

By enacting SB 97 in 2007, California's lawmakers expressly recognized the need to analyze GHGs as a part of the CEQA process. SB 97 required the Governor's Office of Planning and Research (OPR) to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of greenhouse gas emissions. (OPR, n.d.) Those CEQA Guidelines amendments clarified several points, including the following:

- Lead agencies must analyze the GHG emissions of proposed projects, and must reach a conclusion regarding the significance of those emissions. (See CEQA Guidelines § 15064.4.)
- When a project's GHG emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions. (See CEQA Guidelines § 15126.4(c).)
- Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change. (See CEQA Guidelines § 15126.2(a).)
- Lead agencies may significantly streamline the analysis of GHGs on a project level by using a programmatic GHG emissions reduction plan meeting certain criteria. (See CEQA Guidelines § 15183.5(b).)
- CEQA mandates analysis of a proposed project's potential energy use (including transportation-related energy), sources of energy supply, and ways to reduce energy demand, including through the use of efficient transportation alternatives. (See CEQA Guidelines, Appendix F.) (OPR, n.d.)

As part of the administrative rulemaking process, the Natural Resources Agency developed a Final Statement of Reasons explaining the legal and factual bases, intent, and purpose of the CEQA Guidelines amendments. The amendments to the CEQA Guidelines implementing SB 97 became effective on March 18, 2010. (OPR, n.d.)

Of note, the new guidelines state that a lead agency shall have discretion to determine whether to use a quantitative model or methodology, or in the alternative, rely on a qualitative analysis or performance based standards. Pursuant to CEQA Guidelines § 15064.4(a), "A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use; or (2) Rely on a qualitative analysis or performance based standards."

CEQA emphasizes that the effects of greenhouse gas emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis. (See CEQA Guidelines § 15130(f)).

§ 15064.4(b) of the guidelines provides direction for lead agencies for assessing the significance of impacts of greenhouse gas emissions:

1. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; or
3. 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 greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The CEQA Guideline amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. Instead, they call for a "good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." The amendments encourage lead agencies to consider many factors in performing a CEQA analysis and preserve lead agencies' discretion to make their own determinations based upon substantial evidence. The amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. Specific GHG language incorporated in the Guidelines' suggested Environmental Checklist (Guidelines Appendix G) is as follows:

VII. GREENHOUSE GAS EMISSIONS

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

11. Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008) supports the State's climate action goals to reduce greenhouse gas (GHG) emissions through coordinated transportation and land use planning with the goal of more sustainable communities. (CARB, 2018)

Under the Sustainable Communities Act, CARB sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the State's metropolitan planning organizations (MPO). CARB will periodically review and update the targets, as needed. (CARB, 2018)

Each of California's MPOs must prepare a "sustainable communities strategy" (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate "alternative planning strategy" (APS) to meet the targets. The APS is not a part of the RTP. (CARB, 2018)

The Sustainable Communities Act also establishes incentives to encourage local governments and developers to implement the SCS or the APS. Developers can get relief from certain environmental review requirements under CEQA if their new residential and mixed-use projects are consistent with a region's SCS (or APS) that meets the targets (see Cal. Public Resources Code §§ 21155, 21155.1, 21155.2, 21159.28.). (CARB, 2018)

12. Executive Order B-30-15

On April 29, 2015, Governor Brown issued Executive Order B-30-15, which sets a 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). (CCC, n.d.)

13. Senate Bill 32

On September 8, 2016, Governor Jerry Brown signed the Senate Bill (SB) 32 and its companion bill, Assembly Bill (AB) 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide greenhouse gas reduction target of 80% below 1990 levels by 2050. Pursuant to guidance from the Association of Environmental Professionals (AEP), GHG emissions "…should be identified for the project horizon year and lead agencies should consider the project horizon year when applying a threshold of significance" (AEP, 2016, p. 32). Thus, projects with a horizon year beyond 2020 would be subject to the GHG reduction targets set forth by SB 32.

14. Newhall Ranch Decision

In its decision, *Center for Biological Diversity v. Department of Fish and Wildlife*, S217763 (Newhall), the California Supreme Court ("Court") evaluated the CDFW analysis of potential GHG emissions as contained in the EIR for the proposed land development called Newhall Ranch. In the EIR, the CDFW analyzed GHG emissions under AB 32, using the business-as-usual (BAU) comparison as its sole significance determination criteria.

In Newhall, the California Supreme Court concluded that a finding of consistency with meeting statewide emission reduction goals is a legally permissible criterion of significance when analyzing potential impacts of GHG emissions under CEQA. However, the Court found that the EIR's conclusion that the project's emissions

would be less than significant under that criterion was not supported by substantial evidence, and remanded back to the appellate court the narrow issue of whether substantial evidence supported the application of AB 32 statewide GHG reduction goal of approximately 28.5% to new land use projects.

The Court then identified "potential options" for lead agencies evaluating cumulative significance of a proposed land use development's GHG emissions in future CEQA documents:

1. BAU Model: While the Court cautioned that the Scoping Plan may not be appropriate at the project-level, the BAU model might be used to determine what level of reduction from BAU a new land use development at the proposed location must contribute in order to comply with statewide goals pursuant to AB 32.

2. Compliance With Regulatory Programs Designed To Reduce Greenhouse Gas Emissions: The Court suggests that a lead agency could rely on a showing of compliance with regulatory programs designed to reduce GHG emissions. The Court clarifies that a significance analysis based on compliance with such statewide regulations only goes to impact within the area governed by the regulations.

3. Local Climate Action Plan Or Other "Geographically Specific Greenhouse Gas Emission Reduction Plans": The Court points out that these plans may provide a basis for the tiering or streamlining of project-level CEQA analysis, so long as the plan is "sufficiently detailed and adequately supported."

4. Regional 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 SB 375.

5. Numerical GHG Significance Thresholds: Although noting that use of such thresholds are not required, the Court favorably cited to the BAAQMD GHG significance thresholds, which are based on compliance with AB 32, and use a "Service Population" GHG ratio threshold for land use projects and a 10,000 ton annual GHG emission threshold for industrial projects. The Court remanded for further consideration the application of the 28.5% overall Scoping Plan metric, which is used by several Air Districts and, like the favorably-cited BAAQMD metric, is based on AB 32.

6. Executive Order Nos. S-3-05 and B-30-15: Citing to Executive Order Nos. S-3-05 and B- 30-15, the Court cautioned that those EIRs taking a goal-consistency approach to CEQA significance may in the future need to consider the project's effects on meeting emissions reduction targets beyond 2020.

D. Local Regulations

1. City of Lake Elsinore Climate Action Plan (CAP)

The Climate Action Plan (CAP), which was adopted by the City Council on December 13, 2011, is the City of Lake Elsinore's long-range plan to reduce local greenhouse gas emissions that contribute to climate change. The CAP identifies the activities in Lake Elsinore that generate GHGs, quantifies these emissions, and projects their future trends. It also describes local greenhouse gas emissions targets for the years 2020 and 2030,

consistent with the State of California's emissions reduction targets that were in effect at the time the CAP was adopted in 2011, and includes strategies and measures to meet these targets. Implementation of the CAP is intended to guide Lake Elsinore's actions to reduce its contribution to climate change and to support the State of California's emissions reduction targets. The CAP is also intended to support tiering and streamlining of future projects within Lake Elsinore pursuant to CEQA Guidelines §§ 15152 and 15183.5. Individual development projects such as the proposed Project are required to demonstrate consistency with applicable measures from the CAP. Implementation of the City's CAP would result in a City-wide reduction of GHGs by 33% below 1990 Business as Usual (BAU) conditions by 2030. (Lake Elsinore, 2011)

4.6.3 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. 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.

Section VIII of Appendix G to 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.*

The above-listed thresholds are derived directly from Section VIII of Appendix G to the CEQA Guidelines and the Project's Initial Study (*Technical Appendix A*), and address typical adverse effects associated with greenhouse gas emissions. (OPR, 2018)

Because AB 32 and SB 32 are the primary plans, policies and/or regulations adopted in the State of California to reduce GHG emissions, the proposed Project would have a cumulatively considerable impact on GCC if the Project would impede compliance with the GHG emissions reduction mandate established by AB 32 or SB 32.

AB 32 requires that statewide GHG emissions be reduced to Year 1990 levels by the Year 2020 (pursuant to the CARB Scoping Plan, the AB 32 Year 2020 emissions goal could be achieved by a 15-percent reduction in GHG emissions below 2008 emissions levels). To comply with AB 32 on a City-wide basis, the City of Lake Elsinore adopted a Climate Action Plan (CAP) in December 2011. Projects that are determined consistent with the Lake Elsinore CAP also are considered to be consistent with the GHG reduction targets of AB 32.

SB 32 requires that statewide GHG emissions be reduced to 40% below 1990 levels by 2030. The City of Lake Elsinore CAP establishes a target to achieve 33% below 1990 levels by 2030. Thus, in order to demonstrate compliance with the reduction targets established by SB 32, projects must demonstrate compliance with the CAP and that additional GHG reductions will be met beyond compliance with the CAP.

The analysis under Threshold a. is based on a quantitative analysis of the Project's compliance with the City of Lake Elsinore's CAP and the SB 32 target to reduce emissions to 40% below 1990 levels by 2040, and the analysis under Threshold b. is based on a qualitative analysis of the Project's consistency with the City of Lake Elsinore CAP, CARB's Scoping Plan, and with GHG emission-reducing regulations.

4.6.4 Methodology for Estimating Greenhouse Gas Emissions

CEQA Guidelines § 15064.4(b)(1) states that a lead agency may use a model or methodology to quantify greenhouse gas emissions associated with a project. On October 17, 2017, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model™ (CalEEMod™) v2016.3.2. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_x, CO, PM_{10}, and $PM_{2.5}$) and greenhouse gas (GHG) emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod™ has been used for this Project to determine greenhouse gas emissions. Output from the model runs for both construction and operational activity are provided in Appendix 3.1 and 3.2 of the Project's GHGA (*Technical Appendix E*). The CalEEMod model includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water. (Urban Crossroads, 2018b, p. 40)

A full life-cycle analysis (LCA) for construction and operational activity is not included in the analysis due to the lack of consensus guidance on LCA methodology at this time. Life-cycle analysis (i.e., assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the project development, infrastructure and on-going operations) depends on emission factors or econometric factors that are not well established for all processes. At this time, an LCA would be extremely speculative and thus has not been prepared. Additionally, the SCAQMD recommends analyzing direct and indirect project GHG emissions generated within California and not life-cycle emissions because the life-cycle effects from a project could occur outside of California, might not be very well understood or documented, and would be challenging to mitigate. 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, 2018b, p. 40)

A. Establishment of Significance Thresholds

The Lake Elsinore CAP was adopted to ensure that the City of Lake Elsinore achieves the GHG reduction targets established by AB 32 to reduce GHG emissions to 1990 levels by 2020. As such, projects that are consistent with the City's CAP do not require quantification of project-specific GHG emissions and, consistent with CEQA Guidelines, such projects are considered to be consistent with the GHG reduction targets established by AB 32. (Lake Elsinore, 2011)

The Lake Elsinore CAP also establishes a target to reduce GHG emissions by 33% below 1990 levels by 2030. However, SB 32, which was enacted subsequent to adoption of the City's CAP, sets a statewide reduction target for GHG emissions of 40% below 1990 levels by 2030. Thus, projects that are consistent with the CAP are not necessarily consistent with the GHG reduction targets established by SB 32. Rather, additional analysis and, if necessary, mitigation is required in order to demonstrate compliance with SB 32. Specifically, projects that are consistent with the CAP and that incorporate mitigation measures that go beyond the measures identified by the CAP can be found consistent with SB 32 if the additional mitigation achieves the additional 7% reductions needed to achieve the GHG reduction target of 40% below 1990 levels by 2030 on an individual project basis.

B. Methodology for Calculating Project-Related Construction Emissions

Construction activities associated with the proposed Project would result in emissions of CO_2 and CH_4 from construction activities. The Project's Air Quality Impact Analysis ("AQIA," *Technical Appendix B*) contains detailed information regarding construction activity. For construction-phase Project emissions, GHGs are 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 greenhouse gas emissions for the construction activities, dividing it by 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, 2018b, p. 41)

C. 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; Energy Source Emissions; Mobile Source Emissions; Solid Waste; and Water Supply, Treatment and Distribution (Urban Crossroads, 2018b, p. 41). Each is discussed below.

1. Area Source Emissions

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. CalEEMod default parameters were used to estimate emissions associated with landscape maintenance equipment for the Project scenario. (Urban Crossroads, 2018b, p. 41)

Hearths/Fireplaces

GHG emissions would result from the combustion of wood or biomass and are considered biogenic emissions of CO_2. The emissions associated with use of hearths/fireplaces were calculated based on assumptions provided in the CalEEMod model. The Project is required to comply with SCAQMD Rule 445, which prohibits the use of wood burning stoves and fireplaces in new development. In order to account for the requirements of this Rule, the unmitigated CalEEMod model estimates were adjusted to remove wood burning stoves and fireplaces. As the project is required to comply with SCAQMD Rule 445, the removal of wood burning stoves and fireplaces is not considered "mitigation" although it must be identified as such in CalEEMod in order to treat the case appropriately. (Urban Crossroads, 2018b, p. 41)

2. Energy Source Emissions

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. It should be noted that the building energy use emissions do not include street lighting.[2] GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Unless otherwise noted, CalEEMod default parameters were used. (Urban Crossroads, 2018b, p. 42)

3. Mobile Source Emissions

Project mobile source greenhouse gas emissions are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. The Project-related operational air quality impacts are derived primarily from vehicle trips generated by the Project. Trip characteristics available from the Project's Traffic Impact Analysis (EIR *Technical Appendix L*) were utilized in the analysis. (Urban Crossroads, 2018b, p. 42)

Per the Project's TIA, the Project is expected to generate a net total of approximately 6,901 trip-ends per day (actual vehicles) on a typical weekday with 734 AM peak hour trips and 622 PM peak hour trips. It should be noted that weekday and Saturday trip characteristics are based on CalEEMod defaults. The Project's GHGA relies on the net Project trips (as opposed to the passenger car equivalents) to accurately account for the effect of individual truck emissions associated with the Project. (Urban Crossroads, 2018b, p. 42)

4. Solid Waste Emissions

Residential and commercial land uses would result in the generation and disposal of solid waste. A large percentage of this waste would 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 would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material.

[2] The CalEEMod emissions inventory model does not include indirect emission related to street lighting. Indirect emissions related to street lighting are expected to be negligible and cannot be accurately quantified at this time as there is insufficient information as to the number and type of street lighting that would occur.

CalEEMod default parameters were used to estimate GHG emissions associated with the disposal of solid waste for the Project scenario. (Urban Crossroads, 2018b, p. 42)

5. 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. CalEEMod default parameters were used to estimate GHG emissions associated with water supply, treatment and distribution for the Project scenario. (Urban Crossroads, 2018b, pp. 42-43)

4.6.5 IMPACT ANALYSIS

Threshold a.: ***Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

In order to determine whether the Project's GHG emissions would have a potentially significant impact on the environment, the analysis herein evaluates whether the Project's emissions would be consistent with the GHG reduction targets established by AB 32 and SB 32. Per recommendations from the SCAQMD, a screening threshold also is utilized to evaluate whether the Project's GHG emissions would have the potential to be cumulatively considerable.

SCAQMD Screening Threshold

The City of Lake Elsinore has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. A screening threshold of 3,000 $MTCO_2e$ per year to determine if additional analysis is required is an acceptable approach for small projects. This approach is a widely accepted screening threshold used by various jurisdictions in the South Coast Air Basin (SCAB) and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required. (Urban Crossroads, 2018b, p. 43)

As shown on Table 4.6-4, *Total Project Greenhouse Gas Emissions (Annual)*, the proposed Project would result in approximately 4,021.78 $MTCO_2e$ per year from construction, area, energy, waste, and water usage. In addition, the proposed Project has the potential to result in an additional 9,136.27 $MTCO_2e$ per year from mobile sources. As such, the proposed Project has the potential to generate a total of approximately 13,158.05 $MTCO_2e$ per year and would therefore exceed the SCAQMD's numeric threshold of 3,000 $MTCO_2e$ if it were applied. It should be noted however that the 3,000 $MTCO_2e$ threshold is a screening threshold used to determine if additional analysis is required. Because the Project would exceed the screening threshold, additional analysis is required to determine whether the Project's GHG emissions would comply with the GHG reduction targets established by AB 32 and SB 32 and to determine whether the Project's GHG emissions would have the potential to significantly impact the environment. (Urban Crossroads, 2018b, p. 43)

Project Consistency with AB 32 Reduction Targets

As discussed in the Newall Ranch decision (as discussed in subsection 4.6.2.C), 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. The City of Lake Elsinore's CAP serves to fulfill this role and is designed to ensure that the development accommodated by the buildout of the General Plan supports the goals of AB 32, while also identifying GHG reductions anticipated for 2030. CARB adopted the State's strategy for achieving AB 32 targets in its Climate Change Scoping Plan (Scoping Plan) in 2008. The Scoping Plan GHG reduction goal is to reduce statewide emissions to 1990 levels by 2020. The Lake Elsinore CAP includes strategies that will achieve this target in the City of Lake Elsinore. The CAP target is to reduce City-wide emissions by the amount recommended in the Scoping Plan for local governments. Specifically, the CAP identifies an efficiency-based target, which is a measure of the amount of GHG emissions associated with a given development divided by the service population (SP), which is defined as the City's total number of employees and residents. The CAP identifies an efficiency-based target to reduce community-wide emissions to 6.6 MT CO_2e per SP, which, if achieved, would meet the GHG reduction targets established by AB 32 and Executive Order S-3-05. (Lake Elsinore, 2011, p. 4-1)

Table 4.6-4 Total Project Greenhouse Gas Emissions (Annual)

Emission Source	Emissions (metric tons per year) CO_2e
Annual construction-related emissions amortized over 30 years	128.92
Area	43.49
Energy	3,303.58
Mobile Sources	9,136.27
Waste	303.36
Water Usage	242.44
Proposed Project Total Emissions	**13,158.05**

(Urban Crossroads, 2018b, Table 3-1)

Table 4.6-5, *Project Consistency with City of Lake Elsinore CAP*, provides an analysis of the Project's consistency with the Lake Elsinore CAP. As shown, the proposed Project would be consistent with or otherwise would not conflict with most of the applicable CAP reduction measures. However, in the absence of mitigation, it cannot be assured that all applicable CAP measures would be implemented by the Project. Because the City's CAP was adopted to reduce City-wide GHG emission levels to 1990 levels by 2020, consistent with AB 32, and because the Project would conflict with applicable CAP measures in the absence of mitigation, the Project's GHG emissions would have the potential to conflict with the reduction targets established by AB 32. This represents a significant impact for which mitigation would be required.

Table 4.6-5 Project Consistency with City of Lake Elsinore CAP

CAP Measure	Applicability to Proposed Project	Remarks
Measure T-1.2: Pedestrian Infrastructure	Applicable	This measure requires the installation of sidewalks along new and reconstructed streets and sidewalks or paths to internally link all uses and provide connections to neighborhood activity centers, major destinations, and transit facilities contiguous with the project site. As required by the Project's Tentative Map (TM 37305) and the Nichols Ranch Specific Plan (NRSP), the Project would be required to provide sidewalks along Nichols Road, El Toro Road/Wood Mesa Court, and all internal streets. As part of its future review of design review and building permit applications, the Department of Public Works and Building Department would review plans to ensure sidewalks are accommodated in conformance with TM 37305, and also would review plans to ensure that the landscaped greenbelts required by the proposed NRSP are incorporated along "A" Street and "B" Street. As such, the proposed Project would not conflict with this measure.
Measure T-1.4: Bicycle Infrastructure	Applicable	This measure requires new development to implement and connect to the network of Class I, II and III bikeways, trails and safety features identified in the General Plan, Bike Lane Master Plan, Trails Master Plan and Western Riverside County Non-Motorized Transportation Plan. Consistent with the City's General Plan and the proposed NRSP a Class II bicycle lane is accommodated by TM 37305 and the proposed NRSP along Nichols Road. As part of its future review of future improvement plans for Nichols Road, the City would review plans to ensure that the Class II bicycle lane is accommodated. As such, the proposed Project would not conflict with this measure.
Measure T-1.5: Bicycle Parking Standards	Applicable	This measure requires the City to enforce short-term and long-term bicycle parking standards for new non- residential developments. The provision of bicycle parking for non-residential development is a requirement of the Green Building Code (Section 5.106.4), which, consistent with the CAP measures, requires short-term parking for bicycles equal to 5 percent of required vehicle parking spaces, and requires new buildings with 10 or more tenant occupants to accommodate secure bicycle parking equal to 5 percent of the required vehicular parking spaces. Compliance with the Green Building Standards Code is mandatory and would be enforced as part of the City's future review of Commercial Design Review and building permit applications for proposed commercial uses on site. As such, the proposed Project would not conflict with this measure.

CAP Measure	Applicability to Proposed Project	Remarks
Measure T-2.1: Designated Parking for Fuel Efficient Vehicles	Applicable	This measure requires new non- residential developments to designate 10% of total parking spaces for low-emitting, fuel-efficient vehicles. The provision of preferred parking for fuel efficient vehicles is a requirement of the 2016 California Green Building Code (Section 5.106.5.2); however, the Green Building Standards Code only requires preferred parking for fuel efficient vehicles at a rate of 8% of the total required parking spaces. Thus, in the absence of mitigation, the Project has the potential to conflict with Measure T-2.1. This represents a potentially significant impact prior to mitigation.
Measure T-4.1: Commute Trip Reduction Program	Applicable	This measure requires the City to institute a commute trip reduction program for employers with fewer than 100 employees. Although Chapter 10.68 (Transportation Demand Management) of the City's Municipal Code was adopted to promote reduction in commute trips, Chapter 10.68 applies only to developments with more than 100 employees. Thus, in the absence of mitigation, the Project has the potential to conflict with Measure T-4.1.
Measure E-1.1: Tree Planting Requirements	Applicable	This measure requires new developments to plant at minimum one 15-gallon non-deciduous, umbrella-form tree per 30 linear feet of boundary length near buildings. Municipal Code Section 17.124.080 implements this requirement for general commercial land uses. Compliance with Municipal Code requirements would be assured through future City review of Commercial Design Review and building permit applications. As such, the proposed Project would not conflict with this measure.
Measure E-1.2: Cool Roof Requirements	Applicable	This measure requires new non- residential development to use roofing materials having solar reflectance, thermal emittance or Solar Reflectance Index consistent with CalGreen Tier 1 values. The provision of cool roofs is a requirement of the California Green Building Code (Section A5.106.11). Compliance with the Green Building Standards Code is mandatory and would be enforced as part of the City's future review of Commercial Design Review and building permits applications for proposed commercial uses on site. As such, the proposed Project would not conflict with this measure.
Measure E-1.3: Energy Efficient Building Standards	Applicable	This measure requires that new construction exceed the California Energy Code requirements, based on the 2008 Energy Efficiency Standards by 15% by 2020, through either the performance based or prescriptive approach described in the California Green Building Code. In the absence of mitigation, it cannot be assured that the Project would achieve the required reduction. Thus, in the absence of mitigation, the Project has the potential to conflict with Measure E-1.3.

CAP Measure	Applicability to Proposed Project	Remarks
Measure E-3.2: Energy Efficient Street and Traffic Signal Lights	Applicable	This measure requires the City to work with Southern California Edison to replace existing high-pressure sodium street lights and traffic lights with high efficiency alternatives, such as Low Emitting Diode (LED) lights; replace existing City owned traffic lights with LED lights; require any new street and traffic lights to be LED. This requirement applies to the Project's proposed construction of a new traffic signal at the intersection of "A" Street and Nichols Road. As part of the City's future review of improvement plans involving a traffic signal, the City would ensure that the traffic signal is proposed with LED lights. As such, the proposed Project would not conflict with this measure.
Measure E-4.1: Landscaping Ordinance	Applicable	This measure requires the City to enforce the City's AB 1881 Landscaping Ordinance, which requires that landscaping be water efficient, thereby consuming less energy and reducing emissions. The NRSP includes a community plant palette that emphasizes water efficient species. Additionally, the City would review future design review and building permit applications for compliance with Lake Elsinore Municipal Code Chapter 19.08 (Water Efficient Landscape Requirements), which is the City's AB 1881 Landscaping Ordinance. . As such, the proposed Project would not conflict with this measure.
Measure E-4.2: Indoor Water Conservation Requirements	Applicable	This measure requires that development projects reduce indoor water consumption by 30% by 2020. Indoor water conservation is a requirement of Division 5.3 (Water Efficiency and Conservation) of the 2016 California Green Building Code, which is implemented through the City's Municipal Code. Compliance with the requirement to reduce indoor water consumption would be enforced as part of future City review of building permit applications. Thus, the proposed Project would not conflict with this measure.
Measure E-5.1: Renewable Energy Incentives	Applicable	This measure facilitates the voluntary installation of small-scale renewable energy systems, such as solar photovoltaic and solar hot water systems, by connecting residents and businesses with technical and financial assistance through the City website. This measure would be implemented by the City, and future Project residents would receive information regarding installation of small-scale renewable energy systems, including solar. . No elements of the proposed Project would conflict with this measure.
Measure S-1.4: Construction and Demolition Waste Diversion	Applicable	This measure requires development projects to divert, recycle or salvage at least 65% of nonhazardous construction and demolition debris generated at the site by 2020 and requires all construction and demolition projects to be accompanied by a waste management plan for the project. Pursuant to Lake Elsinore Municipal Code Title 14, Chapter 14.12 (Construction and Demolition Waste Management), the Project Applicant

CAP Measure	Applicability to Proposed Project	Remarks
		would be required to prepare a Waste Recycling Plan to demonstrate how construction and demolition waste would be diverted from local landfills. However, Chapter 14.12 requires a diversion rate of only 50%. Thus, the Project would have the potential to conflict with this measure in the absence of mitigation.

(Urban Crossroads, 2018b, Table 3-4)

Project Consistency with SB 32 Reduction Targets

Senate Bill 32 (SB 32) establishes a statewide GHG reduction target to achieve emission levels that are 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide greenhouse gas reduction target of 80% below 1990 levels by 2050. (Urban Crossroads, 2018b, p. 53)

The City of Lake Elsinore CAP was developed prior to the passage of SB 32. The CAP identifies a GHG reduction target of 6.6 $MTCO_2e$ per SP by 2020, and a reduction target of 4.4 $MTCO_2e$ per SP by 2030. These reduction targets would achieve 1990 GHG emission levels in the City of Lake Elsinore by 2020 and would result in GHG emissions that are approximately 33% below 1990 levels by 2030. In consideration of the fact that 6.6 $MTCO_2e$ per SP represents the City's 1990 emission level target, then in order to meet the SB 32 target to reduce emissions to 40% below 1990 levels by 2030 the City would be required to achieve a service-population ratio of 3.96 $MTCO_2e$ per SP (6.6 $MTCO_2e$ per SP x 60% = 3.96 $MTCO_2e$/SP). Therefore, although the Project would be consistent with or otherwise would not conflict with the City's CAP after the incorporation of mitigation, compliance with the CAP is not sufficient to demonstrate consistency at the Project level with the reduction targets of SB 32 to achieve 40% below 1990 levels by 2030.

According to research conducted by the Lawrence Berkeley National Laboratory and supported by the CARB, California, under its existing and proposed GHG reduction policies, is on track to meet the 2020 reduction targets under AB 32 and could achieve the 2030 goals under SB 32. The research utilized a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance to existing and future GHG-reducing policies. The CALGAPS model showed that GHG emissions through 2020 could range from 317 to 415 $MTCO_2e$ per year, "indicating that existing state policies will likely allow California to meet its target [of 2020 levels under AB 32]." CALGAPS also showed that by 2030, emissions could range from 211 to 428 $MTCO_2e$ per year, indicating that "even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40 percent below the 1990 level [of SB 32]." CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Though the research indicated that the emissions would not meet the state's 80 percent reduction goal by 2050, various combinations of policies could allow California's cumulative emissions to remain very low through 2050. (Urban Crossroads, 2018b, pp. 53-54)

Implementation of the Project would not actively interfere with any future City-mandated, state-mandated, or federally-mandated retrofit obligations enacted or promulgated to legally require development projects City-wide, state-wide, or nation-wide to assist in meeting state-adopted greenhouse gas emissions reduction targets, including that established under Executive Order S-3-05, Executive Order B-30-15, or SB 32. For example, California has set a goal to obtain 100 percent of its electric power from zero-emission sources by 2045, and future commercial and residential uses proposed by the Project would be served by energy purveyors that will be required to increasingly rely on zero-emission sources. Additionally, vehicular traffic associated with the Project would be subject to increasingly stringent standards for fuel efficiency and emissions. Thus, the Project would be subject to future City-mandated, state-mandated, or federally-mandated standards for existing development and would not conflict with any such future requirements. (Urban Crossroads, 2018b, p. 54)

The Project does not interfere with the state's implementation of (i) Executive Order B-30-15 and SB 32's target of reducing statewide GHG emissions to 40% below 1990 levels by 2030 or (ii) Executive Order S-3-05's target of reducing statewide GHG emissions to 80% below 1990 levels by 2050 because it does not interfere with the state's implementation of GHG reduction plans described in the CARB's Updated Scoping Plan, including the state providing for 12,000 MW of renewable distributed generation by 2020, the California Building Commission mandating net zero energy homes in the building code after 2020, or existing building retrofits under AB 758. Construction of the Project would be mandated by state law to comply with all applicable regulations in effect at that time. (Urban Crossroads, 2018b, p. 54)

Notwithstanding, because compliance with the City's CAP would only achieve a reduction of 33% in GHG emissions below 1990 levels by 2030, the Project's GHG emissions considered in isolation would not achieve the reduction targets established by SB 32 in the absence of mitigation. Thus, the Project's GHG emissions would be cumulatively considerable prior to mitigation and therefore may have a significant impact on the environment.

Threshold b.: ***Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.***

Applicable plans, policies, or regulations that are in effect in the Project area include the City of Lake Elsinore CAP, AB 32, the CARB Scoping Plan, and SB 32.

Project Consistency with the City of Lake Elsinore CAP

As indicated under the analysis of Threshold a., and as previously summarized in Table 4.6-5, the Project would be consistent with, or otherwise would not conflict with, most of the applicable measures from the City of Lake Elsinore CAP. However, several of the measures identified in the City's CAP are not currently requirements of the City's Municipal Code and/or the 2016 California Green Building Standards Code. Thus, in the absence of mitigation, the Project would result in a significant impact due to a conflict with the City's CAP.

Project Consistency with AB 32 and CARB's Scoping Plan

CARB's Scoping Plan identifies strategies to reduce California's greenhouse gas emissions in support of AB 32. Many of the strategies identified in the Scoping Plan are not applicable at the project level, such as long-term technological improvements to reduce emissions from vehicles. Some measures are applicable and supported by the Project, such as energy efficiency. Finally, while some measures are not directly applicable, the Project would not conflict with their implementation. Reduction measures are grouped into 18 action categories, as follows: (Urban Crossroads, 2018b, pp. 51-52)

1. California Cap-and-Trade Program Linked to Western Climate Initiative Partner Jurisdictions. Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap–and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.

2. California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.

3. Energy Efficiency. Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).

4. Renewables Portfolio Standards. Achieve 33 percent renewable energy mix statewide.

5. Low Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.

6. Regional Transportation-Related Greenhouse Gas Targets. Develop regional greenhouse gas emissions reduction targets for passenger vehicles.

7. Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.

8. Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.

9. Million Solar Roofs Program. Install 3,000 megawatts of solar-electric capacity under California's existing solar programs.

10. Medium- and Heavy-Duty Vehicles. Adopt medium- (MD) and heavy-duty (HD) vehicle efficiencies. Aerodynamic efficiency measures for HD trucks pulling trailers 53-feet or longer that include improvements in trailer aerodynamics and use of rolling resistance tires were adopted in 2008 and went

into effect in 2010. Future, yet to be determined improvements, includes hybridization of MD and HD trucks.

11. Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.

12. High Speed Rail. Support implementation of a high-speed rail system.

13. Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.

14. High Global Warming Potential Gases. Adopt measures to reduce high warming global potential gases.

15. Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials, and mandate commercial recycling. Move toward zero-waste.

16. Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. The 2020 target for carbon sequestration is 5 million $MTCO_2e$/yr.

17. Water. Continue efficiency programs and use cleaner energy sources to move and treat water.

18. Agriculture. In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.

Table 4.6-6, *Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Measures*, summarizes the Project's consistency with the State Scoping Plan. As summarized, the Project would not conflict with any of the provisions of the Scoping Plan and in fact supports the action categories: energy efficiency, water conservation, recycling, and landscaping.

Project Consistency with SB 32

As indicated under the discussion of Threshold a., SB 32 requires the state to reduce statewide greenhouse gas emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide greenhouse gas reduction target of 80% below 1990 levels by 2050. (Urban Crossroads, 2018b, p. 53) Although the Project would be consistent with the Lake Elsinore CAP following implementation of the mitigation measures identified herein, compliance with the CAP would only demonstrate that the Project would achieve a reduction in GHGs that is equal to approximately 33% below

Table 4.6-6 Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Measures

Number	Scoping Plan Measure	Remarks
T-1	Pavley Motor Vehicle Standards (AB 1493)	Future vehicles associated with Project residents and businesses on site would include vehicles in compliance with incumbent CARB vehicle standards
H-4	Limit High GWP Use in Consumer Products	Residents and future business on site would use consumer products that would comply with the incumbent regulations
H-1	Motor Vehicle Air Conditioning Systems – Reduction from Non-Professional Servicing	Residents and future business on site would be prohibited from performing air conditioning repairs and required to use professional servicing.
T-4	Tire Pressure Program	Proper tire pressure for motor vehicles associated with future residential and commercial uses on site would be maintained when vehicles are serviced.
T-2	Low Carbon Fuel Standard	Motor vehicles associated with future residents and businesses would use fuels that are compliant with incumbent standards.
W-1	Water Use Efficiency	Development proposals within the Project site would implement measures to minimize water use and maximize efficiency. The Project will be required to show consistency with the City of Lake Elsinore's municipal code requiring efficient landscape requirements (Chapter 19.08 of the City's municipal code / consistency with the City's AB 1881 Landscaping Ordinance).
GB-1	Green Buildings	Development proposals within the Project site would be constructed in compliance with incumbent state or local green building standards.
H-5	Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	Motor vehicles driven by residents, employees, and customers would comply with the leak test requirements during smog checks.
E-1	Energy Efficiency Measures (Electricity)	The Project would comply with incumbent electrical energy efficiency standards. At this time, the Project would be required to comply with the 2016 Title 24 standards and applicable green building standards.
CR-1	Energy Efficiency (Natural Gas)	Development proposals within the Project site would comply with incumbent natural gas energy efficiency standards. At this time, the Project would be required to comply with the 2016 Title 24 standards and applicable green building standards.
GB-1	Greening New Residential and Commercial Construction	Development proposals within the Project site would comply with incumbent green building standards. At this time, the Project would be required to comply with the 2016 Title 24 standards and applicable green building standards.
GB-1	Greening Existing Homes and Commercial Buildings	Development proposals within the Project site would meet retrofit standards as they become effective.

(Urban Crossroads, 2018b, Table 3-5)

1990 levels by 2030; therefore, it cannot be demonstrated that the Project would achieve the target to reduce emissions to 40% below 1990 levels by 2030. Accordingly, prior to mitigation, the Project is potentially

inconsistent with the GHG reduction targets established by SB 32 and this is considered a cumulatively-considerable impact of the proposed Project.

4.6.6 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 produce total annual GHG emissions (13,158.05 $MTCO_2e$ per year) at Buildout Year (2024) that would exceed the SCAQMD screening threshold of 3,000 $MTCO_2e$. In the absence of mitigation, the Project would have the potential to conflict with the City of Lake Elsinore CAP, which is intended to meet the GHG reduction targets established by AB 32; thus, prior to mitigation, the Project would conflict with AB 32. Additionally, prior to mitigation, the Project would result in a cumulatively-considerable impact due to a conflict with the GHG reduction targets established by SB 32. Thus, the Project's GHG emission impacts would be cumulatively considerable prior to mitigation.

4.6.7 Significance of Impacts Before Mitigation

Threshold a.: Cumulatively-Considerable Impact. As shown in Table 4.6-4 the proposed Project would result in approximately 13,158.05 $MTCO_2e$ per year from construction, area, mobile, energy, waste, and water usage. This level of emissions exceeds the screening threshold established by the SCAQMD for non-industrial projects (3,000 $MTCO_2e$). Although the proposed Project would comply with most of the applicable provisions of the Lake Elsinore CAP, which was prepared to achieve the AB 32 GHG reduction target to achieve 1990 emission levels by 2020, in the absence of mitigation it cannot be assured that the Project would implement certain applicable measures from the CAP that are not already a requirement of the City's Municipal Code and/or the 2016 Green Building Standards Code. Additionally, the CAP does not adequately address the GHG reduction target established by SB 32 to reduce emission levels to 40% below 1990 levels by 2030. As such, prior to mitigation the Project would result in a cumulatively-considerable impact due to GHG emissions that may have a significant impact on the environment.

Threshold b.: Cumulatively-Considerable Impact. In the absence of mitigation, the Project would have the potential to conflict with the Lake Elsinore CAP, which was prepared to ensure compliance City-wide with the GHG reduction targets established by AB 32. Thus, prior to mitigation, the Project has the potential to conflict with the City's CAP. Additionally, it cannot be demonstrated that the Project would achieve the GHG reduction target specified by SB 32 to reduce GHG emissions to 40% below 1990 levels by 2030. Rather, compliance with the CAP would only result in City-wide reductions of approximately 33% below 1990 levels. As such, the Project's potential to conflict with SB 32 represents a cumulatively-considerable impact prior to

mitigation. However, the Project would be consistent with or otherwise would not conflict with the CARB Scoping Plan (refer to Table 4.6-3).

4.6.8 CITY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

The following are standard applicable regulations and project design requirements within the City of Lake Elsinore. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable Project design and regulatory requirements.

The Project would be required to comply with all mandates imposed by the State of California and the South Coast Air Quality Management District aimed at the reduction of air quality emissions. Those that are applicable to the Project and that would assist in the reduction of greenhouse gas emissions are listed below. (Urban Crossroads, 2018b, pp. 3, 6)

- Global Warming Solutions Act of 2006 (AB32)
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (SB 375)
- Pavley Fuel Efficiency Standards (AB1493). Establishes fuel efficiency ratings for new vehicles.
- Title 24 California Code of Regulations (California Building Code). Establishes energy efficiency requirements for new construction.
- Title 20 California Code of Regulations (Appliance Energy Efficiency Standards). Establishes energy efficiency requirements for appliances.
- Title 17 California Code of Regulations (Low Carbon Fuel Standard). Requires carbon content of fuel sold in California to be 10% less by 2020.
- California Water Conservation in Landscaping Act of 2006 (AB1881). Requires local agencies to adopt the Department of Water Resources updated Water Efficient Landscape Ordinance or equivalent by January 1, 2010 to ensure efficient landscapes in new development and reduced water waste in existing landscapes.
- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions.
- Renewable Portfolio Standards (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.

Promulgated regulations that would affect the Project's emissions are accounted for in the Project's GHG calculations (refer to Table 4.6-4). In particular, the Pavley Standards, Low Carbon Fuel Standards, and Renewable Portfolio Standards (RPS) would be in effect for the AB 32 target year of 2020, and therefore are accounted for in the Project's emission calculations. (Urban Crossroads, 2018b, p. 6)

Additionally, the Project accommodates the following design features and/or regulatory requirements that would serve to reduce the Project's GHG emission:

- The Project complies with all applicable provisions of the City of Lake Elsinore Climate Action Plan (December 13, 2011), including applicable requirements identified in Table 4.6-5.

- The Project is designed to provide pedestrian connections along selected roads and trails within the development to provide access to the various uses and activity centers within the Project. Facilitating pedestrian access encourages people to walk instead of drive. The Project would not impose barriers to pedestrian access and interconnectivity.

- The Project is designed to accommodate a mix of uses (i.e., residential, commercial, and recreational land uses) which would serve to reduce travel distances and regional vehicle miles traveled (VMT) by consolidating trips and reducing requirements for multiple trips. The Project would minimize the need for external trips by including services/facilities for uses such as day care, banking/ATM, restaurants, vehicle refueling, health care, personal services (e.g., salons, dry cleaning, etc.) and/or shopping uses.

- The Project is required to comply with SCAQMD Rule 445, which prohibits the use of wood burning stoves and fireplaces in new development.

- The Project is required to comply with applicable provisions of the 2016 California Green Building Standards Code (or any updated code that may be in existence at the time of issuance of building permits), as implemented by the City's Municipal Code. These requirements include, but are not limited to, the following:

    - Prior to issuance of occupancy permits, the City of Lake Elsinore shall ensure that commercial uses on site accommodate the required number of Electric Vehicle (EV) charging stations as required by the 2016 Green Building Standards Code Section 5.106.5.3 (Electric vehicle (EV) charging).

    - Prior to issuance of grading, demolition, or building permits, the Project Applicant shall prepare, and the City of Lake Elsinore shall review and approve, a Construction Waste Management Plan, in conformance with the 2016 Green Building Standards Code Section 5.408 (Construction Waste Reduction, Disposal and Recycling). The Construction Waste Management Plan shall demonstrate that a minimum of 65 percent of the nonhazardous construction and demolition waste will be recycled and/or salvaged, except as otherwise allowed by Section 5.408.

Mitigation

MM 4.6-1 Prior to the issuance of building permits, the City of Lake Elsinore shall review the building plans to ensure that the following requirements have been or will be met:

- The Project Applicant shall provide evidence that the buildings have been designed to achieve efficiency exceeding current 2016 California Building Code Title 24 requirements by at least 15 percent for both residential and non-residential uses.

- All primary use buildings and structures shall be designed to accommodate photovoltaic (PV) solar arrays taking into consideration limitations imposed by other rooftop equipment, roof warranties, building and fire code requirements, and other physical or legal limitations. The electrical system and infrastructure must be clearly labeled with noticeable and permanent signage which informs future tenant/purchasers of the existence of this infrastructure.
- To reduce water demands and associated energy use, a Water Conservation Strategy shall be implemented that demonstrates a minimum 20% reduction in outdoor water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). Future building permit applications shall incorporate the following:
  - The landscaping palette shall emphasize drought-tolerant plants consistent with provisions of the City of Lake Elsinore requirements;
  - Irrigation plans shall demonstrate use of water-efficient irrigation techniques consistent with City of Lake Elsinore requirements.
- Project building plans shall incorporate the following:
  - U.S. EPA Certified WaterSense labeled or equivalent faucets, high-efficiency toilets HETs), and water-conserving shower heads.
  - All appliances shall be energy star appliances (refrigerator, dish washer, and washing machine).

MM 4.6-2 Prior to the issuance of building permits, the City of Lake Elsinore shall review Project building plans to ensure that all outdoor lighting consists of solar or light-emitting diodes (LEDs), where feasible. Use of any other type of lighting, if required for operational or safety reasons, shall be minimized to the extent feasible.

MM 4.6-3 Prior to issuance of occupancy permits for any proposed commercial uses on site, the City of Lake Elsinore shall ensure that at least 10% of the required parking spaces are reserved for fuel-efficient vehicles (i.e., vehicles bearing Clean Air Vehicle stickers from expired High Occupancy Vehicle lane programs).

MM 4.6-4 Prior to the issuance of occupancy permits for any proposed commercial uses on site, the Project Applicant shall prepare a Commute Trip Reduction Program that requires 20% of employees to be offered telecommuting or other trip reduction techniques, consistent with Measure T-4.1 of the Lake Elsinore Climate Action Plan (CAP). The Commute Trip Reduction Program also shall require future tenants to provide information, training, and incentives to future employees to encourage participation.

4.6.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a.: Less-than-Cumulatively Considerable Impact with Mitigation. Implementation of Mitigation Measures MM 4.6-2 through MM 4.6-4 and compliance with applicable regulatory requirements and Project design features as identified above in subsection 4.6.8 would ensure that the proposed Project implements applicable measures from the Lake Elsinore CAP. Compliance with the City's CAP demonstrates that City-wide GHG emissions would be reduced to 1990 levels by 2020 and 33% below 1990 emission levels by 2030[3]. Per SB 32, the reduction target is 40% below 1990 levels by 2030, which for purposes of analysis herein, the Project is required to meet to demonstrate a less-than-significant impact. In order to show consistency with SB 32, the Project would need to demonstrate a minimum of 7% reduction through implementation of mitigations measures beyond what is required through the CAP. As shown on Table 4.6-7, *Total Project 2030 Greenhouse Gas Emissions (With Mitigation)*, the Project's 2030 emissions would result in 11,156.33 $MTCO_2e$ per year after implementation of the mitigation measures, regulatory requirements, and Project design features identified above in subsection 4.6.8. This yields an additional reduction of approximately 15% which satisfies the additional 7% needed to meet the SB 32 reduction target, as shown in Table 4.6-8, *Greenhouse Gas Emissions (Without Mitigation vs. With Mitigation)*. Because with mitigation the Project would be consistent with the City's CAP and would demonstrate an additional 15% reduction through implementation of mitigation, regulatory requirements, and Project design features by 2030, the Project would be consistent with the statewide reduction targets for GHG emissions as established by SB 32. Therefore, with regulatory requirements, Project design features, and mitigation measures, the Project's GHG emissions would be consistent with the state's GHG reduction targets and impacts would be reduced to less-than-significant levels. (Urban Crossroads, 2018b, pp. 43-44) .

Table 4.6-7 Total Project 2030 Greenhouse Gas Emissions (With Mitigation)

Emission Source	Emissions (metric tons per year) CO_2e
Annual construction-related emissions amortized over 30 years	128.92
Area	43.49
Energy	2,209.95
Mobile Sources	8,353.71
Waste	303.36
Water Usage	116.90
Proposed Project Total Emissions	**11,156.33**

(Urban Crossroads, 2018b, Table 3-2).

[3] This is based on an assumption that the service population ratio for 2020 is equal to the City's 1990 level of emissions (6.6 $MTCO_2e$/yr/SP), and the 4.4 $MTCO_2e$/yr/SP reduction specified by the CAP for 2030; this results in a 33% reduction below 1990 emission levels.

Table 4.6-8 Greenhouse Gas Emissions (Without Mitigation vs. With Mitigation)

Emission Source	Emissions (metric tons per year) CO_2e	
	Without Mitigation	With Mitigation
Total	13,158.05	11,156.33
Reduction	15.21%	
Project Minimum Improvement	7%	
Meets Requirement?	YES	

(Urban Crossroads, 2018b, Table 3-3)

Threshold b.: Less-than-Cumulatively Considerable Impact with Mitigation. As indicated above under the discussion of Threshold a., with implementation of the required mitigation the Project would be fully consistent with the City of Lake Elsinore CAP, and therefore would be consistent with the GHG reduction targets established by AB 32. Additionally, the Project would not conflict with the CARB Scoping Plan. Furthermore, with implementation of regulatory requirements, Project design features, and mitigation measures, the Project would exceed the GHG reduction target established by SB 32 to reduce emissions to 40% below 1990 levels by 2030. Accordingly, Project impacts due to a conflict with a plan, policy, or regulation adopted to reduce GHG emissions would be reduced to less-than-significant levels.

4.7 HAZARDS AND HAZARDOUS MATERIALS

The information and analysis presented in this Subsection is based in part of a technical study that was prepared to determine the presence or absence of hazardous materials on the Project site under existing conditions. The report titled, "Phase I Environmental Site Assessment" ("ESA") prepared by Terracon Consultants, Inc. (referenced herein as "Terracon"), and dated December 27, 2017, addresses the entire Project site (Terracon, 2017). This report is included as EIR *Technical Appendix F*. Information in this Subsection is also based in part on a technical study for wildfire protection titled, "Fire Protection Plan" and prepared by Firewise 2000, Inc. (referenced herein as "Firewise"), which is dated January 25, 2019 and included as *Technical Appendix G*. (Firewise, 2019).

4.7.1 EXISTING CONDITIONS

A. Definition of Toxic Substances and Hazardous Waste

For 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.

"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 [EPA] 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).

B. Historical Review, Regulatory Review, and Field Reconnaissance

Terracon performed a search of readily available environmental record sources. The search results are summarized below. The search radius for each data base was one mile from the Project site. Environmental Data Resources, Inc. (EDR) conducted a search for sites listed on various federal and state databases within one mile of the Project site. A detailed description of the results of the regulatory records review is provided in the Project's ESA, (*Technical Appendix F*), and is summarized below.

1. Historical Review

Terracon performed a search of aerial photographs, topographical maps, and Sanborn fire insurance maps, and interviewed property owners in order to determine that past uses of the Project site. The Project site was vacant and undeveloped until approximately 1961 when a structure was developed on the southeast portion of the site. In the late-1960s, additional structures were developed on the southeast portion of the site and an apparent landing strip was developed on the southern portion of the site. By 1978, the landing strip was removed. By 2005, the structures on the southeast portion of the site were removed and site was utilized to stockpile topsoil from the adjacent Nichols Mine, located north of Nichols Road. Site reconnaissance conducted by Terracon, found that the northern portion of the Project site has been filled and graded as part of reclamation activities pursuant to Amendment No. 2 to Reclamation Plan No. 2006-01 (RP 2006-01A2.) (Terracon, 2017, p. 6)

2. Regulatory Records Review

Terracon conducted a search for site listed on various federal and state databases within the vicinity of the Project site. The databases provide lists of facilities that use, store, or disposes of hazardous substances, as well as sites with known or suspected contaminated soil or groundwater. The Project site was not located on any of the databases reviewed by Terracon. The database search identified one site, the Nichols Canyon Mine, which is located immediately north of the Project site and is identified in the regulatory database Mines listing. Seventeen unmapped facilities (sites with inadequate address or location information to be mapped) were listed surrounding the Project site. Terracon determined that none of the unmapped facilities were identified as the Project site or adjacent to the Project site. None of the sites in the vicinity of the Project represent a recognized environmental condition (REC) with regards to the Project site. For a more detailed description of the sites identified during the regulatory records review, please refer to EIR *Technical Appendix F*. (Terracon, 2017, pp. 9-11)

3. Property Owner Interview

An interview was conducted with the technical services manager of the Project site, Todd Pendergrass. Mr. Pendergrass indicated that he had been familiar with the site since November of 2013. Mr. Pendergrass indicated that there are no current underground storage tanks (USTs) on the Project site that there was not a history of USTs associated with the Project site. No known environmental concerns associated with the site or in the site vicinity were identified. In addition, Mr. Pendergrass was not aware of any pending, threatened, or past environmental litigation, proceedings, or notices of possible violations of environmental laws or liability or potential environmental concerns in connection with the Project site. (Terracon, 2017, p. 8)

4. Field Reconnaissance

Terracon conducted an inspection of the Project site on December 12, 2017. Although field reconnaissance took place in 2017, the conditions on-site have not substantially changed since December 2017. Terracon observed that the northern 45.4 acres of the Project site were in the process of being graded as part of mining reclamation activities pursuant to RP 2006-01A2. The southern 27.1 acres were vacant and undeveloped with a moderate growth of weeds and natural vegetation. Overhead power lines were observed across the Project site from near the southeastern corner to a point along Nichols Road in the west-central portion of the Project site. (Terracon, 2017, p. 13)

Remnants of an apparent cistern was observed by Terracon on the south-central portion of the site during field reconnaissance. Staining and/or releases were not observed in the vicinity of the cistern during the site field reconnaissance. Based on site observations, Terracon determined the cistern does not constitute a REC for the Project site. (Terracon, 2017, p. 15)

During Terracon's site visit, one pole-mounted transformer, owned and serviced by Southern California Edison, was observed on one of the power poles in the southeastern portion of the site; however, no evidence of polychlorinated biphenyl (PCB) content of the transformer fluids was observed. Some transformers contain mineral oil which may contain PCBs. Southern California Edison maintains responsibility of the transformer and would be required to replace the transformer fluids only if a release was identified. Evidence of current or prior releases was not observed in the vicinity of the electrical equipment during the site reconnaissance. Based on-site observations, the pole-mounted transformer does not appear to constitute a REC for the Project site. (Terracon, 2017, p. 15)

A small area of stained soil was observed in the northern portion of the Project site. The total area of visibly stained soil was approximately 10 to 12 square feet. The potential cause of stained soil appears to be dripping from heavy equipment or spillage from plastic open-top bins. Terracon noted that the stained soil areas did not appear to represent a REC in connection with the Project site. (Terracon, 2017, p. 15)

Dumped fill dirt was observed on the south-central portion of the site during the site reconnaissance. The amount of dirt was approximately 300 cubic yards. Based on visual surface observations, no other materials appeared within the dumped dirt. Additionally, the dumped fill dirt appeared to be native to the area. Notable odors were not apparent from this area at the time of the site reconnaissance. Based on site observations, the dumped filled dirt does not appear to constitute a REC for the Project site. (Terracon, 2017, p. 15)

Construction/demolition debris was observed on the southeast portion of the site during reconnaissance. The materials consisted of concrete pipes, concrete traffic barriers, and concrete blocks. Terracon noted that the construction/demolition debris did not appear hazardous in nature. Leakage, spills or releases from these materials were not observed during the visual reconnaissance. Based on site observations, the construction/demolition debris did not appear to constitute a REC for the Project site. Additionally, three construction equipment tires, outcrop rock mixed with stock pile of on-site material, boulders, two chain-link fence enclosures with metal lock boxes, a box culvert, heavy construction vehicles, and overhead powerlines were observed during site reconnaissance. RECs were not observed with the on-site observations. (Terracon, 2017, p. 16)

C. *Airport Hazards*

The Project site is located approximately 12 miles southwest of the March Air Reserve Base, which is the nearest public airport facility within the Project site's vicinity. The nearest airport to the proposed Project is Skylark Field, a private use airport located 5.7 miles southeast of the Project site. The Project site is not located within an airport land use plan and is not located within an Airport Influence Area (AIA). (Lake Elsinore, 2011a, Figure 2.7; Google Earth, 2016)

D. Wildland Fire Hazards

According to the City of Lake Elsinore General Plan Update Environmental Impact Report (EIR), the northern portion of the Project site is located in an area identified as having a "High' susceptibility to wildfires, while the northern most boundary of the Project site along Nichols Road and the southern 27.1 acres of the Project site are identified as having a "Very High" susceptibility to wildfires. (Lake Elsinore, 2011b, Figure 3.10-2)

4.7.2 Applicable Environmental Regulations

The following is a brief description of the federal, state, and local environmental laws and related regulations related to hazards and hazardous materials.

A. Hazardous Materials Regulations and Plans

1. Federal Regulations

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Superfund Amendments and Reauthorization Act (SARA)

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the Environmental Protection Agency (EPA) was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, EPA obtains private party cleanup through orders, consent decrees, and other small party settlements. EPA also recovers costs from financially viable individuals and companies once a response action has been completed. (EPA, 2017d)

EPA is authorized to implement the Act in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies. (EPA, 2017d)

The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. Also, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA). (EPA, 2017d)

- Resource Conservation and Recovery Act (RCRA)

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. (EPA, 2017e)

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program. (EPA, 2017e)

❑ Hazardous Materials Transportation Act (HMTA)

The Hazardous Materials Transportation Act of 1975 (HMTA) empowered the Secretary of Transportation to designate as hazardous material any "particular quantity or form" of a material that "may pose an unreasonable risk to health and safety or property." (OSHA, n.d.)

Hazardous materials regulations are subdivided by function into four basic areas:

- Procedures and/or Policies 49 CFR Parts 101, 106, and 107
- Material Designations 49 CFR Part 172
- Packaging Requirements 49 CFR Parts 173, 178, 179, and 180
- Operational Rules 49 CFR Parts 171, 173, 174, 175, 176, and 177 (OSHA, n.d.)

The HMTA is enforced by use of compliance orders [49 USC 1808(a)], civil penalties [49 USC 1809(b)], and injunctive relief (49 USC 1810). The HMTA (Section 112, 40 USC 1811) preempts state and local governmental requirements that are inconsistent with the statute, unless that requirement affords an equal or greater level of protection to the public than the HMTA requirement. (OSHA, n.d.)

❑ Hazardous Materials Transportation Uniform Safety Act of 1990

In 1990, Congress enacted the Hazardous Materials Transportation Uniform Safety Act (HMTUSA) to clarify the maze of conflicting state, local, and federal regulations. Like the HMTA, the HMTUSA requires the Secretary of Transportation to promulgate regulations for the safe transport of hazardous material in intrastate, interstate, and foreign commerce. The Secretary also retains authority to designate materials as hazardous when they pose unreasonable risks to health, safety, or property. (OSHA, n.d.)

The statute includes provisions to encourage uniformity among different state and local highway routing regulations, to develop criteria for the issuance of federal permits to motor carriers of hazardous materials, and to regulate the transport of radioactive materials. (OSHA, n.d.)

❑ Occupational Safety and Health Act (OSHA)

Congress passed the Occupational and Safety Health Act (OSHA) to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. (EPA, 2017f)

In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for OSHA. OSHA is a division of the

U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states. (EPA, 2017f)

❑ Toxic Substances Control Act

The Toxic Substances Control Act of 1976 provides EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint. (EPA, 2017g)

Various sections of TSCA provide authority to:

- Require, under Section 5, pre-manufacture notification for "new chemical substances" before manufacture
- Require, under Section 4, testing of chemicals by manufacturers, importers, and processors where risks or exposures of concern are found
- Issue Significant New Use Rules (SNURs), under Section 5, when it identifies a "significant new use" that could result in exposures to, or releases of, a substance of concern.
- Maintain the TSCA Inventory, under Section 8, which contains more than 83,000 chemicals. As new chemicals are commercially manufactured or imported, they are placed on the list.
- Require those importing or exporting chemicals, under Sections 12(b) and 13, to comply with certification reporting and/or other requirements.
- Require, under Section 8, reporting and record-keeping by persons who manufacture, import, process, and/or distribute chemical substances in commerce.
- Require, under Section 8(e), that any person who manufactures (including imports), processes, or distributes in commerce a chemical substance or mixture and who obtains information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment to immediately inform EPA, except where EPA has been adequately informed of such information. EPA screens all TSCA b§8(e) submissions as well as voluntary "For Your Information" (FYI) submissions. The latter are not required by law, but are submitted by industry and public interest groups for a variety of reasons. (EPA, 2017g)

2. State Regulations

❑ Cal/OSHA and the California State Plan

Under an agreement with OSHA, since 1973 California has operated an occupational safety and health program in accordance with Section 18 of the federal OSHA. The State of California's Department of Industrial Relations administers the California Occupational Safety and Health Program, commonly referred to as Cal/OSHA. The State of California's Division of Occupational Safety and Health (DOSH) is the principal agency that oversees plan enforcement and consultation. In addition, the California State program has an

independent Standards Board responsible for promulgating State safety and health standards, and reviewing variances. It also has an Appeals Board to adjudicate contested citations and the Division of Labor Standards Enforcement to investigate complaints of discriminatory retaliation in the workplace.

Pursuant to 29 CFR 1952.172, the California State Plan applies to all public and private sector places of employment in the state, with the exception of federal employees, the United States Postal Service, private sector employers on Native American lands, maritime activities on the navigable waterways of the United States, private contractors working on land designated as exclusively under federal jurisdiction and employers that require federal security clearances. Cal/OSHA is the only agency in the state authorized to adopt, amend, or repeal occupational safety and health standards or orders. In addition, the Standards Board maintains standards for certain things not covered by federal standards or enforcement, including: elevators, aerial passenger tramways, amusement rides, pressure vessels and mine safety training. The Cal/OSHA enforcement unit conducts inspections of California workplaces in response to a report of an industrial accident, a complaint about an occupational safety and health hazard, or as part of an inspection program targeting industries with high rates of occupational hazards, fatalities, injuries or illnesses.

❑ California Hazardous Waste Control Law

The Hazardous Waste Control Law (HWCL) (Health and Safety Code [HSC], Division 20, Chapter 6.5, Article 2, Section 25100, et seq.) is the primary hazardous waste statute in California. The HWCL implements RCRA as a "cradle-to-grave" waste management system in the state. It specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure its proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reuse as raw materials. The HWCL exceeds federal requirements by mandating source reduction planning and broadening requirements for permitting facilities that treat hazardous waste. It also regulates a number of waste types and waste management activities not covered by federal law (RCRA).

❑ California Code of Regulations (CCR), Titles 22 and 26

A variety of California Code of Regulation (CCR) titles address regulations and requirements for generators of hazardous waste. Title 22 contains detailed compliance requirements for hazardous waste generators, transporters, and facilities for treatment, storage, and disposal. Because California is a fully-authorized state according to RCRA, most regulations (i.e., 40 CFR 260, et seq.) have been duplicated and integrated into Title 22. However, because the Department of Toxic Substances Control (DTSC) regulates hazardous waste more stringently than the EPA, the integration of state and federal hazardous waste regulations that make up Title 22 does not contain as many exemptions or exclusions as does 40 CFR 260. As with the HSC, Title 22 also regulates a wider range of waste types and waste management activities than does RCRA. To aid the regulated community, California has compiled hazardous materials, waste, and toxics-related regulations from CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24 and 27 into one consolidated listing: CCR Title 26 (Toxics). However, the hazardous waste regulations are still commonly referred to collectively as "Title 22."

B. Airport and Aircraft Hazards Regulations and Plans

1. State Regulations

❑ State Aeronautics Act

The State Aeronautics Commission Act of 1947 created the Division of Aeronautics ("Division"), and was later amended by statute to read the State Aeronautics Act (Aeronautics Act) in 1961. As a result of this legislation, the Division's first priorities are those mandated by the Aeronautics Act, then Caltrans guidance, then Division guidance as expressed through its Policy Element. As directed by the Aeronautics Act, the Division is a steward and advocate of aviation in California. To that end, its efforts are focused on activities that "protect the public interest in aeronautics and aeronautical progress." (§ 21002) (Caltrans, 2016, p. 1-2)

The Aeronautics Act itself is divided into six chapters, the first five of which have not received significant cleanup legislation since its enabling in 1947. The first chapter begins with general provisions and definitions and explains the Legislature's intent for a State aviation program. Chapter two explains Caltrans' role in administering the Division, and explains the role of the California Transportation Commission (CTC). Chapter three includes many of the safety considerations from Federal Aviation Administration (FAA) regulations that help keep airports and the surrounding communities safe and compatible with flight operations. Chapter four deals with airport and heliport permitting, air navigation facilities, noise guidelines, funding, and importantly, the formation and authority of Airport Land Use Commissions (ALUC). Chapter five covers the investigations and hearings on matters covered in the Aeronautics Act. Finally, Chapter six introduces airport planning and specifically introduces the intent of the CASP and how it can be used to support California aviation. (Caltrans, 2016, p. 1-2)

❑ California Environmental Quality Act

The operation of airports and aircraft is the responsibility of the Federal Aviation Administration (FAA), but the requirement to document potential hazards related to airports and air activities when a new project is proposed is contained in CEQA, specifically PRC Section 21096, which states:

> *"(a) If a lead agency prepares an environmental impact report for a project situated within airport land use compatibility plan boundaries, or, if an airport land use compatibility plan has not been adopted, for a project within two nautical miles of a public airport or public use airport, the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation, in compliance with section 21674.5 of the Public Utilities Code and other documents, shall be utilized as technical resources to assist in the preparation of the environmental impact report as the report relates to airport-related safety hazards and noise problems.*
>
> *(b) A lead agency shall not adopt a negative declaration for a project described in subdivision (a) unless the lead agency considers whether the project will result in a safety hazard or noise problem for persons using the airport or for persons residing or working in the project area."*

C. *Wildland Fire Hazards Regulations and Plans*

1. Federal Regulations

❑ Healthy Forests Restoration Act of 2003

On August 22, 2002, President Bush established the Healthy Forests Initiative, directing the Departments of Agriculture and the Interior, and the Council on Environmental Quality, to improve regulatory processes to ensure more timely decisions, greater efficiency, and better results in reducing the risk of catastrophic wildland fires. On June 5, 2003, the Departments of Agriculture and the Interior adopted two new categorical exclusions from documentation in an environmental assessment or environmental impact statement (EIS): an exclusion for hazardous-fuel reduction and another for rehabilitation of resources and infrastructure damaged by wildfire (68 FR 33814).

This act also defines "communities at risk" as those "wildland urban interface communities within the vicinity of federal lands that are at high risk from wildfire." For California, CalFire has expanded this definition to include all communities (regardless of distance from federal lands) for which a significant threat to human life or property exists as a result of a wildland fire event. According to the 2010 California Strategic Fire Plan (page E-1), factors used to determine at-risk communities include: high fuel hazard, probability of a fire and proximity of intermingles wildland fuels, and urban environments near fire threats.

2. State Regulations

❑ Public Resources Code (PRC) Sections 4290-4299

These sections establish minimum statewide fire safety provisions pertaining to: roads for fire equipment access; signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and fire fuel breaks and greenbelts. With certain exceptions, all new construction after July 1, 1991, in potential wildland fire areas, is required to meet these statewide standards. The state requirements, however, do not supersede more restrictive local regulations.

As defined by CalFire, wildland areas defined as State Responsibility Areas (SRAs) may contain substantial wildfire risks and hazards. They consist of lands exclusive of cities, and federal lands regardless of ownership. The primary financial responsibility for preventing and suppressing fires within wildlands belongs to the State of California. However, it is not the State of California's responsibility to provide fire protection services to buildings or structures located within the wildlands unless CalFire has entered into a cooperative agreement with a local agency for those purposes pursuant to PRC Section 4142. As such, wildland areas require disclosure of these fire hazards in real estate transactions, and owners of properties in wildland areas are subject to PRC Section 4291 maintenance requirements. The law requires CalFire every five years (1991, 1996, 2001, etc.) to provide maps identifying the boundaries of lands classified as SRAs to the Riverside County Assessor.

❑ PRC Section 4213 – Fire Prevention Fees

Pursuant to PRC Section 4213, in July of 2011, the State of California began assessing an annual "Fire Prevention Fee" for all habitable structures within SRAs to pay for fire prevention services. SRAs are the portions of California where the State of California is financially responsible for the prevention and suppression of wildfires. The SRA does not include lands within incorporated city boundaries, Tribal or

federally owned land. As of 2013, the fee is up to $150 per habitable structure (i.e., a building that can be occupied for residential use, which does not include incidental buildings such as detached garages, barns, outdoor bathrooms, sheds, etc.).

❑ California Government Code (CGC) Section 51178

This section specifies that the Director of CalFire, in cooperation with local fire authorities, shall identify areas that are Very High Fire Hazard Severity Zones (VHFHSZ) in Local Responsibility Areas (LRAs), based on consistent statewide criteria, and the expected severity of fire hazard. Per CGC § 51178, a local agency may, at its discretion, exclude from the requirements of § 51182 an area within its jurisdiction that has been identified as a VHFHSZ, if it provides substantial evidence in the record that the requirements of § 51182 are not necessary for effective fire protection within the area. Alternatively, local agencies may include areas not identified as VHFHSZ by CalFire, following a finding supported by substantial evidence in the record that the requirements of § 51182 are necessary for effective fire protection within the new area. According to § 51182, such changes made by a local agency shall be final, and shall not be rebuttable by CalFire.

❑ California Code of Regulations (CCR) Title 14 – Natural Resources

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They were prepared and adopted to establish minimum wildfire protection standards in conjunction with building, construction, and development within SRAs. Among other things, Title 14 requires the design, and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures (fire fuel modification zones, etc.).

❑ CCR Title 24, Parts 2 and 9 – Fire Codes

Part 2 of Title 24 of the CCR refers to the California Building Code, which contains complete regulations and general construction building standards of state adopting agencies, including administrative, fire and life safety, and field inspection provisions. Part 2 was updated in 2008 to reflect changes in the base document from the Uniform Building Code to the International Building Code. Part 9 refers to the California Fire Code, which contains other fire safety-related building standards. In particular, Chapter 7A, "Materials and Construction Methods for Exterior Wildfire Exposure," in the 2010 California Building Code addresses fire safety standards for new construction. In addition, Section 701A.3.2, "New Buildings Located in Any Fire Hazard Severity Zone," states:

> "*New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, any Local Agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.*"

❑ California Health and Safety Code (Division 20, Chapter 6.95, § 25500 et seq)

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.

4.7.3 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact due to hazards and hazardous materials if the Project or any Project-related component 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. *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or*

g. *Expose people or structures to a significant risk of loss, injury, or death involving wildland fires;*

h. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones and any of the following occurs as a result of the Project:*

   i) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;*

   ii) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or*

   iii) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.*

The above listed thresholds are derived directly from Sections IX and XX of Appendix G to the CEQA Guidelines and address typical adverse effects due to hazards, hazardous materials, and wildfire hazards (OPR, 2018).

4.7.4 IMPACT ANALYSIS

Threshold a:	***Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***
Threshold 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?***

Implementation of the proposed Project has the potential to expose future site workers and/or residents to hazardous materials or conditions and has the potential to result in the accidental release of hazardous materials into the environment associated with the existing site conditions, construction activities, and long-term operation of the proposed Project. Each is discussed below.

Existing Site Conditions

Based on the Phase I ESA conducted by Terracon (EIR *Technical Appendix F*), and based on a review of regulatory databases, historical conditions of the Project site, and a site reconnaissance, the Project site does not contain any RECs, nor is the Project site affected by any off-site RECs. No odors, pools of liquids, drums, significantly stained soil, unidentified subsurface containers, distressed vegetation, pits, or unmaintained ponds were observed. One pole-mounted transformer was observed in the southeastern of the Project site. No leaking or staining was observed in the area surrounding the transformer. Based on these findings, Terracon concluded there are no conditions associated with the Project site's existing condition or surroundings that would create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. Accordingly, no impact would occur associated with the Project site's existing conditions. (Terracon, 2017, pp. i-ii; 13-16)

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 Project construction activities 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, disposal, or accidental release of hazardous materials, and a less-than-significant impact would occur.

Long-Term Operation

The Project propose development of 168 single-family homes; 14.5 acres of commercial uses accommodating a 130-room hotel, 6,000 s.f. of fast-food restaurant uses with drive-through window use, 5,500 s.f. of fast-food restaurant uses without drive-through window use, 9,400 s.f. of sit-down restaurant uses, 4,400 s.f. of

commercial retail uses, an 8,000 s.f. health and fitness club, a gas station (including market and car wash) with 16 fueling stations, and 43,000 s.f. of office uses; and recreation uses. With the exception of the proposed gas station (discussed in further detail below), none of the proposed uses (residential, commercial, and recreational) are associated with the transport, use, or disposal of significant quantities of hazardous materials. Household and other goods used by residential homes and retail uses 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 employees 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, and/or the City of Lake Elsinore. With mandatory regulatory compliance, potential hazardous materials impacts associated with the residential, commercial (excluding the proposed gas station), and recreational uses associated with long-term operation of the Project would be less than significant.

The planned gas station would have the potential to use and store hazardous and flammable materials on the Project site. The gas station would include an UST. Due to the potential on-site storage of hazardous materials during long-term operation, the Project would be subject to compliance with the California Health and Safety Code § 25507, which requires a Hazardous Materials Business Emergency Plan (HMBEP). The HMBEP requires the disclosure of the inventory of hazardous materials and provides procedures to follow in the event of an emergency situation (such as a fire or hazardous spill). Oversight for this plan is provided by the Riverside County Department of Environmental Health (RCDEH) and would be revised annually and renewed every three years. Furthermore, due to the nature of the gas station component of the proposed Project, the Project would be subject to routine inspection by federal, state, and local regulatory agencies with jurisdiction over fuel dispensing facilities. These regulations and regulatory agencies include: provisions established by Section 2540.7, *Gasoline Dispensing and Service Stations*, of the California Occupational Safety and Health Regulations; Chapter 38, *Liquefied Petroleum Gases*, of the California Fire Code; and the RCDEH. Under the above provisions including the routine inspection of the gas station, the permitted USTs, and all associated fuel delivery infrastructure, as well as compliance with all federal, state and local regulations would ensure that the Project operates in a manner that poses no substantial hazards to the public or the environment.

Additionally, as the Project would feature fueling stations, various standard conditions to minimize hazardous materials impacts related to fueling stations would be applicable to the Project. These standard conditions are monitored by RCDEH, the State-designated local Certified Unified Program Agency (CUPA) managing hazardous materials programs within the City of Lake Elsinore and throughout Riverside County. In addition to other programs and requirements that may be applicable, as determined by the RCDEH, the following programs may also apply to the fueling stations: Certificate of Disclosure of Hazardous Substances (Business Emergency Plan), Hazardous Waste Generator Permit, and Underground Storage Tank Permit.

The operation of the proposed fueling station component of the Project would be required to comply with all applicable federal, State, and local regulations to ensure the proper transport, use, and disposal of hazardous substances (as described in subsection 4.7.2 above). With mandatory regulatory compliance, potential hazardous materials impacts associated with long-term operation of the Project is not expected to pose a

significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials, nor would the Project increase the potential for accident operations which could result in the release of hazardous materials into the environment.

In addition, SCQAMD released a Health Risk Assessment for Gas Stations which estimated the residential and occupational cancer risk for gasoline service stations. Hazards associated with cancer risk are considered significant if the incremental risk is equivalent to or greater than10 persons in one million persons. For the proposed residential uses, at a distance of 85 feet (the minimum distance between gas station uses and residential uses per proposed Nichols Ranch Specific Plan Table III-1, *Development Standards – General Commercial*), the cancer risk was determined to be 4.31 in one million persons per one million gallons throughput per year (gpy) (SCAQMD, 2007, Table 3). According to the National Association of Convenience Stores, the average gas station sells approximately 1,788,500 gpy (NACS, 2018). Thus, at a distance of 85 feet, the cancer risk to downwind residential uses would be 7.33 persons in one million (4.13 persons in one million/1,000,000 gpy x 1,788,500 gpy = 7.33 persons in one million). For the proposed commercial uses, at a distance of 85 feet (the minimum distance studied by SCAQMD) the occupational cancer risk was determined to be 0.81 in one million per one million gpy. Thus, at a distance of 85 feet, the cancer risk to downwind occupational uses would be 1.43 persons in one million (0.81persons in one million/1,00,000 gpy x 1,788,500 gpy = 1.43 persons in one million). Although proposed occupational commercial uses may be located closer than 85 feet to the gas station, it is reasonable to assume cancer risks would not reach the 10 in one million significance threshold. The Project's cancer risk due to gasoline service stations for both residential and occupational uses is less than the 10 persons in one million threshold used by SCAQMD to determine a significant cancer hazard risk, thus impacts would be less than significant. (SCAQMD, 2007, pp. 9,14)

With mandatory regulatory compliance with federal, State, and local laws (as described above), potential hazardous materials impacts associated with long-term operation of the Project would be less than significant.

Threshold c: ***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 located immediately north of the Temescal Canyon High School. The nearest building at the Temescal Canyon High School is located 55 feet mile from the Project site. The Project consists of a proposal to allow for future development of residential, commercial, and recreational uses. With the exception of the proposed gas station (discussed in further detail below), the proposed uses on the Project site are not associated with the transport, use, or disposal of significant quantities of hazardous materials.

As the Project would feature fueling stations, various standard conditions to minimize hazardous materials impacts related to fueling stations would be applicable to the Project. These standard conditions are monitored by RCDEH, the State-designated local CUPA managing hazardous materials programs within the City of Lake Elsinore and throughout Riverside County. In addition to other programs and requirements that may be applicable, as determined by the RCDEH, the following programs may also apply to the fueling stations: Certificate of Disclosure of Hazardous Substances (Business Emergency Plan), Hazardous Waste Generator Permit, and Underground Storage Tank Permit.

The operation of the proposed fueling station component of the Project would be required to comply with all applicable federal, State, and local regulations to ensure the proper transport, use, and disposal of hazardous substances (as described in subsection 4.7.2 above). With mandatory regulatory compliance, potential hazardous materials impacts associated with long-term operation of the Project is not expected to pose a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials, nor would the Project increase the potential for accident operations which could result in the release of hazardous materials into the environment.

SCQAMD released a Health Risk Assessment for Gas Stations which estimated the residential and occupational cancer risk for Gasoline Service Stations. Hazards associated with cancer risk are considered significant if the risk is calculated to be 10 persons in one million persons or greater. In order to provide a worst-case analysis, the residential cancer risk was used to estimate cancer risks for the sensitive receptors at Temescal Canyon High School. At a distance of 900 feet (the distance from the Project's commercial boundary to the nearest facility at Temescal Canyon High School), the cancer risk was determined to be 0.01 in one million persons per one million gpy (SCAQMD, 2007, Table 3). According to the National Association of Convenience Stores, the average gas station sells approximately 1,788,500 gpy (NACS, 2018). Thus, at a distance of 900 feet, the cancer risk to Temescal Canyon High School would be 0.02 persons in one million (0.01 persons in one million/1,000,000 gpy x 1,788,500 gpy = 0.02 persons in one million). The proposed gas station would be located approximately 900 feet away or more from the nearest building at Temescal Canyon High School, thus, impacts due to exposure of Temescal Canyon High School to cancer-related hazard risks would be less than the 10 in one million threshold used by SCAQMD, and impacts would be less than significant.

As such, with mandatory regulatory compliance with federal, State, and local laws (as described above), impacts to nearby schools due to the Project emitting hazardous emissions or handling hazardous materials would be less than significant.

Threshold 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?***

According to the Phase I ESA prepared for the Project (EIR *Technical Appendix F*), the Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code § 65962.5. Accordingly, no impact would occur. (Terracon, 2017, pp. 9-11)

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 not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest public airport is the March Air Reserve Base, located approximately 12 miles northeast of the Project site, and the Project is not located within the AIA of the March Air Reserve Base. The nearest airport to the proposed Project is Skylark Field, a private use airport located 5.7 miles southeast of the Project site. The Project is not within the AIA for Skylark Field. (Lake Elsinore, 2011a, Figure 2-7; Google Earth,

2016) As such, the proposed Project would not expose people residing or working in the area to safety hazards associated with public airports, and impacts would be less than significant.

Threshold f:	***Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction and at Project build-out, the proposed Project would be required to maintain adequate access for emergency vehicles. Accordingly, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and impacts would be less than significant.

Threshold g:	***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***
Threshold h:	***If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:***
i)	***Expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors, as a result of an exacerbation of wildfire risks?***
ii)	***Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? or***
iii)	***Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

The northern portion of the Project site is located in an area identified as having a "High' susceptibility to wildfires, while the northern most boundary of the Project site along Nichols Road and the southern 27.1 acres of the Project site are identified as having a "Very High" susceptibility to wildfires (Lake Elsinore, 2011b, Figure 3.10-2).

The Project site would be surrounded by improved roadways which would provide buffer area from fire hazards. Nichols Road would provide 120 feet of buffer area under ultimate roadway buildout conditions and 30-60 feet of buffer under interim conditions within the right-of-way (ROW). El Toro Road would provide a 70-foot buffer consisting of 60 feet of improved ROW and a 10-foot landscape buffer, while Wood Mesa Court would provide an 80-foot buffer consisting of 60 feet of improved ROW and a 10-foot landscape buffer. Additionally, the Project site would be buffered along the western boundary by Interstate 15 (I-15). A buffer distance of between 30-120 feet as provided by these roads and buffer as provided by I-15 would reduce the site's potential for fire hazards.

Although roadway buffers would reduce potential fire hazards, the Project would preserve Stovepipe Creek, which traverses from the Project's northeastern boundary and exits through the Project's southwestern

boundary and has a "High" and "Very High" susceptibility to wildfires. A Fire Protection Plan (FPP) was prepared for the Project site by Firewise 2000, Inc. and is included as EIR *Technical Appendix G*.

Firewise used the "BehavePlus Fire Modeling System 5.0.5" model to measure to intensity of a fire moving toward the proposed Project to design a protection system that would ensure that the Project would be safe from potential wildland fires even without fire department suppression activities. The predominate fuels in or near the Project site consist of grasses, scrubs, and shrubs. (Firewise, 2019, pp. 4, 9-10)

Based on proposed and natural slope gradients, the aspect of existing and proposed slopes on site, wind patterns and other inputs, the maximum calculated flame length for a wildland fire affecting the site was calculated to be 55.2 feet. While the modeling indicates that flame lengths of 55.2 feet are possible under perfect conditions, this scenario would only occur if during a late fire season winds reached 70 miles per hour from the north, northeast, and east. For the majority of the Project site flanking fire of 15 feet or less is expected on the Project site prior to implementation of fuel modification measures. (Firewise, 2019, pp. 10-15)

Flame lengths and fire intensity would be reduced by the installation and maintenance of a Fuel Modification Plan through the use of irrigated zones and possible radiant head walls surrounding homes on certain areas of the Project site. Specifically, and as required by the Master Fire Protection Plan provisions of the Nichols Ranch Specific Plan, the following requirements would apply (Firewise, 2019, pp. 18-21):

- Zone 1: Zone 1 would consist of a 10-foot setback between buildings and trees. Zone 1 would generally be located within the rear yard and side years of the homes within residential Planning Areas that are in close proximity to Stovepipe Creek.
- Zone 2: Zone 2 would consist of landscaping and manufactured slopes that would be irrigated and fire resistant. Zone 2 would generally be located in the landscaping areas outside of homeowner lots, starting from the lot parcel line extending outwards, parks, roadway landscaping, and manufactured slopes.
- Zone 3: Zone 3 would consist of thinning treatment to ensure that areas are free of any dead and dying combustible vegetation. Zone 3 would generally be located within the detention basins and manufactured slopes within Planning Area 13.
- Special Fire Protection Features: Special Fire Protection Features would be required for a few homes within residential Planning Areas 1, 2, and 5 because they do not meet the minimum 100-foot fuel treatment setback. For any home or building that is located less than 100 feet from Stovepipe Creek or the natural open space located north of Nichols Road, a 6-foot tall wall would be required to limit any actual radiant fire that may start in the creek or open space areas. No combustible landscaping would be allowed within five feet of the structure and no trees would be allowed on these residential lots. Additional construction standards would be required for these homes as described in the FPP.

Refer to Figure 3-10, *Conceptual Fire Protection Plan*, for the location of each fuel modification zone proposed for the Project.

Based on the scientific fire behavior analysis conducted by Firewise and assuming mandatory compliance with the required fuel modification design criteria as required by the Nichols Ranch Specific Plan, exterior portions of future structures or attic spaces would not ignite from the exterior fire exposure from a wildland vegetation fire. This is primarily because the greatest fire energy would be too far away from the structures due to the low plant densities within the defensible spaces zones and the construction feature requirements.

Compliance with the requirements of the FPP, as required by the Nichols Ranch Specific Plan would reduce impacts due to the exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires to less than significant. Furthermore, the Project would be developed in a manner consistent with the jurisdictional requirements for fire protection and would generally decrease the fire hazard in the local area. Additionally, the Project would not exacerbate wildfire risks, and would not increase the likelihood that Project occupants could be exposed to pollutant concentrations for a wildfire or the uncontrolled spread of a wildfire. In addition, the only infrastructure required by the Project's FPP are fire walls, fire hydrants, and the proposed fuel modification zones. The proposed infrastructure would reduce potential fire risks on site and would not exacerbate fire risk or result in temporary or ongoing impacts to the environment. Moreover, although there are steep slopes with natural vegetation to the north of the Project site, this existing hillside exhibits very shallow bedrock; as such, these slopes would not be subject to landslides even in the event of a fire and subsequent rain events. Therefore, impacts regarding wildland fire hazards, including where wildlands are adjacent to urbanized areas or where residents are intermixed with wildlands, would be less than significant.

4.7.5 Cumulative Impact Analysis

Because the issue of hazards and hazardous materials tend to be site-specific in nature, the cumulative study area includes existing and planned developments within a one-mile radius of the Project site. A one-mile radius is appropriate because that is the standard distance used in regulatory database searches of properties that may generate or store toxic materials.

There are no known hazards located on the Project site under existing conditions. During Project construction and operation, mandatory compliance with federal, state, and local regulations would ensure that the Project as proposed would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials. Accordingly, impacts associated with the routine transport, use, or disposal of hazardous materials, and impacts associated with reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, would be less-than-cumulatively considerable.

The Project site is located immediately adjacent to the Temescal Canyon High School. The only component of the Project that would have the potential to emit hazardous emissions or handle hazardous materials on-site would be the proposed gas station. The proposed gas station would handle hazardous materials within one-quarter mile of a school; however, the gas station's hazardous emissions would be below the cancer-related hazardous risk threshold established by SCAQMD. The remaining proposed uses for the Project site are not associated with the transport, use, or disposal of significant quantities of hazardous materials. Thus, the Project's impact due to emitting hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school would be less than significant. Other developments would be required to

demonstrate that any hazardous emissions that would result from the development is below the established hazardous risk threshold. Therefore, impacts would be less-than-cumulatively-considerable.

The Project site is not located on the list of hazardous materials sites compiled pursuant to Government Code § 65962.5. Therefore, the Project would not contribute to a cumulatively-considerable hazardous materials impact associated with a listed hazardous materials site.

The Project site is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest public airport is the March Air Reserve Base, located approximately 12 miles northeast of the Project site, and the Project is not located within the Airport Influence Area of the March Air Reserve Base. The nearest airport to the proposed Project is Skylark Field, a private use airport located 5.7 miles southeast of the Project site. The Project is not within the Airport Influence Area for Skylark Field. As such, the Project's potential to expose people residing or working in the area to safety hazards associated with public airports, and impacts would be less-than-cumulatively-considerable.

The nearest private airport facility to the Project site is Skylark Field, located approximately 5.7 miles southeast of the Project site. The Project site is not located within the AIA for this facility, indicating operations at Skylark Field are unlikely to create a safety hazard for people working or residing in the Project area. Thus, the Project would not result in safety hazards due to proximity to a private airstrip. There are no components of the proposed Project that would result in a cumulatively-considerable impact due to safety hazards in proximity of a private airstrip.

The Project site does not contain any emergency facilities nor would it impact an emergency evacuation route. Other cumulative developments would be reviewed by the City of Lake Elsinore to ensure no interference with emergency access and evacuation routes would occur. Accordingly, the Project would result in less-than-cumulatively-considerable impacts due to a conflict with emergency evacuation plans and evacuation routes.

As discussed above under the analysis of Threshold h the northern portion of the Project site is located in an area identified as having a "High' susceptibility to wildfires, while the northern most boundary of the Project site along Nichols Road and the southern 27.1 acres of the Project site identified as having a "Very High" susceptibility to wildfires. The Project would be surrounded by improved roadways with a buffer distance of 30-60 feet as provided by Project roadways (Nichols Road, El Toro Road, and Wood Mesa Court) and I-15 would reduce the site's potential for fire hazards. In addition, the Project would be subject to mandatory compliance with the recommendations of the FPP as required by the Nichols Ranch Specific Plan, which requires implementation of fuel modification zones and other fire hazard design features on the Project site. Furthermore, the Project site would be developed in a manner consistent with jurisdictional requirements for fire protection, and would generally decrease fire hazards in the local area. Other developments within the study area also would be subject to the jurisdictional requirements for fire protection. As such, within the cumulative context of the Project vicinity, fire hazards are anticipated to decline over time, and the Project has no potential to contribute to cumulatively significant impacts associated with wildland fire hazards.

4.7.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less-than-Significant Impact. Under existing conditions, no hazards were found on the Project site. During Project construction and operation, mandatory compliance with federal, state, and local regulations would ensure that the Project as proposed would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials.

Threshold b: Less-than-Significant Impact. Under existing conditions, no hazards were found on the Project site. During Project construction and operation, mandatory compliance with federal, state, and local regulations would ensure that the Project as proposed would not create a significant hazard to the public or the environment through accident conditions involving the release of hazardous materials. Thus, the Project would not create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials in the environment.

Threshold c: Less-than-Significant Impact. The Project site is located immediately adjacent to the Temescal Canyon High School. The only component of the Project that would have the potential to emit hazardous emissions or handle hazardous materials on-site would be the proposed gas station. The proposed gas station would handle hazardous materials within one-quarter mile of a school; however, the gas station's hazardous emissions would be below the cancer-related hazardous risk threshold established by SCAQMD and would be subject to regulatory requirements and routine inspections. The remaining proposed uses for the Project site are not associated with the transport, use, or disposal of significant quantities of hazardous materials. Thus, the Project's impact due to emitting hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school would be less than significant.

Threshold d: No Impact. The Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code § 65962.5. Accordingly, no impact would occur.

Threshold e: Less-than-Significant Impact. The Project site is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest public airport is the March Air Reserve Base, located approximately 12 miles northeast of the Project site, and the Project is not located within the AIA of the March Air Reserve Base. The nearest airport to the proposed Project is Skylark Field, a private use airport located 5.7 miles southeast of the Project site. The Project is not within the AIA for Skylark Field. As such, the proposed Project would not expose people residing or working in the area to safety hazards associated with public airports, and impacts would be less than significant.

Threshold f: Less-than-Significant Impact. The Project would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. No emergency facilities exist on the Project site, and the site does not serve as an emergency evacuation route and the Project would be required to maintain access during construction. Thus, impacts would be less than significant.

Thresholds g and h: Less-than-Significant Impact. According to the City of Lake Elsinore General Plan Update EIR, the Project site is identified as having a "High" and "Very High" susceptibility to wildfires. Nichols Road, El Toro Road, Wood Mesa Court, and I-15 would provide buffers around the Project site. A buffer distance of between 30-60 feet as provided by these roads and buffer as provided by I-15 would reduce the

site's potential for fire hazards. In addition, the Project would be subject to mandatory compliance with the recommendations of the FPP as required by the Nichols Ranch Specific Plan, which requires implementation of fuel modification zones and other fire hazard design features on the Project site. Furthermore, the Project site would be developed in a manner consistent with jurisdictional requirements for fire protection and would generally decrease the fire hazard in the local area. As such, impacts regarding wildland fires would be less than significant.

4.7.7 City Regulations, Design Requirements, and Mitigation

Applicable City Regulations and Design Requirements

The following are applicable regulations and design requirements within the City of Lake Elsinore. Although these requirements technically do not meet CEQA's definition for mitigation, they are applied herein to ensure Project compliance with applicable City regulations and design requirements.

- The Project shall comply with California Health and Safety Code § 25507, which requires a Hazardous Materials Business Emergency Plan (HMBEP). The HMBEP requires the disclosure of the inventory of hazardous materials and provides procedures to follow in the event of an emergency situation (such as a fire or hazardous spill). Oversight for this plan is provided by the Riverside County Department of Environmental Health (RCDEH) and would be revised annually and renewed every three years.
- The Project shall comply with Section 2540.7, *Gasoline Dispensing and Service Stations*, of the California Occupational Safety and Health Regulations;
- The Project shall comply with Chapter 38, *Liquefied Petroleum Gases*, of the California Fire Code and the RCDEH.
- The Project shall comply with Title 22, Division 4.5 of the California Code of Regulations, which requires residents and employees 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.
- The Project shall comply with Title 22, Division 4.5, Chapter 11 of the California Code of Regulations which requires fluorescent lamps, batteries, and mercury thermostats be recycled or taken to a Household Hazardous Waste Collection Facility.
- The Project shall comply with the requirements of the Nichols Ranch Specific Plan. Compliance with the Nichols Ranch Specific Plan standards include but are not limited to improvements to surrounding roadway, compliance with standards related to fuel modification zones, maintenance of fuel modification zones, landscape, and fire protection features which would be assured by the City's future review of implementing building permits for compliance with the Nichols Ranch Specific Plan.
- In conformance with the requirements of the Nichols Ranch Specific Plan, and as a component of future building permit applications, the Building Official (or his/her designee) shall verify that all of the recommendations given in the Project's Fire Protection Plan (*Technical Appendix G*) with respect to fuel management zones have been incorporated into the building permit application(s). The fuel management zones shall consist of following zones, as conceptually depicted on Figure II-10, of the Nichols Ranch Specific Plan:

- Zone 1: Zone 1 would consist of a 10-foot setback between buildings and trees. Zone 1 would generally be located within the rear yard and side years of the homes within residential Planning Areas that are in close proximity to Stovepipe Creek.
- Zone 2: Zone 2 would consist of landscaping and manufactured slopes that would be irrigated and fire resistant. Zone 2 would generally be located in the landscaping areas outside of homeowner lots, starting from the lot parcel line extending outwards, parks, roadway landscaping, and manufactured slopes.
- Zone 3: Zone 3 would consist of thinning treatment to ensure that areas are free of any dead and dying combustible vegetation. Zone 3 would generally be located within the detention basins and manufactured slopes within Planning Area 13.
- Special Fire Protection Features: Special Fire Protection Features would be required for a few homes within residential Planning Areas 1, 2, and 5 because they do not meet the minimum 100-foot fuel treatment setback. For any home or building that is located less than 100 feet from Stovepipe Creek or the natural open space located north of Planning Area 2 and Nichols Road, a 6-foot tall wall would be required to limit any actual radiant fire that may start in the creek or open space areas. No combustible landscaping would be allowed within five feet of the structure and no trees would be allowed on these residential lots. Additional construction standards would be required for these homes as described in the FPP.

- As a component of future building permit applications, the Building Official (or his/her designee) shall verify that all of the recommendations given in the Project's Fire Protection Plan (*Technical Appendix G*) with respect to construction requirements have been incorporated into the building permit application(s). The construction requirements include the following:
  - For areas with less than 100 feet of overall fuel treatment the following building enhancements will be required. Refer to Section 2.4 of the FPP for detailed specific flame lengths for these areas:
    - Exterior walls facing the open space shall be one (1) hour fire resistance rated tested in accordance with ASTM E119 or UL263 with one layer of 5/8-inch Type X gypsum sheathing on interior and exterior surfaces to prevent exposure from both sides and shall have no underfloor or attic vent openings. Stucco shall be applied over the gypsum wall assembly.
    - Appendages and projections attached to exterior fire-resistive walls, shall be constructed to maintain the same fire-resistant standards as the exterior walls of the structure.
    - If the roof profile allows a space between the roof covering and roof decking, the roof area will have one layer of minimum 72-pound (32.4 kg) mineral-surfaced, non-perforated cap sheet complying with ASTM D 3909 installed over the combustible decking.
    - Fire sprinklers shall be installed throughout the attics and installed in accordance with manufacturer's instructions, the referenced standard should be followed as a minimum. Fire sprinklers will require a four (4) head calculation for the sprinkler design. The four-head calculation must have a minimum .05 density design, QR and intermediate temperature heads; the heads may be of a small orifice type such as 3/8 or 7/16. Listed domestic demand shutoff valves may be used to try to minimize upgrading meter sizes where possible.

- Copper piping is required in the attics; chlorinated polyvinyl chloride (CPVC) will only be permitted in the attic if listed heads are used to protect piping in accordance with their listing. Lots shall have a 6-foot masonry fire wall, which may have up to 3 feet of rated glass to provide for a view. This will block the defensible space area around the home from the creek area.
- Lots 14, 15, 16, 23 and 24 within five (5) feet of the structure envelope no combustible landscaping will be allowed, no trees will be allowed on the parcel. The exception will be the front of the structure facing the access.
- Lot 14, 15, 16, 23 and 24 have the greatest exposure to an off-shore wind driven fire and shall have fire sprinklers extended to the under-eave areas installed in accordance with manufacturer's instructions and acceptable to Riverside County/Lake Elsinore Fire Department standards. The heads should be installed at equal distance on eave areas facing open space. This will protect the structure envelope in future years against burning combustible material near and around structure envelope.

- All structures within the development site shall meet all wildland/interface standards to the satisfaction of the Riverside County Fire Department (RCFD). Design and construction shall meet the requirements listed in the 2016 Edition of the Fire and Building Codes, with special adherence to Chapter 7A, and the 2016 Edition of the California Residential Code section R337, with other local amendments/ordnances adopted by RVCFD. Other applicable codes include the 2013 International Wildland-Urban Interface Code (IWUIC). For a description of the current construction requirements as of the date of this report (see Appendix E of EIR *Technical Appendix G*).
- All accessory structures such as decks, balconies, patios, covers, gazebos and fences shall be built from non-combustible or ignition resistant materials. The homeowner(s) are not restricted from having concrete patios, concrete walkways or swimming pools within the Vegetation Management Zones in compliance with other codes. Refer to Appendix D of EIR *Technical Appendix G* for photos and descriptions of non-combustible decks, patio covers, and railings for these accessory structures. Construction or building permits shall not be issued until the fire code official inspects and approves required vegetation clearance, fire apparatus access and water supply for the construction site. The issuance of building permits with regard to these requirements shall be in accordance with RVCFD. Prior to the delivery of combustible building construction materials to the project site the following conditions shall be completed to the satisfaction of the RVCFD:
- All wet and dry utilities shall be installed and approved by the appropriate inspecting department or agency.
- Clearance of Zone 1, 2 and 3 vegetation management shall be provided prior to combustible material arriving on the site and shall be maintained throughout the duration of construction. Fire code officials may require additional vegetation management and/or defensible space when warranted.
- Additional requirements as listed in the development will be adhere to:

- Mobile stationary or portable powered operated equipment in the HFA shall not be used without the RVCFD written approval. Specific fire protection measures that may be required to mitigate the hazard include, but are not limited to:
  - A standby water tender, equipped with a pump, fire hose and nozzle.
  - Pre-wetting of the site to avoid the production of sparks between blades, tracks and rocks.
  - Conducting a fire watch for a minimum of one-hour following the cessation of operations each day
  - For welding cutting or grinding work, clear away all combustible material from the area around such operations for a minimum distance of 10 feet. A hot-work permit may be required prior to commencing work.
  - Maintain a serviceable round point shovel with an overall length of not less than forty-six (46) inches and a five (5) gallon backpack water pump-type fire extinguisher fully equipped and ready for use at the immediate area during the operation.

- All homes will require NFPA 13D Residential Sprinklers, engineered to the satisfaction of RVCFD. Those lot listed in Section 5, requiring special mitigation measures shall have under eave sprinklers on the exterior of the structure.
- Fire access roads shall meet the requirements of the RVCFD, and shall be a paved surface capable of supporting loads of 80,000 lbs gross vehicle weight. Access to all portions of the building must be within 150 feet of the available fire department access. Fire access roads shall be maintained for clear access of emergency vehicles. The proposed development requires primary and secondary access at the time of construction.
- Any gates crossing fire access into the development must be installed to Riverside County/Lake Elsinore Fire Department standards and shall be approved prior to fabrication and installation. Gates crossing access into the development must have a "Knox" override key switch installed outside the gate in an approved, readily visible, and unobstructed location to provide emergency access, in addition gates shall be equipped with an infrared gate opening device in accordance with Riverside County/Lake Elsinore standards

Mitigation

Impacts to Hazards, Hazardous Materials, and Wildfire Hazards as a result of Project implementation would be less than significant and mitigation is not required.