Wilson Creek Estates DRAFT Environmental Impact Report SCH#2015091088

Case No. 15-061/TTM 19974

Lead Agency:
City of Yucaipa
Planning Division
34272 Yucaipa Blvd.
Yucaipa, CA 92399

March 2016

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DRAFT EIR

WILSON CREEK ESTATES

CITY OF YUCAIPA
CASE NO. 15-061/TTM 19974

Lead Agency:
City of Yucaipa
Planning Division
34272 Yucaipa Blvd.
Yucaipa, CA 92399

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March 2016

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

APPENDICES

LIST OF ACRONYMS

ADT	Average Daily Traffic
AP	Agricultural Preserve
APE	Area of Potential Effects
APN	Assessor Parcel Number
APS	Alternative Planning Strategy
AQMP	Air Quality Management Plan
BMP	Best Management Practices
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CC&Rs	Conditions, Covenants and Restrictions
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH	Custom Home
CH_4	methane
CMP	(San Bernardino County) Congestion Management Plan
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
County	County of San Bernardino
CRHR	California Register of Historical Resources
CSA	County Service Area
CWA	Clean Water Act
dB	decibel
dBA	decibel A-weighted
DFG	California Department of Fish and Game
EB	eastbound
EIR	Environmental Impact Report
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
GHG	greenhouse gas
GWP	global warming potential
HCP	Habitat Conservation Plan
Hz	hertz

I-10	Interstate 10
ITE	Institute of Transportation Engineers
lbs./day	pounds per day
LCFS	low-carbon fuel standard
L_{dn}	day-night noise level
L_{eq}	Equivalent Sound Level
LESA	Land Evaluation and Site Assessment
LORS	laws, ordinances, regulations, and standards
LOS	Level of Service
LST	Localized Significance Threshold
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendent
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
msl	mean sea level
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NB	northbound
NO	nitric oxide
NO_X	nitrogen oxides
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
N_2	nitrogen
N_2O	nitrous oxide
O_2	oxygen
OHWM	ordinary high water mark
PD	Planned Development
PFC	perfluorocarbon
PI	plasticity index
PM	particulate matter
$PM_{2.5}$	particulate matter equal to or less than 2.5 micrometers in diameter
PM_{10}	particulate matter equal to or less than 10 micrometers in diameter
ppm	parts per million
PRC	Public Resources Code
Project	Wilson Creek Estates Residential Subdivision
RL	Rural Living
RMP	Risk Management Plan
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SANBAG	San Bernardino Association of Governments
SBAIC	San Bernardino Archaeological Information Center
SB	Senate Bill
SB	southbound

SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SF_6	sulfur hexafluoride
SHMA	Seismic Hazards Mapping Act
SMARA	Surface Mining and Reclamation Act
SO_X	sulfur oxides
SO_2	sulfur dioxide
SR	State Route
SRA	Source/Receptor Area
SWMD	Solid Waste Management Division
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SWQMP	Storm Water Quality Management Plan
TAC	toxic air contaminant
TIA	Traffic Impact Analysis
TTM	Tentative Tract Map
URM	unreinforced masonry
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	Underground storage tank
UWMP	Urban Water Management Plan
VOC	volatile organic compound
v/c	Volume to Capacity
WB	westbound
WQMP	Water Quality Management Plan
WRCC	Western Regional Climate Center
YAPS	Yucaipa Animal Placement Society
YVWD	Yucaipa Valley Water District
ºF	degrees Fahrenheit
$\mu g/m^3$	micrograms per cubic meter

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EXECUTIVE SUMMARY

The Executive Summary prepared for the Wilson Creek Estates Residential Subdivision (the "Project") briefly describes the intended use of this Environmental Impact Report (EIR), in addition to the Project's background, goals and objectives, alternatives, and the areas of environmental concerns relative to the Project. Table ES-1, Summary of Significant Environmental Impacts, Mitigation Measures and Level of Significance after Mitigation, is presented in this Executive Summary to outline the Project's significant impacts by resource, mitigation measure(s), and the Project's residual significant impact after implementation of recommended mitigation measure(s).

INTENDED USE OF THE EIR

As required by the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21000-21178, this Draft EIR is specifically intended to assist decision makers and the general public in understanding the potential significant environmental effects to occur with development of the Wilson Creek Estates Residential Subdivision. Additionally, CEQA states that an EIR must address "a range of reasonable alternatives to the Project, or a location of the Project, which could feasibly attain the basic objectives of the Project, but avoid or substantially lessen any of the significant effects of the Project and evaluate the comparative merits of the alternatives" (California Code of Regulations Title 14, Chapter 3 Section 15126.6(a)). Therefore, the intent of this EIR is to delineate information on the:

- Potential environmental impacts of the Project;
- Feasible mitigation measures to avoid or significantly reduce these impacts; and,
- Evaluation of reasonable alternatives for use by decision-making bodies and other interested parties.

The City of Yucaipa is the lead agency for the Project, as defined by Section 15051(b) of the CEQA Guidelines, and will have discretionary authority over Project approval.

PROJECT DESCRIPTION

The Project is located in the City of Yucaipa, in the County of San Bernardino (Figure ES-1), and consists of a Phased Tentative Tract Map (TTM) to subdivide approximately 236 gross acres into 184 single-family lots each with a minimum lot size of one (1) gross acre, with two (2) additional "Not a Part" lots for an existing private residence (Casa Blanca Ranch) and water tank/pump station site owned and operated by the Yucaipa Valley Water District. The Project is intended to be constructed as a lot sales project, with individual lots to be sold to future builders.

The TTM includes right-of-way dedication for public streets within the development, which will include an area to accommodate a multi-purpose trail system within the subdivision consistent with the City's General Plan Map of Multi-Use Trails and Bike Paths and Rural Multi-Use Trail specifications. Appropriate drainage easements will be recorded to accommodate 100-year flood zone areas located within the development.

The EIR process typically consists of three parts:

1. Initial Study and Notice of Preparation
2. Draft EIR
3. Final EIR

The original Notice of Preparation (NOP) for the proposed Project was circulated in September 2015. The NOP, which included a completed Initial Study Checklist, was distributed directly to approximately 17 public agencies and interested parties. A notice advising the availability of the NOP was posted with the San Bernardino County Clerk of the Board on October 1, 2015 and the State Clearinghouse on September 30, 2015. Copies of both the NOP and NOP distribution list are presented in Appendix A of this EIR. Copies of the comments received in response to the NOP are also presented in Appendix A.

PROJECT OBJECTIVES

Pursuant to CEQA Guidelines Section 15124(b) and recent CEQA case law, the project proponent, Meridian Land Development, has identified several objectives for the proposed Wilson Creek Estates Residential Subdivision. The Project objectives, shown below, are generally consistent with the City's building intensity standards for the Rural Living (RL) Land Use District, as well as the goals, policies, and objectives as defined in the City's adopted 2004 General Plan, including the 2013 update to the Housing Element:

1. To subdivide the property for single-family homes consistent with the density requirements and provisions of the Yucaipa General Plan;
2. To design a project that will avoid mass grading;
3. To design a project that will avoid existing slopes and vegetation wherever possible;
4. To design a project that will follow street grades and the existing topography to the extent and wherever possible;
5. Rural street designs will maintain a 30-foot paved profile within a 60-foot right-of-way;
6. Street grading will not alter or impact Wilson Creek drainage; and
7. To design a project in which minor drainage courses feeding into Wilson Creek will be left natural wherever possible.

AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR describe known areas of controversy and issues to be resolved, including the choice among alternatives and how to mitigate significant impacts. The principal issues to be resolved include decisions by the City as to whether:

- The Draft EIR adequately describes the environmental impacts of the proposed project.
- The recommended mitigation measures should be adopted or modified.
- Additional mitigation measures need to applied to the proposed project.

- The unavoidable significant adverse impacts related to Agricultural Resources and Air Quality outweigh the benefits of the project, and whether a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 should be adopted in conjunction with certification of the Final EIR.

SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table ES-1 provides a summary of the significant environmental impacts, mitigation measures, and residual environmentally significant impacts following implementation of the mitigation measures. Detailed evaluation of these issues is presented in Section 3.0.

Figure ES-1 – Regional Context

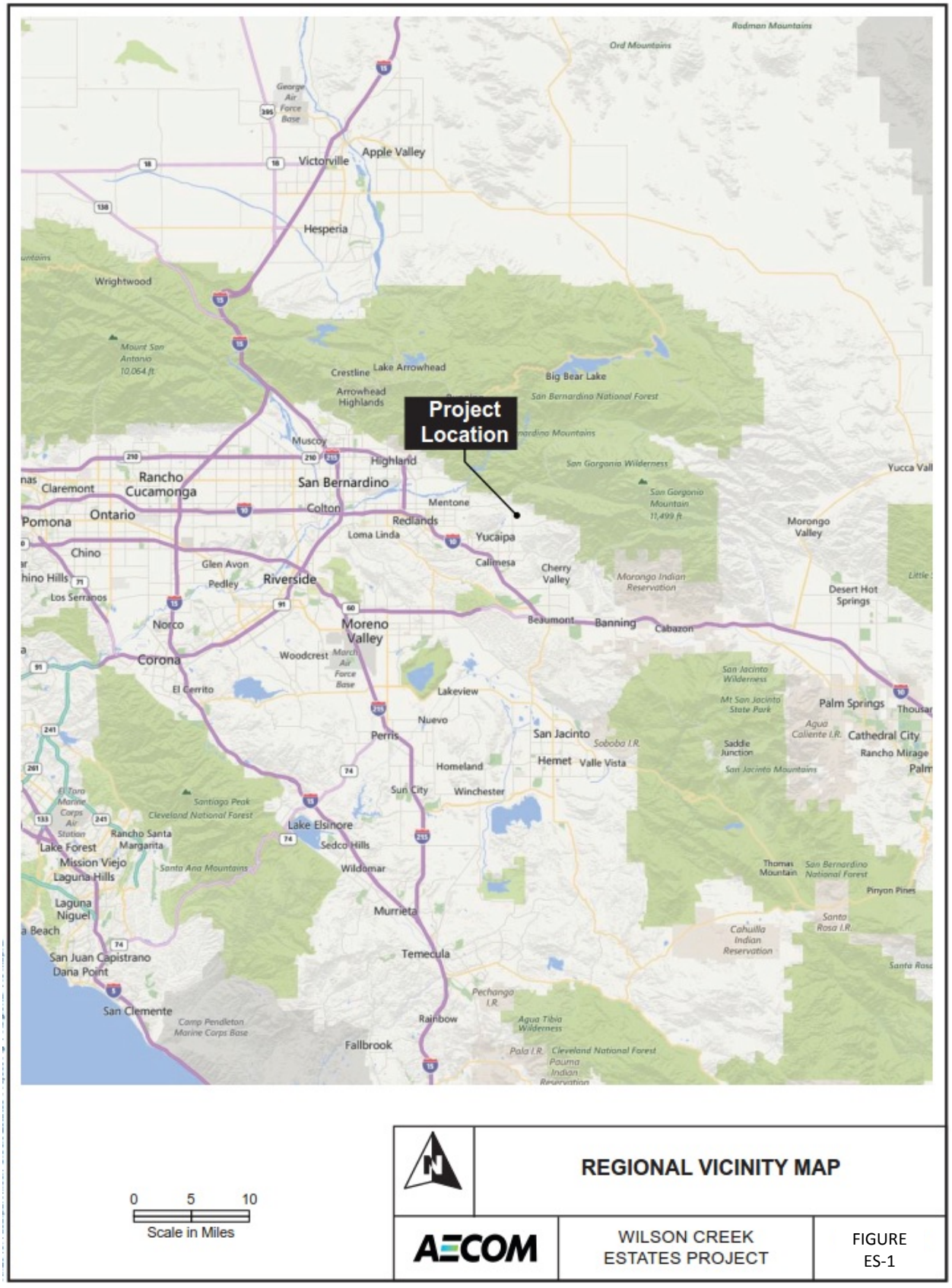

Table ES-1 Summary of Significant Environmental Impacts, Mitigation Measures, and Level of Significance after Mitigation

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
AESTHETICS		
Scenic Vistas	• AES-1. Prior to the issuance of a building permit for each lot to be constructed by an individual homeowner, the project proponent shall submit a Building Pad Constraints Exhibit for City review and approval. The Building Pad Exhibit shall identify the building pads and access driveways for each lot that avoids areas with one or more of the following attributes: o Moderate to steep sloping land (15 percent slope or greater). o Applicable drainage courses per the City Engineer, including but not limited to the FEMA-designated 100-year floodplain. o Within identified riparian areas. o Within identified areas of important biological resources.	Less Than Significant Impact.
AGRICULTURE AND FORESTRY RESOURCES		
Prime and Unique Farmland. The portion of land along the north side of Oak Glen Road, designated unique farmland, is located on the southern portion of nine proposed lots of the subdivision (lots 171 through 175 and lots 178 through 181).	• AG-1: The Olive Grove shall be maintained to the extent possible. Prior to recording the final tract map, developer shall submit an Olive Tree preservation plan for review and approval by the Planning Division for common/street areas and for individual parcels, to be used prior to removal of any olive trees as part of the tract map development, or the development of any parcel. The preparation of the document which shall include the following attributes: - Delineation of grove boundaries - Maintenance responsibilities (who is responsible for trees in the future) - Method of tree preservation (easement, HOA, LLMD, CC&R's, etc.) - Ratio of acceptable take (i.e., retain at least 75% of the olive grove)	Less Than Significant Impact
AIR QUALITY		
The operational phase of the Project would generate VOC emissions that exceed the SCAQMD threshold of significance. These emissions are primarily related to hearth emissions.	• AQ-1: The Project shall comply with the requirements of SCAQMD Rule 445 with regard to the installation of permanent indoor wood-burning devices (such as fireplaces and stoves). The exemption for residential properties above 3,000 or more feet above msl shall not apply to the Project.	Less Than Significant Impact
BIOLOGICAL RESOURCES		
Sensitive and Special Status Species. The presence of white-tailed kite and Cooper's hawk, as well as habitat suitable for the burrowing owl, was observed on the project site. Additionally, Parry's spineflower and	• BIO-1: The property owner or Project contractor will be responsible to schedule vegetation clearing and grading activities outside of the typical avian nesting season (February 15 through August 31) to the maximum extent practical in order to comply with the MBTA and relevant sections of the California FGC. If active nests are observed, a minimum buffer zone from occupied nests is recommended to the maximum extent practicable. Once nesting has ended, the buffer may be removed. In addition, a pre-construction survey for burrowing owls shall be conducted by a City approved, licensed biologist, no more than 30 days prior to commencement of grading, and submitted to and approved by the Planning Division prior to issuance of a	Less Than Significant Impact.

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
Plummer's mariposa lily, both identified as sensitive species, was listed as having a high potential for occurrence within the project site.	grading permit. The survey shall be conducted according to the recommended guidelines of the California Burrowing Owl Consortium (1993) and in consultation with CDFW. • BIO-2: Due to their potential for occurrence on the site, additional surveys for Parry's spineflower and Plummer's mariposa lily shall be completed during the spring blooming period prior to final map recordation and prior to construction of common areas and streets, or of individual lots. The blooming period for Parry's spineflower is April through June, and Plummer's mariposa lily is May through July. Surveys during May would encompass both species; however, known reference populations should be visited to determine if April/May for Parry's spineflower would be better and another survey in June should occur to locate Plummer's mariposa lily. Should surveys indicate of the presence of these species, the project proponent shall contact CDFW to determine appropriate strategies, which may include in-lieu payment, avoidance, or replacement of plants.	Less Than Significant Impact.
A total of 0.64 acres of potential waters of the U.S. were recorded on the property. This acreage represents a calculated estimation of the jurisdictional area within the Project boundaries, and is subject to modification following the USACE verification process. A total of 1.202 acres of CDFG Habitat Area were recorded on the property, and this finding is to be verified by the CDFW.	• BIO-3: During Project grading activities, the limits of grading and construction activities within the Project footprint should be clearly delineated with temporary staking, flagging, or similar materials by the property owner or Project contractor. Grading of the Project footprint should be minimized to the greatest extent feasible and access to it should be via preexisting/maintained access routes to the greatest extent possible. • BIO-4: Prior to the issuance of grading permits on those lots within the subdivision that contain jurisdictional features, including FEMA 100-year flood zone facilities, the property owner or Project contractor shall obtain the applicable CWA Section 401 and 404 permits from USACE and CDFW as required. • BIO-5: Prior to the issuance of grading permits, nesting surveys shall be conducted within 72 hours of construction. Preemptive vegetation removal outside of the raptor breeding season of January 1 through July 15 may occur, where feasible, to avoid take of the fully protected nesting white-tailed kite, state protected Cooper's hawk, and any additional protected nesting birds under the MBTA. o To comply with Section 10 of the MBTA and relevant sections of the California FGC (e.g., Sections 3503, 3503.4, 3504, 3505, et seq.), any vegetation clearing within the Project footprint shall take place during September through December, outside of the raptor breeding season (January 1 through July 15) and outside of the typical avian nesting season (February 15 through September 15). o In the event that vegetation clearing is necessary during the breeding season (i.e., February 1 through September 1), a qualified biologist shall conduct a preconstruction survey no more than 72 hours prior to construction to identify the locations of avian nests. Should occupied nests be found in construction areas, an appropriate buffer area of 200 feet, or 500 feet for raptors and listed species, shall be established around each nest site (typically). No construction shall take place within this buffer until the nest is no longer active. In the event that construction must occur within the buffer, the biological monitor will take steps to ensure that construction activities are not disturbing or disrupting nesting activities. If the biological monitor determines that construction activities are disturbing or disrupting nesting activities, then the biologist shall have the authority, upon consultation and concurrence with CDFW, to halt construction in order to reduce the noise and/or	Less Than Significant Impact. Less Than Significant Impact. Less Than Significant Impact.
Protected oak trees subject to the City's Oak Tree Conservation Ordinance were found to exist on the project site.		

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
	disturbance to the nests, as appropriate. • BIO-6: Prior to the issuance of grading permits for infrastructure facilities (Project roadways) it will be the responsibility of the project proponent (master developer) to obtain the necessary permits for removal of protected oak trees as applicable. Subsequent oak tree removal permits outside of the public right-of-way will be the responsibility of the individual lot owners as applicable. Removal of oak trees will also be subject to nesting surveys prior to the issuance of permits, consistent with the requirements identified under Mitigation Measure BIO-5.	Less Than Significant Impact.
CULTURAL RESOURCES		
The proposed Project includes the construction of new homes immediately adjacent to the Casa Blanca property, which is eligible for listing in both the NRHP under criteria A through C and in the CRHR under criteria 1 through 3.	• CR-1: Prior to recordation of the final map, the following security measures shall be implemented to the existing Casa Blanca residence to prevent arson and further vandalism: a) Installation of an alarm system to the main residence. b) Installation of a locked gate at the lower end of the driveway by Oak Glen Road. • CR-2: Prior to the issuance of building permits to restore the Casa Blanca residence, a landscaping plan shall be submitted to the City for review and approval. The landscaping plan shall show how the landscaping and plantings in the area immediately surrounding the house shall be preserved for the Casa Blanca residence's integrity of setting. This includes the front yard and its border of deodar cedar and olive trees, the deodar cedar trees that line the driveway, the stone retaining wall with rings for tethering horses in the back yard of the house, and the olive trees on the steep hill slope south of the house. Keeping the olive trees on the hill slope would have the added effect of maintaining the historical visual barrier between Oak Glen Road and the house. Retaining the Casa Blanca house and its immediate surroundings would provide an aesthetic focal point for any new residential development, as well as an important link to the history of the region and its pioneers. • CR-3: Although the cultural resources survey was conducted in as thorough a manner as possible, there is the possibility that previously unidentified archaeological and paleontological resources could be discovered during Project construction. Prior to the issuance of grading permits, the property owner or Project proponent will be responsible to retain the services of a qualified archaeologist and/or paleontologist who shall monitor grading activities during Project construction. In the event that any prehistoric or historic-period cultural resources (chipped or ground stone lithics, animal bone, ashy midden soil, structural remains, historic glass or ceramics, etc.) are discovered during the course of construction when a monitor is not present, the Project contractor will be responsible to cease all work in the vicinity and wait until the archaeologist and/or paleontologist has evaluated the significance of the find and has removed the resource as required by law. • CR-4: If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made necessary findings as to origin and disposition of the remains pursuant to PRC Section 5097.98. The following actions must be taken by the property owner or Project contractor or proponent in the event that human remains are discovered on private or State land: o Stop work immediately and contact the County Coroner. The County Coroner must be notified	Less Than Significant Impact. Less Than Significant Impact. Less Than Significant Impact. Less Than Significant Impact.

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
	immediately of the find. o The Coroner has two working days to examine human remains after being notified by the responsible person. If the remains are determined to be prehistoric or Native American the coroner will notify the NAHC within 24 hours. o The NAHC will immediately notify the person it believes to be the most likely descendent (MLD) of the deceased Native American. With the permission of the landowner or agency, or an authorized representative, the MLD may inspect the site of the discovery. o The MLD makes recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods. o If the NAHC is unable to identify a descendent, the descendent identified fails to make a recommendation, or the landowner rejects the recommendations of the descendent and the mediation provided for in subdivision (k) of Section 5097.94 fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with the Native American burial(s) with appropriate dignity on the property in a location not subject to further subsurface disturbance.	
GEOLOGY/SOILS		
None identified.	None required.	N/A
GREENHOUSE GAS EMISSIONS		
• The Project would generate GHG emissions that exceed the SCAQMD and City of Yucaipa threshold of 3,000 MT CO2e per year.	• GHG-1: As a condition of approval prior to issuing building permits, development proposals associated with the Project shall be required to demonstrate that the residential unit(s) would obtain at least 100 points from the Screening Tables for residential projects in the City of Yucaipa CAP.	Less Than Significant Impact.
HAZARDS/HAZARDOUS MATERIALS		
None identified.	None required.	N/A
HYDROLOGY/WATER QUALITY		
• The Wilson creek and the tributary streams run through several lots of the proposed Project grading may potentially impact the tributary streams. • The proposed Project has been identified as being potentially impacted by jurisdictional area,	• WQHYDRO-1: The property owner or the project applicant for future development projects shall prepare additional project drainage studies and submit for approval by the City Engineer when future development plans are available. Such studies will need to identify any increase in developed condition peak flows, measures to manage any incremental increase in storm flows (e.g. detention/retention basins, other storm water BMPs), measure impacts to adjacent properties, and the timing of additional improvements needed to serve the subdivision at buildout. • WQHYDRO-2: Local storm drain facilities shall be sized to convey the 10- and/or 100-year storm event per a final drainage plan reviewed and approved by the City Engineer, or per the requirements of other	Less Than Significant Impact Less Than Significant

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
and based on materials submitted with the project application, the following lots within the proposed subdivision are located within a 100-year floodplain: 4, 8-20, 24, 28, 29, 39-47, 49, 50, 52, 53, 58-65, 71-74, 81, 82, 84-86, 89-92, 102, 111, 118, 119, 122-138, 140, 141, 145, 151, 154, 158, 159, 171, 173-180, 182,184.	responsible agencies. • WQHYDRO-3: Prior to the issuance of grading permits on those lots within the subdivision that contain jurisdictional features, including 100-year FEMA flood zone facilities, the property owner or Project contractor shall obtain the applicable CWA Section 401 and 404 permits from USACE and CDFW as required. • WQHYDRO-4: Building plans submitted to and approvable by the Engineering Department shall be designed so that infrastructure associated with the proposed Project is situated outside jurisdictional areas of streams and drainages (e.g., channels and banks). A drainage easement will be recorded as approved by the City Engineer, aligned consistent with the centerline of the wash. A conservation easement exceeding the limits of the 100-year flood shall be recorded. No buildings or structures will be permitted within the easement, which shall be maintained as close to its natural state as possible. • WQHYDRO-5: Grading plans submitted to and approvable by the Engineering Department shall delineate the limits of grading and construction activities and should clearly outline the limits of the drainage easements and the 100-year flood limits. • WQHYDRO-6: Building plans submitted to and approvable by the Engineering Department shall be designed so that new construction and substantial improvement of any residential structure shall have the lowest floor, elevated to one foot above base flood elevation. Upon the completion of the structure, the elevation of the lowest floor, including the basement, shall be certified by a registered professional engineer or licensed land surveyor, and verified by the City Building Official to be properly elevated above the floodplain elevation at the time of certification. • WQHYDRO-7: The property owner or the project applicant for future development projects shall prepare additional project drainage studies and submit for approval by the City Engineer when future development plans are available. Such studies will need to identify any increase in developed condition peak flows, measures to manage any incremental increase in storm flows (e.g. detention/retention basins, other storm water BMPs), measure impacts to adjacent properties, and identify and quantify whether diversion of flow will occur. • WQHYDRO-8: The property owner or the project applicant for future development projects shall ensure that fill materials placed adjacent to streambeds are compacted according to the City's development standards. It must be demonstrated that fill will not settle and is protected from erosion, scour, or differential settlement. • WQHYDRO-9: Storm water drainage inside the proposed Project boundaries will be designed to minimize soil erosion and provide for sediment control. Drainage control measures will be installed so that surface runoff will not be increased as it exits the site and does not increase velocity, to prevent erosion of downslope properties. Final design of the site drainage shall be subject to all requirements of the grading permit. • WQHYDRO-10: The property owner or the project applicant for future development projects shall provide	Impact Less Than Significant Impact Less Than Significant Impact Less Than Significant Impact Less Than Significant Impact Less Than Significant Impact Less Than Significant Impact Less Than Significant

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
	employee training concerning water quality and site management (as is required in the WQMP). The employee training documents shall be submitted to the City Engineering Department prior to the issuance of final occupancy permits. • WQHYDRO-11: The property owner or the project applicant for future development projects shall prepare and submit a Notice of Intent to comply with the Construction General Permit to the California State Water Resources Board. • WQHYDRO-12: The property owner or the project applicant for future development projects shall prepare a SWPPP per requirements of the Construction General NPDES Permit. • WQHYDRO-13: During Project construction and operation, the property owner or Project contractor will be required to use or store hazardous materials in a safe manner and at an appropriate distance from known or identified natural drainages. Material Safety Data Sheets will be made available to all site workers for cases of emergency. • WQHYDRO-14: The property owner or the project applicant for future development projects shall prepare a final WQMP for approval by the City Engineer addressing post-construction water quality BMPs.	Impact Less Than Significant Impact Less Than Significant Impact Less Than Significant Impact Less Than Significant Impact Less Than Significant Impact
LAND USE/PLANNING		
None identified.	None required.	N/A
MINERAL RESOURCES		
None identified.	None required.	N/A
NOISE		
• The proposed Project would result in a temporary increase in ambient noise levels during construction activities.	Construction Noise: • NOISE-1: Engineering noise controls – to the extent practical, locate stationary and/or continuous major noise producers (e.g., air compressors, generators) as far as possible from the potentially impacted residential receiver. In other words, gain more naturally-occurring noise attenuation via increasing distance between source and receiver. • NOISE-2: Equipment noise controls – there are a number of practices that could be employed as follows:	Less Than Significant Impact Less Than Significant Impact

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
	• Ensure that all engine-driven vehicles and stationary equipment feature factory-approved exhaust silencers/mufflers that are in proper working order. • Minimize idling time for engine-driven operating vehicles that have the engine running between periods of mobility and/or work-intensive activity. For instance, with respect to its influence on an hourly L_{eq} value, reducing the time that a vehicle or piece of equipment operates by half (e.g., 10 minutes instead of 20 during a given hour) generally enables a 3 dB reduction of noise emission associated with that source (since it is contributing half as much acoustical energy), which can help lower the overall hourly L_{eq} value representing the sound environment at a studied location. • As certain equipment may have a "louder" side or facing (e.g., an air intake that produces the most noise), position the equipment onsite so that said louder facings are directed away from the noise-sensitive receiver.	Less Than Significant Impact
	• NOISE-3: Beyond noise mitigation measures NOISE-1 and NOISE-2, proper design and installation of temporary construction noise barriers may need to be implemented to reduce construction noise. The following are recommended: • Use of quiet construction equipment when possible. • Operational limitations within the noise ordinance day time hours. • Use of temporary sound barriers. • When loud equipment is required for construction, noise baffles should be used to reduce impacts.	Less Than Significant Impact
	When the construction activity of concern has concluded and moved to sufficiently more distant Project locations, thus increasing the distance between it and the NSR, the need for temporary noise barriers would correspondingly diminish or be eliminated altogether. Operational Noise: • NOISE-4: Developer shall consider options for and implement measure(s) such as an earthen berm or wall of sufficient height and extent between 11114 Cherry Croft Drive and the primary roadway traffic noise sources (e.g., engine exhaust and tire/pavement contact) on Jefferson Street so that 4 dBA of Jefferson Street traffic noise reduction as quantified at 11114 Cherry Croft Drive can be achieved. Noise reduction benefit could be estimated prior to mitigation measure design and installation as part of Jefferson Street roadway upgrading, and field-verified with pre-construction and post-construction outdoor noise level measurements similar to those performed for the baseline sound environment data collection described in Section 3.2.2 of Appendix I.	Less Than Significant Impact
PUBLIC SERVICES		

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
None identified.	None required.	N/A
RECREATION		
None identified.	None required.	N/A
TRANSPORTATION/TRAFFIC		
Based on the results of the traffic study, there are no anticipated AM and PM peak hour Project added trips at the Bryant Street/Carter Street intersection. The development of the Project will not impact nor deteriorate the forecast intersection delay of the Bryant Street/Carter Street intersection, which is projected to operate at LOS E during the morning peak hour and LOS D during the evening peak hour under 2040 traffic conditions with and without Project.	The Project shall contribute to the implementation of the following mitigation measure to improve the forecast future LOS E/D operation of this intersection: • TR-1: Signalization of the Bryant Street/Carter Street intersection will be required when MUTCD peak hour signal warrants are met. Based on the prevailing growth in the area, the anticipated year of implementation of the signal will be by Year 2025 contingent upon meeting traffic signal warrants. The Project may proactively contribute in a fair-share program (based on and not to exceed 50 daily or five peak hour Project added trips) towards the costs of the signalization of this intersection.	Less Than Significant Impact.
UTILITIES/SERVICE SYSTEMS/ENERGY		
None identified.	None required.	N/A

1.0 INTRODUCTION

1.1 PURPOSE AND INTENT

This Draft Environmental Impact Report (EIR) has been prepared to evaluate the potential environmental effects of the proposed Wilson Creek Estates Residential Subdivision ("Project"). In accordance with Section 15121(a) of the California Environmental Quality Act (CEQA) Guidelines (California Administrative Code, Title 14, Division 6, Section 3), the purpose of this EIR is to:

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

This EIR does not set forth City policy about the appropriateness of the Project. It contains information on the (1) potential environmental impacts of the Project, (2) feasible mitigation measures to avoid or significantly reduce the impacts, and (3) an evaluation of reasonable alternatives for use by City decision-making bodies, public agencies and the general public.

1.2 PROPOSED PROJECT ACTIONS AND PROJECT OBJECTIVES

The EIR analyzes the development of the Project as a whole in order to determine the full potential impact of the proposed Project. It is uncertain, however, as to what portion of the overall Project will be constructed initially as the Project is anticipated to be developed as individual lot sales, and the rate of development will depend on market demand. To ensure adequate facilities, improvements, and access are available for the project site, the on-site improvements, including streets, utilities, and related infrastructure will be constructed as each phase of the Project is completed. This will ensure that utilities, roadways, and related infrastructure onsite meet the demands of the residential units.

Pursuant to CEQA Guidelines Section 15124(b) and recent CEQA case law,[1] the project proponent, Meridian Land Development, has identified several objectives for the proposed Wilson Creek Estates Residential Subdivision. The statement of the Project objectives is intended to provide a clear understanding of the purpose and intent of the Project, to assist in the formulation and evaluation of alternatives, and to aid in the preparation of findings by the decision-making body. This environmental analysis of project impacts includes assumptions about the building of the individual homes by purchasers of individual parcels. The Project objectives, shown below, are generally consistent with the goals, policies, and objectives as defined in the City of Yucaipa's General Plan, including the 2013 update to the Housing Element:

1. To subdivide the property for single-family homes consistent with the density requirements and provisions of the Yucaipa General Plan;
2. The project design specifically avoids mass grading;

[1] *Watsonville Pilots Assoc. v. City of Watsonville* (2010) 183 Cal.App.4th 1059

3. Existing slopes and vegetation will be avoided wherever possible;
4. Street grades will follow the existing topography to the extent and wherever possible;
5. Rural street designs will maintain a 30-foot paved profile within a 60-foot right-of-way;
6. Street grading will not alter or impact Wilson Creek drainage; and
7. Minor drainage courses feeding into Wilson Creek will be left natural wherever possible.

1.3 FORMAT AND CONTENT OF THIS EIR

As part of the Notice of Preparation (NOP) (refer to Appendix A), an initial Study was completed and circulated for the Project. The following environmental topics have been identified for additional information and analysis in this EIR:

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

This EIR is organized into nine sections. In addition to this introductory section, Section 2.0 contains a detailed Project description, including a discussion of the regional and local context of the Project. Section 3.0 contains an analysis of the potential impacts of the Project by potential environmental impacts required by CEQA, including recommended mitigation measures and significant impacts after mitigation. Section 4.0 examines cumulative impacts of the Project. Section 5.0 evaluates the growth-inducing impacts as well as the unavoidable and irreversible impacts of the Project. Section 6.0 examines the alternatives to the Project and the associated environmental effects. Sections 7.0, 8.0, and 9.0 provide a summary of proposed mitigation measures, a list of references used in preparing the EIR, and a list of the organizations and persons consulted, respectively. Appendices containing Project-related information and technical studies are also included with the document.

1.4 DISCRETIONARY ACTIONS

The intent of this EIR is to provide sufficient information to allow the discretionary actions listed below to be considered and approved by the lead agency and responsible agencies.

1.4.1 Tentative Tract Map

The applicant has submitted an application for a Phased Tentative Tract Map (Case No. 15-061/TTM 19974), to create 184 numbered lots, with two (2) additional "Not a Part" lots for an existing private residence (Casa Blanca Ranch) and water tank/pump station site owned and operated by the Yucaipa Valley Water District (YVWD).

The Tentative Tract Map (TTM) includes right-of-way dedication for public streets within the development, which will include area to accommodate a multi-purpose trail system within the subdivision consistent with the City's General Plan Map of Multi Use Trails and Bike Paths and Rural Multi Use Trail specifications. Appropriate drainage easements will be recorded to accommodate 100-year flood zone areas located within the development.

1.4.2 Other Related Actions

Permits to remove and relocate on-site protected oak trees will also be necessary, prior to the issuance of grading permits. These permits would be issued by the Development Services Department (City).

1.4.3 Other Agency Permits

This EIR may be used for approvals and or permits issued by the following Responsible Agencies:

- Yucaipa Valley Water District
- Santa Ana Regional Water Quality Control Board
- California Department of Fish and Wildlife
- United States Army Corps of Engineers

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2.0 PROJECT DESCRIPTION

2.1 LOCATION

The proposed Project encompasses approximately 236 acres of land located within the northeast portion of the City of Yucaipa (City), San Bernardino County, California. The site is located within Section 29, Township 1 South, and Range 1 West, San Bernardino Base and Meridian, and is identified on the Baldy Mesa, California United States Geological Survey (USGS) 7.5-Minute Topographic Quadrangle Map (USGS 1970). The site is located at latitude 34°2'56.74"N and longitude 117°0'59.84"W. Figures 2-1 and 2-2 show the project site's regional and local vicinity, respectively.

As shown in Figure 2-2, the project site is located north of Oak Glen Road and east of Jefferson Street/Cherry Croft Drive. The project site is currently improved with a vacant ranch, which has been historically used for agricultural purposes and includes hilltops and canyons. Several farm-related structures exist on the project site, including a ranch house and other small habitable buildings, as well as structures used for storage, workshop, and packing purposes.

The Project includes the following Assessor Parcel Numbers (APN)s:

0321-082-15
0321-101-02
0321-101-12
0321-101-21

The City, in its capacity as Lead Agency under CEQA, would consider this document and other information that may be presented to the City to make decisions concerning the Project.

Figure 2-1 Regional Vicinity Map

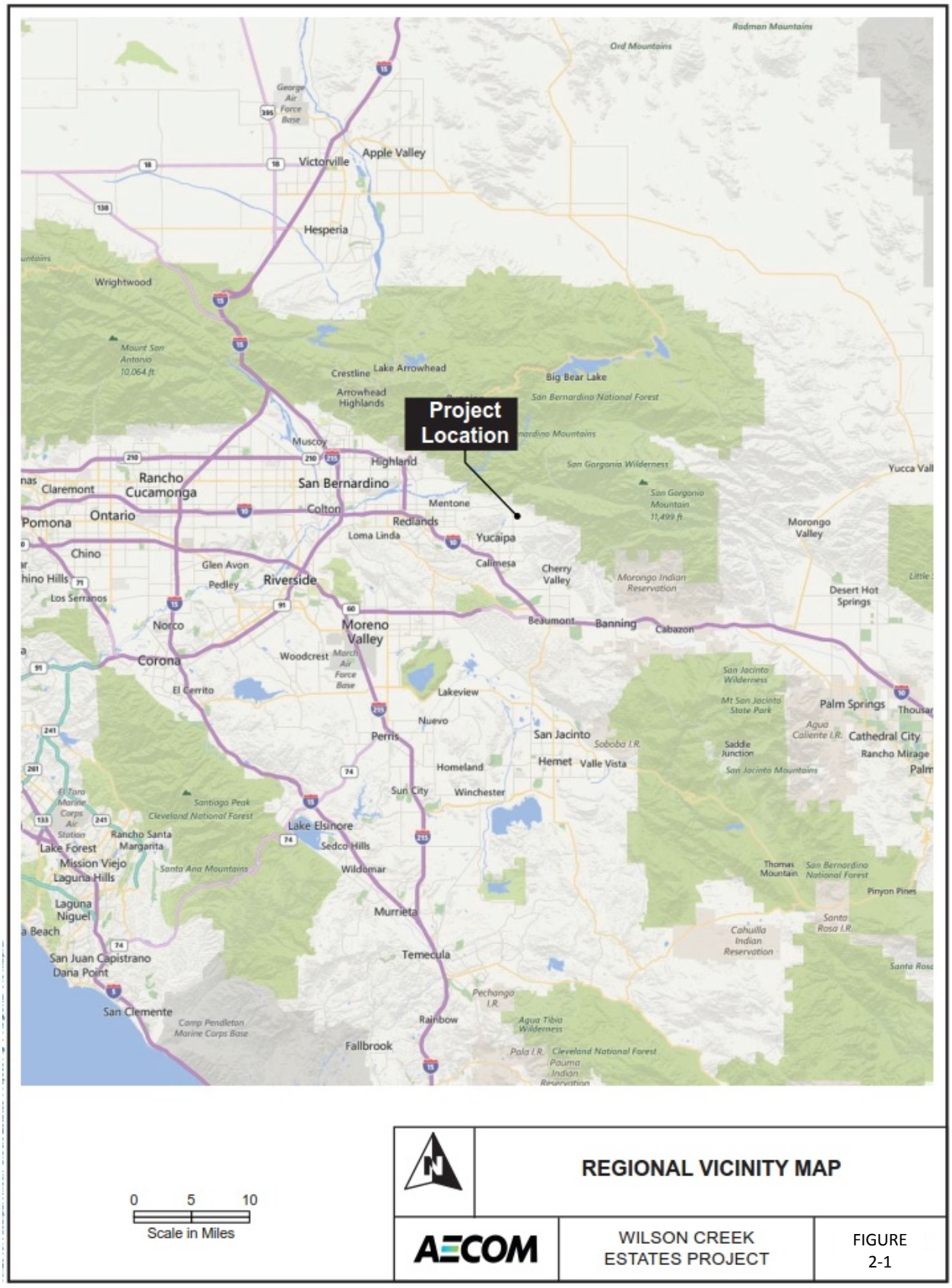
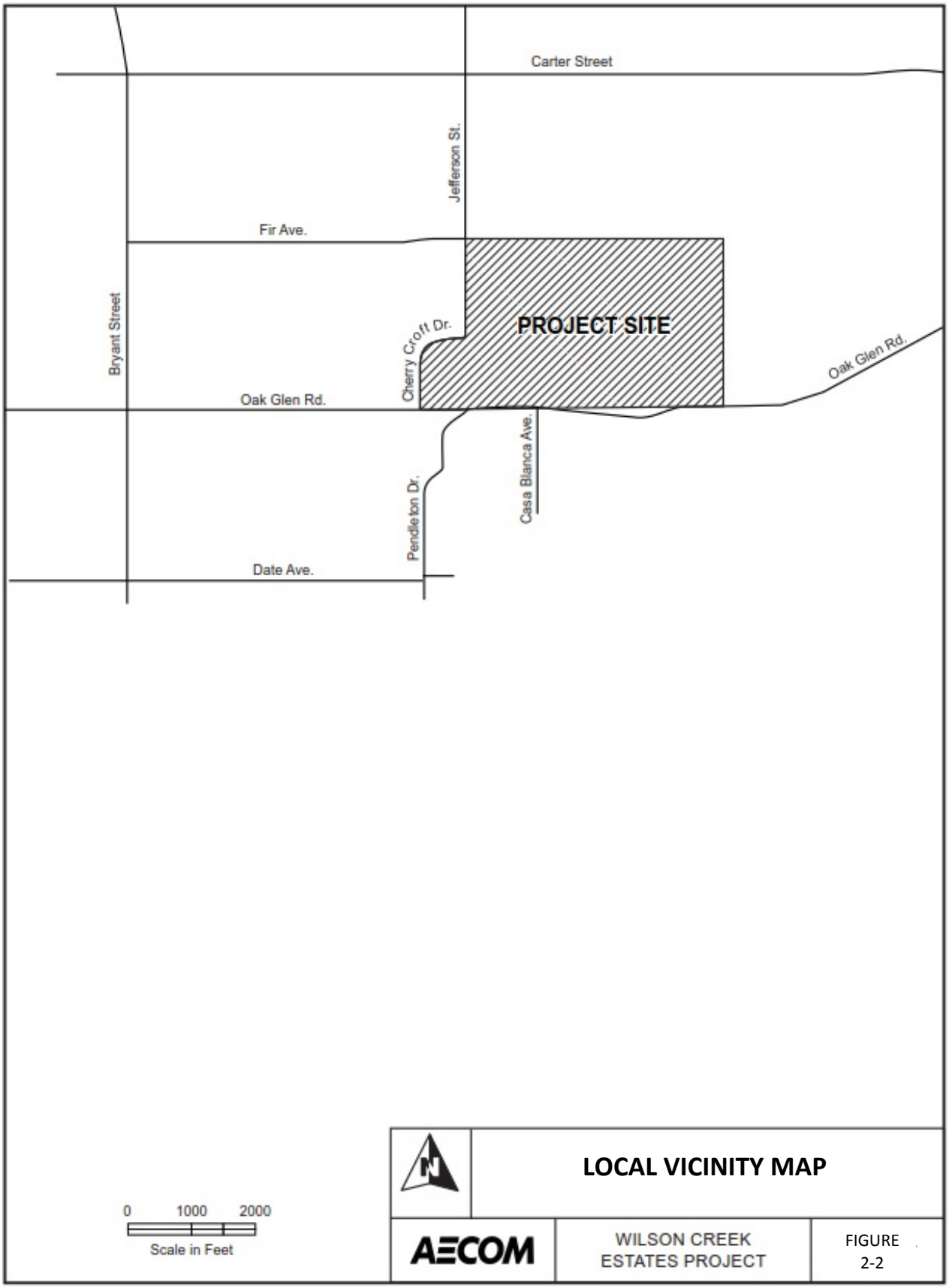


Figure 2-2 Local Vicinity Map



2.2 REGIONAL AND LOCAL CONTEXT

2.2.1 Land Use

The property is located along the upper portions of Wilson Creek in the northeastern portion of the City of Yucaipa, San Bernardino County, California, four miles north of Interstate 10 (I-10). The property is bound by Fir Avenue to the north, Oak Glen Road to the south, and Jefferson Street and Cherry Croft Drive to the west.

As outlined in the 2004 Yucaipa General Plan, Yucaipa is divided into five residential neighborhoods, North Bench, Central Yucaipa, Wildwood Canyon, Dunlap Acres, and Freeway Corridor, based on topography and creeks. The proposed site is situated in the North Bench Planning Area, which is a residential area of Yucaipa, north of Oak Glen Road.

The location of the Project has been a historic ranch with vacant lands to the north and east. The project site is currently improved with a vacant ranch used for agricultural purposes, and includes hilltops and canyons. Several farm-related structures exist on the project site, including a ranch house and other small habitable buildings, as well as structures used for storage, workshop, and packing purposes.

Vacant and open land zoned for rural residential are located to the east of the project site. Large lot, rural (one- to five-acre minimum lot sizes) and single-family (20,000 square feet minimum lot size) residential uses are located to the west and south of the project site. (Figure 2-3.) It should be noted that approved TTMs exist for the adjacent, vacant parcels, which would allow development of one gross acre lots or larger.

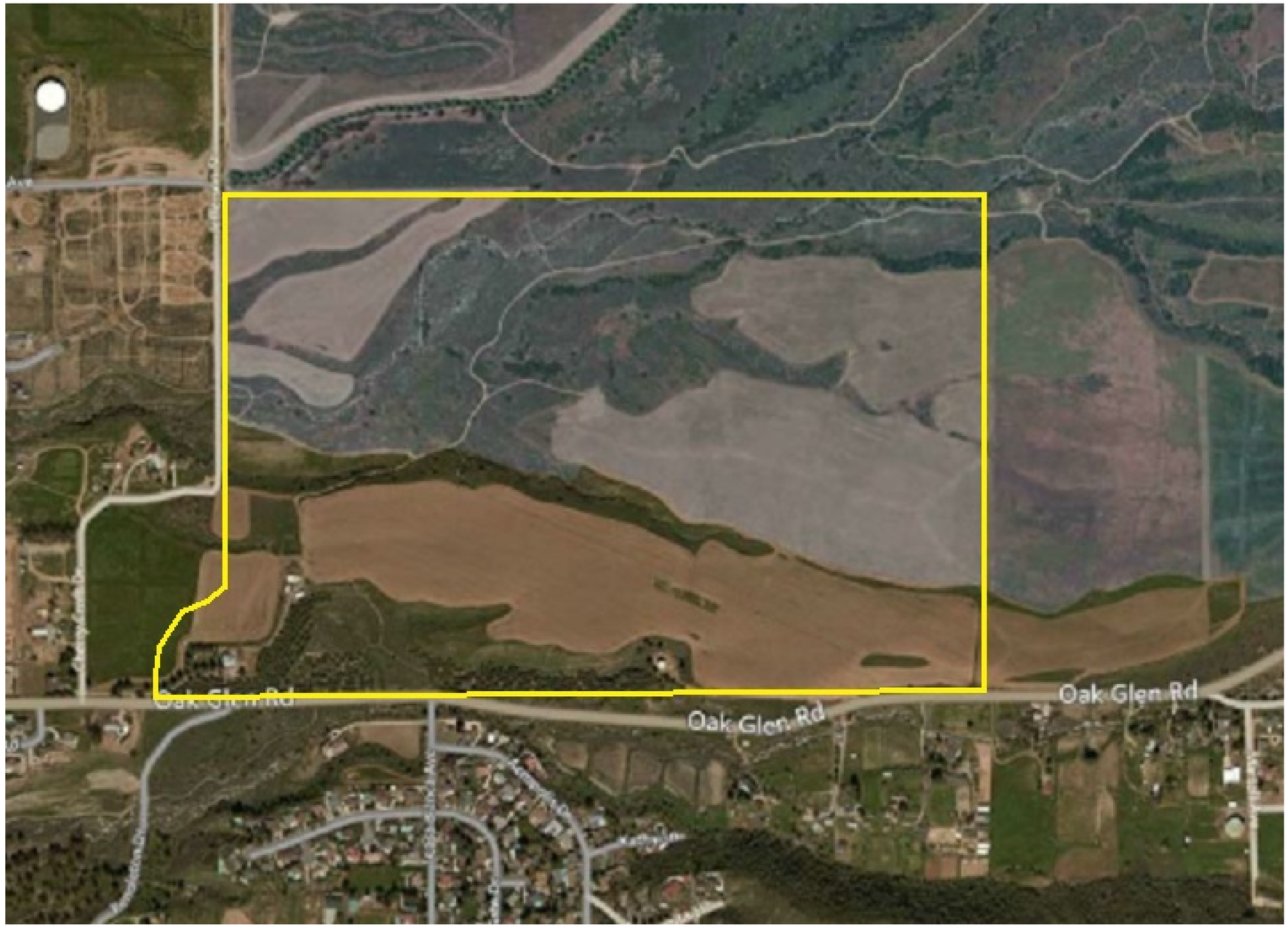
Wilson Creek, a designated Federal Emergency Management Agency (FEMA) 100-year flood plain and a USGS blue-line stream, traverses through the north and central portions of the project site (see Figure 2-4, Preliminary Flood Hazard Map). Other non-FEMA drainage courses also traverse the project site.

2.2.2 Natural Resources

Vegetation within the site consists of a mixture of native shrubs and trees, agriculture, orchards, grasslands, and developed areas. Native vegetation tends to dominate the Wilson Creek area and its associated finger canyons, while agriculture and associated plant communities dominate the ridgelines. Several outbuildings exist in the southwestern corner of the property. The property is currently subject to some degree of human visitation, likely from site maintenance purposes, with associated habitat degradation.

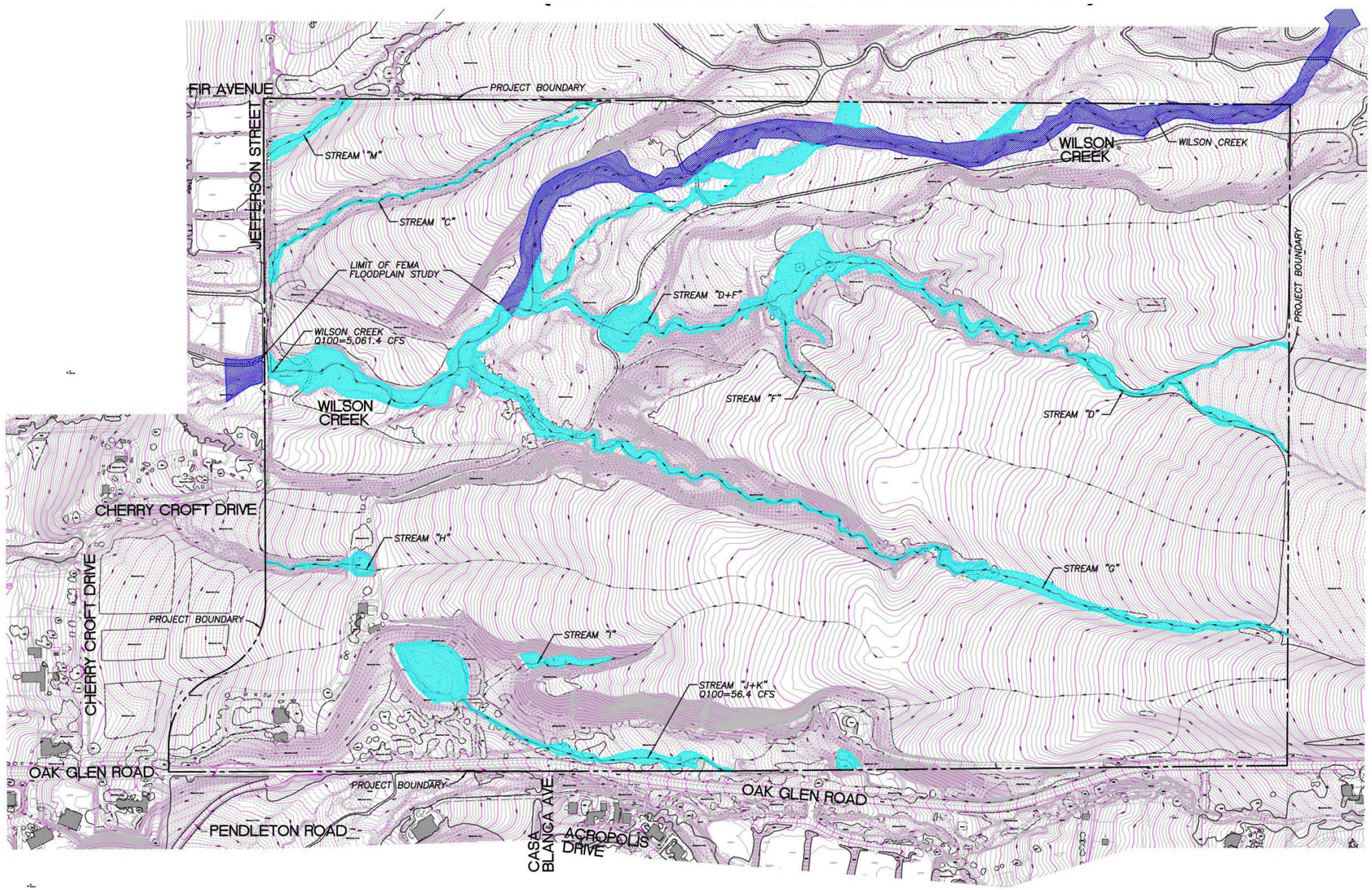
The property is located along Wilson Creek within the Yucaipa Creek Watershed, a watershed of approximately 67 square miles, which is a part of the much larger Santa Ana River Watershed. Local topography consists of a single large canyon (Wilson Creek), and a few adjoining canyons, surrounded by ridges trending in an east to west direction. The property ranges in elevation between approximately 3,000 feet above mean sea level (msl) in the southwest section to 3,460 feet above msl in the northeast.

Figure 2-3 Local Vicinity Aerial



NOTE: Exhibit does not identify areas noted as "Not A Part" within the proposed Tentative Tract Map, which includes a parcel of land containing the Casa Blanca Ranch private residence and a parcel of land associated with the water tank/pump station site north of Oak Glen Road owned and operated by the Yucaipa Valley Water District. These areas are identified in Figure 2-5, Proposed Subdivision Map.

Figure 2-4 Preliminary Flood Hazard Map



"PRELIMINARY FLOOD HAZARD ANALYSIS"

EXHIBIT "C"

AEI CASC CONSULTING
937 SOUTH VIA LATA, SUITE 500
COLTON, CA 92324
PH. (909) 783-0101; FAX (909) 783-0108

CASA BLANCA ON-SITE
FLOOD HAZARD MAP-EXISTING CONDITION
(NORMAL DEPTH METHOD)
EXHIBIT "C"

2.3 PROJECT CHARACTERISTICS

2.3.1 Tentative Tract Map

The TTM will subdivide approximately 236 gross acres into 184 single-family lots with a minimum lot size of one (1) gross acre, with two (2) additional "Not a Part" lots for an existing private residence (Casa Blanca Ranch) and water tank/pump station site owned and operated by the YVWD. See Figure 2-5, Proposed Subdivision Map. The property owner submitted a Lot Line Adjustment application to make the parcel with the Casa Blanca Ranch a separate parcel.

The TTM includes right-of-way dedication for public streets within the development, which will include a multi-purpose trail system within the subdivision rights-of-way consistent with the City's General Plan Map of Multi Use Trails and Bike Paths and associated design standards. Appropriate drainage easements will be recorded to accommodate 100-year flood zone areas located within the development.

The proposed Project is intended to reflect a rural design that includes minimal grading for roads, and phased recordation based upon projected demand and sales potential. Recorded lots are to be sold to individual home buyers to build and construct on an individual basis. Each homeowner would act as their own developer and would be responsible for hiring professionals to prepare plans for review and approval by the City prior to the issuance of any permits, such as site grading and building. This environmental analysis of project impacts includes assumptions about the building of the individual homes by purchasers of individual parcels. No production-type housing is proposed by the applicant at this time; however, there is a possibility of such occurrence and relevant Conditions of Approval for the Project can be used in either scenario.

2.3.2 Grading

The project proponent is proposing to build paved streets and infrastructure to support 184 developable rural residential lots. The Project includes roads, water and sewer lines, utilities, and fire access. It is the intent of the project proponent to utilize a "minimal grading" concept for the property, meaning that the Project design, including the circulation and drainage systems, would conform to the existing contours of the land to the extent possible. Primary objectives and features of the development plan involve a minimal grading concept to preserve to the maximum extent possible existing slopes and vegetation, and avoid mass-grading. Further, the design and layout of the proposed one-acre lots offer the opportunity to maintain each lot in its natural state until development. However, individual site grading would occur as lots are sold and developed by individuals; it is assumed that individual lots would not be developed all at one time, but would be spread out over up to twenty years. Grading for each individual lot would need to be consistent with appropriate drainage requirements.

2.3.3 Circulation and Infrastructure

Primary access to the site will be from new public residential streets with access from the realigned Jefferson Street and Oak Glen Road. Regional access to the site will be provided via Oak Glen Road, the major east-west corridor that also is accessible from the I-10 freeway.

Sewer service for this Project is provided by the YVWD. Water service, for both domestic and fire protection purposes, is provided by the YVWD. On-site distribution systems will be

constructed as part of the Project. Electrical, telephone, and gas services will also be constructed as part of the Project.

2.4 CUMULATIVE PROJECTS

CEQA Guidelines Section 15130(b) requires identification of related projects that, together with the Project, could have cumulative impacts on the environment. A cumulative impact is an impact created as a result of the combination of the proposed Project described in this EIR, together with other projects causing related impacts. A list of such projects in the City of Yucaipa and surrounding jurisdictions and their location is provided in Table 2-1. This list was developed to include projects that could combine with the proposed Project to cumulatively affect resources. Potential cumulative impacts are discussed further in Section 4.0 of this EIR.

Table 2-1 Cumulative Projects List

Project	General Location	Total Units/Site Size
Tract 18593	north of Oak Glen Road, east of Casa Blanca Ave.	58 SF detached on 78.8 acres
Tract 17725	west of 3rd Street, east of 4th Street, and south of Avenue H	108 SF condo units on 14.9 acres
Tract 18948	NEC Chapman Heights Rd. and Oak Glen Rd.	143 SF detached homes
Tract 17229	SE corner of Jefferson and Carter Street	229 lot subdivision on 318 acres

SF = single-family

Tract 18593: TTM to subdivide 78.8 acres into 58 single-family detached lots located on the north side of Oak Glen Road, abutting the project to the east.

Tract 17725: TTM for a 108-detached-unit condominium project on 14.9 acres, west of 3rd Street, east of 4th Street, and south of Avenue H.

Tract 18948: Tract Map to build 143 single-family detached homes within the Planning Area 3D in Chapman Heights (northeast corner of Chapman Heights Road and Oak Glen Road); APN: 0303-131-093. The project is currently under construction by William Lyon Homes.

Tract 17229: TTM for a 229-lot subdivision on 318 acres located at the southeast corner of Jefferson and Carter Street: APNs: 321-091-01, 03, 04 & 06, and abutting the project to the north.

2.5 PROPOSED PROJECT ALTERNATIVES

Section 15126.6[2] of the CEQA requires that an EIR describe a range of reasonable alternatives to the Project or to the location of the Project, which would feasibly attain most of the basic

[2] *CEQA Guidelines Section 15126.6(b): Because an EIR must identify ways to mitigate or avoid the significant effects that a Project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the Project or its location that are capable of avoiding or substantially lessening any significant effects of the Project, even if these alternatives would impede to some degree the attainment of the Project objectives, or would be more costly.*

objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project, and evaluate the comparative merits of the alternatives. The range of potential alternatives to the proposed Project needs to include those that could feasibly accomplish most of the basic objectives of the Project and could avoid or substantially lessen one or more of the significant effects. The following alternatives were considered in this environmental analysis:

- No project alternative
- Lower density alternative
- Planned Development alternative with the protection of riparian areas along Wilson Creek and its tributaries.
- Alternative locations also within the Rural Living 1, Improvement Level 3 (RL-1) Zoning and General Plan designations.

The alternatives are further discussed and analyzed in Section 6.0, Alternatives, of this EIR.

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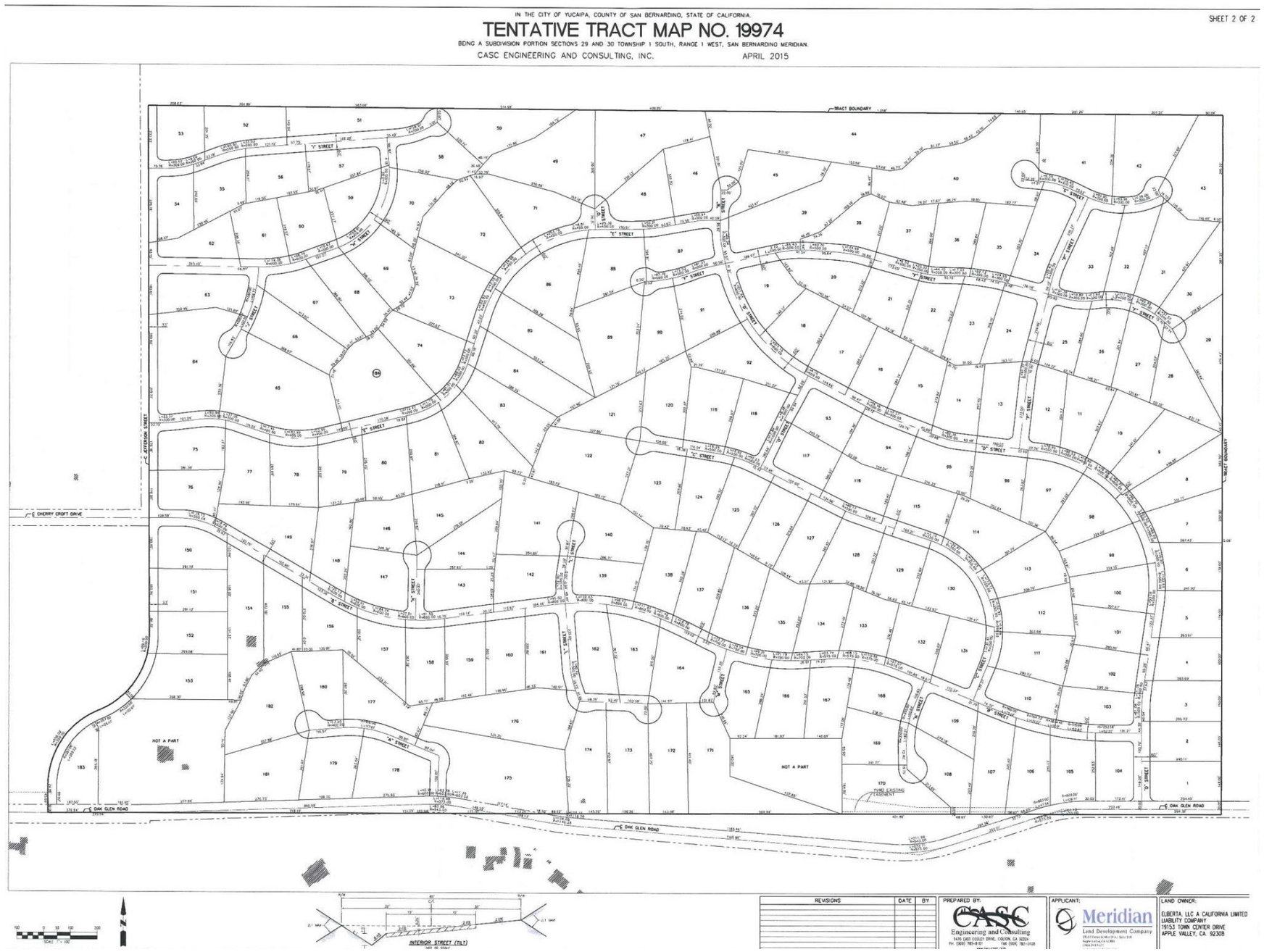
Figure 2-5 Proposed Subdivision Map



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3.0 SETTING, IMPACTS, MITIGATION, AND SIGNIFICANT EFFECTS AFTER MITIGATION

Section 3.0 is organized by environmental topic in the order presented in the NOP (Appendix A). Each environmental topic contains a description of the environmental setting, regulatory framework, and the thresholds used to determine whether the Project may result in a significant effect. The impact analysis is followed by a list of mitigation measures designed to avoid, minimize, rectify, reduce, or eliminate potential impacts, or compensate for unavoidable adverse effects. The statement of unavoidable adverse impacts describes the level of significance of each effect after mitigation. Below is a brief description of these components of Section 3.0.

Environmental Setting – This subsection describes the physical conditions and the policy and regulatory framework applicable to the subject matter. This information establishes the baseline condition and environmental goals and objectives to be considered in the analysis.

Regulatory Framework – The impact analysis identifies and describes applicable plans, policies, or regulations from agencies with jurisdiction over the Project, including federal, state, and local agencies.

Thresholds of Significance – The threshold of significance for a given environmental effect is that level at which the City finds the effects of the Project to be significant. To the extent possible, quantitative, qualitative, or performance level standards or criteria used to evaluate and describe each environmental effect are adapted from City and responsible agencies policies, regulations, and standards for environmental review. For purposes of this EIR, the City considers non-compliance with an applicable, adopted policy, regulation, or standard to be a *significant* effect, and compliance with an adopted policy, regulation, or standard to be a Project effect, which is less than significant (CEQA Guidelines, Section 15064.7).

Impacts – The impact analysis identifies the direct and indirect impacts in the short and long term. Short-term impacts are those effects associated with construction of the Project. Long-term impacts are environmental effects associated with occupation of the Project after construction.

Consistent with CEQA, the impacts of the Project are described using the words *adverse* and *significant* when appropriate, based on the applicable threshold criteria. An *adverse* impact is any negative effect of the Project, notwithstanding its severity and probability of occurrence. A *significant* impact is considered a substantial or potentially substantial adverse change in the physical conditions in the affected area as they exist at the time the environmental analysis is commenced (CEQA Guidelines, Section 15382).

Mitigation Measures – For each substantial or potentially substantial adverse change in the physical conditions within the area affected by the Project, mitigation measures are identified. The types of mitigation considered are defined below.

- *Avoid* the impact by not taking certain actions or parts of actions.
- *Minimize* the impact by limiting the degree or magnitude of the action and its implementation.

- *Rectify* the impact by repairing, rehabilitating, or restoring the affected environment.
- *Reduce or eliminate* the impact over time by preservation and maintenance during the life of the action.
- *Compensate* for the impact by replacing or providing substitute resources or environments.

When applicable, standard conditions, uniform codes, and design features incorporated into the Project to lessen the environmental effects are described.

Significant Effects after Mitigation – This subsection, if applicable, identifies those significant environmental effects that cannot be avoided or reduced to a level of insignificance through application of reasonable and feasible mitigation measures.

3.1 AESTHETICS

3.1.1 Setting

The City of Yucaipa is located along the southern foot of the San Bernardino Mountains and west of the San Gorgonio Pass along I-10. Yucaipa is located in the valley and foothills of the San Bernardino Mountains, which affords scenic views of the San Bernardino Mountains, Crafton Hills, and other undeveloped hilly areas to the north and northeast. The proposed site is situated in the North Bench residential area of Yucaipa, north of Oak Glen Road.

The physical address of the property is 36104 Oak Glen Road, a historic ranch site that supports a residence known as the "Casa Blanca" and several outbuildings. The natural condition of the project site is characterized by broad, flat "table-tops" that are elevated above Oak Glen Road and Wilson Creek and are separated by deep, thickly vegetated ravines that feed into the Wilson Creek drainage area. Wilson Creek traverses the northern half of the subject property from east to west. The flat areas have been farmed for most of the past century, although the most recent production has been dry farming of hay. The man-made features of the project site include three structures that were used with the past farming activities and consist of a worker's residence, a produce refrigerator building, and a maintenance garage, located in the western portion of the project site. Additionally, a substantial olive grove exists on the slopes along the southern boundary of the property along Oak Glen Road. The existing Casa Blanca Ranch residence, located in the southwestern portion of the project site, is not a part of this entitlement application.

3.1.2 Regulatory Framework

3.1.2.1 State

State Scenic Highway Program

California's State Scenic Highway Program was created by the California Legislature to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of land adjacent to those highways. A scenic corridor is land generally adjacent to a highway that is visible from a motorist's line of vision and is protected under the program if it is classified as "eligible" or "officially designated." The California Department of Transportation (Caltrans) maintains the State Scenic Highway Program. A review of the Caltrans website revealed that no

eligible or officially designated scenic highways are located within or adjacent to the proposed project site.

3.1.2.2 Local

City of Yucaipa General Plan

The Land Use, Open Space and Urban Design Elements provide the following policies applicable to the Project:

Goal LU-7: Encourage the enhancement of the 'rural atmosphere' of Yucaipa by retaining the opportunity to raise and keep animals.

Policy A. The keeping of horses in residential subdivisions, where such use is permitted by the Development Code, may be reasonably regulated by CC&Rs, but shall not be prohibited.

Policy B. Promote and preserve the rural setting in designated areas of the community. This may be accomplished by identifying and maintaining specific areas for low density residential or agricultural uses and by establishing development standards that enhance the rural character within identified areas.

Goal OS-9: Provide for the visual enhancement of existing and new development through landscaping and preservation of scenic vistas.

Policy A. As development occurs in hillside areas, open space will be needed both for aesthetic and practical reasons, such as the reduction of grading impacts and watershed protection.

Policy B. Undergrounding of all utility facilities shall be required for all new projects.

Policy C. All development, and particularly commercial and industrial development, shall install and maintain a minimum of 10% on-site landscaping that is drought tolerant and compatible with the regional environment. Lawns shall not be permitted to cover more than one-fourth of the total landscaped area requirements.

Policy D. Development shall be controlled on prominent ridgelines.

Policy E. New regional community infrastructure on hilltops shall be allowed only when no alternative sites are available and if approved by the City Council.

Policy F. Review site planning, including architectural design, to prevent obstruction of scenic views and to blend with the surrounding landscape.

Policy G. Require compliance with grading and vegetation removal standards as set forth in the Scenic Routes Overlay District.

Policy H. Because flood control and drainage measures are part of an overall community improvement program and should advance the goals of recreation, resource conservation, preservation of natural riparian vegetation and habitat, and the preservation of the scenic values of the City's streams and creeks, the City shall implement the following actions.

1. Protect natural drainage channels by considering the ecological significance and aesthetic quality of natural drainage ways in the design of all drainage projects, wherever feasible.

2. Require that storm waters be used for groundwater recharge when possible.

3. Preserve designated drainage channels and water courses such as creeks and river beds as resource management areas or linear parks and recreation trails, when possible.

Goal UD-4: Promote design guidelines which are sensitive to the environmental features of the City, respecting major ridgelines, natural drainage and 'bench' areas, steep hillsides and oak woodlands.

Policy A. Regulate the development of hillsides and ridgelines by the implementation of sensitive development standards.

Policy B. Require an increasing percentage of natural open space as topography increases in slope.

1. Review and refine requirements for open space in the current City ordinance.

City of Yucaipa Municipal Code

The City of Yucaipa Municipal Code regulates the protection of oak trees in Chapter 5 of the Development Code, Division 9 Plant Protection and Management, sections 89.0501, 89.0505, 89.0510, 89.0515, 89.0520, 89.0525, 89.0530, and 89.0535, Oak Tree Conservation. The expressed purpose of this regulation "contributes to the welfare and aesthetics of the community and retains the great historical and environmental value of these trees." This chapter of the code sets forth the policy of the City to require the conservation of all healthy oak trees unless reasonable and conforming use of the property justifies the removal, cutting, pruning and/or encroachment into the protected zone of an oak tree.

The City of Yucaipa Municipal Code also includes a Scenic Resources Overlay District in Chapter 3, Resource Preservation. The purpose of this chapter is to provide development standards that will protect, preserve, and enhance the aesthetic resources of the City. The development standards of this chapter are applicable to areas with unique views of Yucaipa's mountain, and valley areas or any other aesthetic natural land formations.

3.1.3 Thresholds of Significance

The City utilizes CEQA Guidelines Appendix G for impact criteria to determine significant impacts. The Project would result in a significant or potentially significant impact if it would:

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

3.1.4 Impacts

It is important to note that not all scenic vistas relate to ocean views, mountains, hills, lakes, and other natural features. Scenic vistas can also be man-made such as a bridge or a historic neighborhood within the City. The City is surrounded by natural scenic open space and contains a variety of slope conditions, soil types, plant communities, and other physical characteristics.

The City of Yucaipa 2004 General Plan Land Use and Open Space Elements recognize that scenic resources exist within the City in the surrounding hills and mountains, including the areas formed by both natural and man-made elements. Natural resources include Wilson Creek and Wildwood Creek, which have created definite elevation changes referred to as "benches," which give a definite character to Yucaipa. The City has also designated scenic roadways as part of its General Plan, which includes Oak Glen Road located along the Project's southern boundary. The natural features that currently exist on the project site, including Wilson Creek and the thickly vegetated ravines that feed into the Wilson Creek drainage area, can be considered as scenic resources.

Also, the existing Casa Blanca Ranch residence, and significant landscaping features on its grounds, is located at the southwestern corner of the Project and can also be considered as a scenic resource. While technically not a part of the proposed Project, the property will be surrounded by the proposed subdivision along the north, west, and eastern property lines.

Therefore, the discussion within the General Plan was utilized in guiding the determination of significant viewsheds for the purpose of this evaluation and CEQA significance determination as discussed in this section.

Will the Project have a substantial adverse effect on a scenic vista?

The City of Yucaipa 2004 General Plan does not identify specific scenic vistas within the City. However, Goal OS-9 of the Open Space and Conservation Element states that the City will "Provide for the visual enhancement of existing and new development through landscaping and preservation of scenic vistas." Prior to issuance of building permits and during project design and construction, the Project will be required to adhere to criteria adopted in conjunction with this Goal, including the undergrounding of utilities for new projects; providing a minimum of 10 percent landscaping for new development; addressing development on prominent ridgelines; and preventing obstruction of scenic views.

To ensure compliance with the City's Open Space Goal OS-9 is met, **Mitigation Measure AES-1** shall be implemented, requiring submittal of a Building Pad Constraints Exhibit for City review and approval prior to issuance of a grading permit. The Building Pad Constraints Exhibit shall show how the proposed residence preserves scenic resources and vistas by identifying how the building pads and access driveways for each lot avoids development within areas of one or more of the following attributes:

- Moderate to steep sloping land (15 percent slope or greater).
- Applicable drainage courses per the City Engineer, including but not limited to the FEMA-designated 100-year floodplain.
- Within identified riparian areas.
- Within identified areas of important biological resources.

The minimum lot size of one gross acre per lot, as well as the 35-foot building height permitted in the RL-1 District would not have notable prominence nor affect area views. All new development is required to underground utilities as a standard condition of approval.

The project site is located within a rural area of the City, surrounded by hillsides. Development of the project site will be constructed utilizing the scale, size, and setbacks of the RL-1 Land Use designation and the Custom Home Overlay District, and all applicable development standards. With the implementation of Mitigation Measure AES-1, development would not significantly impact the public's enjoyment of the surrounding scenic vistas.

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

The City of Yucaipa 2004 General Plan Land Use Element recognizes scenic resources exist within the City in the surrounding hills and mountains, including the area within and adjacent to the project site. No state designated scenic highways exist within the City's Planning area, according to information available from Caltrans Scenic Highway Program.

The City of Yucaipa has designated scenic roadways within the City limits as part of its General Plan, which includes Oak Glen Road located along the project's southern boundary. The project proponent intends to utilize a "minimal grading" concept for the property, with circulation and drainage systems conforming to the existing contours of the land, and individual lots to be kept in their natural state to the extent feasible. Design elements of the Project, along the southern border adjacent to Oak Glen Road, could include split rail fencing and landscaping with a rustic theme, consistent with standards identified for this roadway in the 2004 General Plan.

I-10 and State Route 38 (SR 38) are the closest State Highway facilities to the project site. However, according to the Caltrans Scenic Highway Program, neither facility has been designated as a state scenic highway at the location of the proposed Project. SR 38 is an eligible state scenic highway that has not been officially designated; however, only a limited portion of SR 38 passes through the City of Yucaipa, approximately two miles north from the project site. There would be no impact to scenic routes as a result of the proposed Project.

Will the Project substantially degrade the existing visual character or quality of the site and its surroundings?

With the exception of the Casa Blanca Ranch and supporting farm structures, the project site is mostly vacant with native vegetation and natural features scattered throughout the site. There are also existing rural residential uses surrounding the project site.

Vegetative visual resources are most commonly protected through tree preservation ordinances that place limitations on the removal of such trees found to be native. Chapter 5 of the City of Yucaipa Municipal Code regulates the protection of oak trees. The conservation program outlined in this chapter contributes to the welfare and aesthetics of the community and retains the great historical and environmental value of these trees. Removal and relocation of oak trees are further discussed in Section 3.4 Biological Resources. The Project will be required to comply with the Municipal Code; therefore, a less than significant impact to scenic vistas is anticipated.

The project site is located within a rural area of Yucaipa, surrounded by hillsides. Development of the project site will be constructed utilizing the scale, size, and setbacks of the RL-1 Land Use designation and the Custom Home Overlay District, and all applicable development standards. In addition, the project proponent intends to utilize a "minimal grading" concept for the property, with circulation and drainage systems conforming to the existing contours of the land, and individual lots shall maintain its existing drainage characteristics. With the implementation of Mitigation Measure AES-1, development would not significantly impact the existing visual character or quality of the site and its surroundings. Design elements of the Project, along the southern border adjacent to Oak Glen Road, could include split rail fencing and landscaping with a rustic theme, consistent with standards identified for this roadway in the 2004 General Plan Urban Design Element Landscape Guidelines. Per the Landscape Guidelines, the City wishes to improve the appearance of residential projects. The City created the Landscape Guidelines to encourage attractive, identifiable neighborhoods while balancing aesthetic considerations for new development with the need to promote water conservation (City of Yucaipa 2004). Therefore, an impact upon the existing visual character or quality of the area is anticipated to be less than significant.

Will the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The developed portions of the City contain numerous sources of light and glare. Examples of light and glare include streetlights, freestanding lights, building-mounted lights, illuminated signage, reflective building materials, and vehicular headlights. The undeveloped portions of the City, such as the area within the Project vicinity, contain few, if any sources of light and glare.

The proposed subdivision will add new homes to the area and bring new sources of light and glare that could adversely affect day or nighttime views in Yucaipa. However, while the amount of lighting would increase, it is required to be directed downward and shielded to prevent glare and dispersion beyond the Project boundaries

New sources of nighttime lighting resulting from the implementation of the proposed Project include street lighting, as well as building-mounted lights on the proposed new homes and

related accessory structures. These features could result in light trespass, light pollution, and glare to the neighboring rural residential community surrounding the Project. Light trespass is unwanted light from a neighboring property or roadway and can be both a nuisance and a health and safety risk if it adversely affects visibility for tasks like driving. Light pollution has a broader and more cumulative impact than light trespass to neighboring residents. Excessive nighttime lighting could result in sky glow, the haze of light that surrounds highly populated areas and reduces the ability to see the stars. This could change the appearance of the nighttime sky over the long term.

Upon completion, the proposed Project could potentially result in significant adverse light and glare impacts on nighttime views from street and building-mounted lighting. However, the Project will be required to comply with the City's Development Code, which contains property development and general design standards that ensure new developments and expansions of existing developments will not have a negative impact upon surrounding land uses. Therefore, impacts related to light and glare will be less than significant through compliance with the Development Code.

3.1.5 Mitigation Measures

Mitigation Measure AES-1. Prior to issuance of grading permits, the project proponent shall submit a Building Pad Constraints Exhibit for City review and approval. The Building Pad Constraints Exhibit shall show how the proposed residence preserves scenic resources and vistas by identifying how the building pads and access driveways for each lot avoid development within areas of one or more of the following attributes:

- Moderate to steep sloping land (11 percent slope or greater).
- Applicable drainage courses per the City Engineer, including but not limited to the FEMA-designated 100-year floodplain.
- Within identified riparian areas.
- Within identified areas of important biological resources.

3.2 AGRICULTURAL AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and State Assessment Model (1997) prepared by the California Department of Conservation to assess impacts on agriculture and farmland. In determining whether there would be impacts to forest resources, including timberland, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection. The state's inventory of forest land, including the Forest Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provide suitable data to determine whether the site contains agricultural resources.

3.2.1 Setting

The proposed site is situated in the North Bench residential area of Yucaipa north of Oak Glen Road. Historically, the Project site has been a ranch with vacant lands to the north and east. To

the west and south of the project site are large, rural, single-family residential plots as outlined in the City General Plan and Zoning maps.

3.2.2 Regulatory Framework

3.2.2.1 State

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (the Williamson Act, Government Code Sections 51200 through 51297.4) encourages the preservation of agricultural lands through tax incentives due to the increasing trend toward the conversion of agricultural lands to urban uses. The act enables counties and cities to designate agricultural preserves (Williamson Act lands) and within these preserves, offer preferential taxation to agricultural landowners based on the agricultural income-producing value of the property. Essentially, this approach ties real estate tax rates to the agricultural value of the land rather than the market rate, which can escalate rapidly as areas around a farm or dairy convert to urban uses. In return for the preferential tax rate, the landowner is required to sign a contract with the county or city agreeing not to develop the land with non-agricultural uses for a minimum of 10 years. On each annual anniversary, the date of the contract is renewed automatically for an additional year to maintain the 10-year contract, unless a notice of non-renewal or petition for cancellation is filed.

State Farmland Mapping and Monitoring Program

The California Department of Conservation established the Farmland Mapping and Monitoring Program (FMMP) in 1982. The FMMP is a non-regulatory program. However, it provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The FMMP produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status and is identified by the following categories, collectively referred to as Farmland, Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Farmland of Local Importance. Descriptions of the categories applicable to the City of Yucaipa are provided below.

- **Prime Farmland:** Prime farmland has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Farmland of Statewide Importance:** Farmland of statewide importance is similar to prime farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Unique Farmland:** Unique farmland consists of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

- **Farmland of Local Importance:** These farmlands include areas of soils that meet all the characteristics of prime, statewide, or unique and are not irrigated. These are farmlands not covered by the other categories but are of high economic importance to the community. These farmlands include dryland grains of wheat, barley, oats, and dryland pasture.
- **Grazing Land:** Grazing land is land on which the existing vegetation is suited to the grazing of livestock.
- **Other Land:** Other land is land not included in any other mapping category. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines; borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as other land. Urban and built-up land is occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.

3.2.2.2 Local

City of Yucaipa General Plan

The Land Use Element provides the following agricultural-related policy:

Goal LU-9: Locate new development so that the economic strength derived from agricultural, mineral and other natural resources is preserved.

Policy A. Prime agricultural lands must be protected from the adverse effects of urban encroachment, particularly increased erosion and sedimentation, trespass, and non-agricultural land development.

1. Areas of prime agriculture lands supporting commercially viable and valuable agriculture shall not be developed to urban intensity prior to the supply of non-productive areas being exhausted.

Policy B. Because specific soil conditions pose a constraint to various developments, the City shall require the following action

1. Areas where soils represent a constraint to development shall be identified. Development areas where percolation restrictions apply, as designated by the Regional Water Quality Control Boards, will be coordinated and evaluated by the City and County Department of Environmental Health Services.

Policy D. Because agricultural uses are valuable, the City shall encourage the retention of productive, commercially-viable agricultural land and discourage the premature or unnecessary conversion of agricultural land to nonagricultural uses through the implementation of the following actions.

1. Preservation of land supporting viable agricultural operations will be considered an integral portion of the Open Space and Conservation Element of this General Plan when reviewing development proposals.

2. Utilize the provisions of the Williamson Act to further the preservation of commercially viable agricultural open space.

3. Establish minimum parcel sizes of 10 acres for prime and 40 acres for non-prime agricultural land, and encourage the consolidation of undersized parcels through the use of land use districts.

4. Support property and estate tax relief measures which assess long-term agriculture at farm use value.

5. Support the reduction and elimination of special district boundaries in agricultural areas where urban services are not planned.

6. Provide flexibility for individual farmers to convert their land to alternative uses at their current locations by periodically reevaluating agricultural areas on the General Plan.

7. Within commercially viable agricultural areas, encourage only land uses which are compatible with agriculture.

8. Consider the availability and financing of public services and utilities in any decision to convert an area from agricultural to non-agricultural uses. This information should be documented in special study reports.

9. Establish necessary buffers between agricultural and other uses.

10. Provide information on viable alternative crops through the Agricultural Extension Service and other resources.

11. If the need arises, encourage the relocation of agricultural operations within the City rather than to areas outside the City.

12. Provide improved agriculture-related services in agricultural areas.

13. Designate agricultural preserve overlay districts on the Land Use Map.

14. Encourage adequate, inexpensive water distribution systems and water conservation for agricultural lands through the following measures.

    a. Support the continuation of the water price differential between agricultural and urban uses where water conservation measures are employed.

b. Support the use of certain non-potable water sources for agricultural purposes (e.g., some treated wastewater can be used for agriculture).

15. Encourage the agricultural use of commercially productive agricultural lands.

16. Fund detailed consultant studies of the following joint public/private financing options for infrastructure improvements in productive agricultural areas, especially flood control, utilizing the results of the 205J and River Basin Studies.

    a. Assessment District Acts of 1911, 1913 and 1915.

    b. Community Facilities District

    c. PL-566 Project Monies and Soil Conservation Service

    d. City General Fund

    e. Land Development Drainage Fees

    f. Other Bonding Sources

    g. Not-for-Profit Corporation

17. Coordinate a capital improvement policy program/plan that directs development into existing urbanized sections of the City and away from agriculture.

18. Utilize regional planning agency programs/funding (SCAG and SANBAG) for the protection of agriculture and the direction of growth.

Policy E. Because agricultural involves the disturbance of surface features via tilling and other mechanisms, also resulting in erosion, fugitive dust and the scarring of the landscape, these consequences for unnecessary nuisance and visual impact can be reduced through the implementation of the following actions.

1. Support the efforts of the Soil Conservation Service, and seek their input when reviewing agricultural operations to assure the best soils management practices are implemented.

2. Utilize easements and other conveyances for developments which propose to locate proximate to agricultural operations in order to minimize future nuisance complaints.

Policy F. Because agricultural activities tend to be larger in terms of acreage to remain economically viable, and the creation of parcels results in creating road networks which discourage agriculture, larger parcel sizes are to be encouraged.

1. The minimum parcel size for agricultural districts within the City shall be 10 acres.

City of Yucaipa Municipal Code

The City of Yucaipa Municipal Code includes the Agricultural Preserve (AP) Overlay District, to protect vital agricultural uses by limiting land use activity to those uses that are compatible with and supportive of agriculture and related uses and/or agricultural by-products. The Municipal Code also includes the RL District, which allows for residential uses (single dwelling unit), as well as row, field, tree, and nursery crop cultivation, and animal raising.

3.2.3 Thresholds of Significance

The Project would result in a significant or potentially significant impact if it would:

- Convert prime farmland, unique farmland, or farmland of statewide importance (farmland) as shown on the maps prepared pursuant to the FMMP of the California Resources Agency to non-agricultural use; or
- Conflict with existing zoning for agricultural use, or a Williamson Act contract; or
- Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code [PRC] Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)); or
- Result in the loss of forest land or conversion of forest land to non-forest use; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest to non-forest land.

3.2.4 Impacts

Will the Project convert prime farmland, unique farmland, or farmland of statewide importance (farmland) as shown on the maps prepared pursuant to the FMMP of the California Resources Agency to non-agricultural use?

The FMMP has established several categories to identify the integrity of land for agricultural purposes. Prime farmland has the best combination of physical and chemical features (soil quality, growing season, moisture supply, etc.) able to sustain long-term agricultural production. Farmland of statewide importance is very similar to the aforementioned Prime farmland. However, this soil may have minor deficiencies such as inability to retain moisture. Both Prime farmland and farmland of statewide importance must also have been used for irrigated agricultural purposes at some time during the four years prior to the mapping date. Unique farmland is typically land that is irrigated and contains lesser quality soils that are used for the production of the state's leading agricultural crops.

Based upon a review of the San Bernardino County Important Farmland 2012 maps prepared by the California Department of Conservation, Division of Land Resource Protection accessed in July 2015, there is a small area designated with both the prime and unique farmland categories

(three and 11 acres, respectively) on the north side of Oak Glen Road, just east of Jefferson Street, within the Project's boundaries (Figure 3.2-1). A portion of this land is located on a proposed parcel that will not be developed and is noted as "Not A Part" of the proposed subdivision. This parcel is located north of the main residence (containing prime farmland), in the southwest corner of the Project, and has been used for growing fruit trees, as well as grain and hay crops since at least 1938. The portion of land along the north side of Oak Glen Road (unique farmland) is an olive grove that occupies a narrow area of hill slope stretching approximately 0.5 mile, beginning south of the main Casa Blanca house. This land is located on the southern portion of nine proposed lots of the subdivision (lots 171 through 175 and lots 178 through 181).

The analysis presented in this section is based on information contained in the project application materials, City of Yucaipa General Plan, relevant maps and reports provided by the Natural Resources Conservation Service and San Bernardino County Department of Agriculture/Weights & Measures, and guidance provided by the California Department of Conservation's Land Evaluation and Site Assessment (LESA) Model. The LESA Model calculations and associated maps are included in their entirety in Appendix B of this EIR.

The LESA Model is composed of six different factors, which evaluate the land and the project site. Two Land Evaluation factors are based upon measures of soil resource quality. Four "Site Assessment" factors provide measures of a project site's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands intended to measure social, economic, and geographic attributes that contribute to the overall value of agricultural land. The factors used are as follows:

Land Evaluation

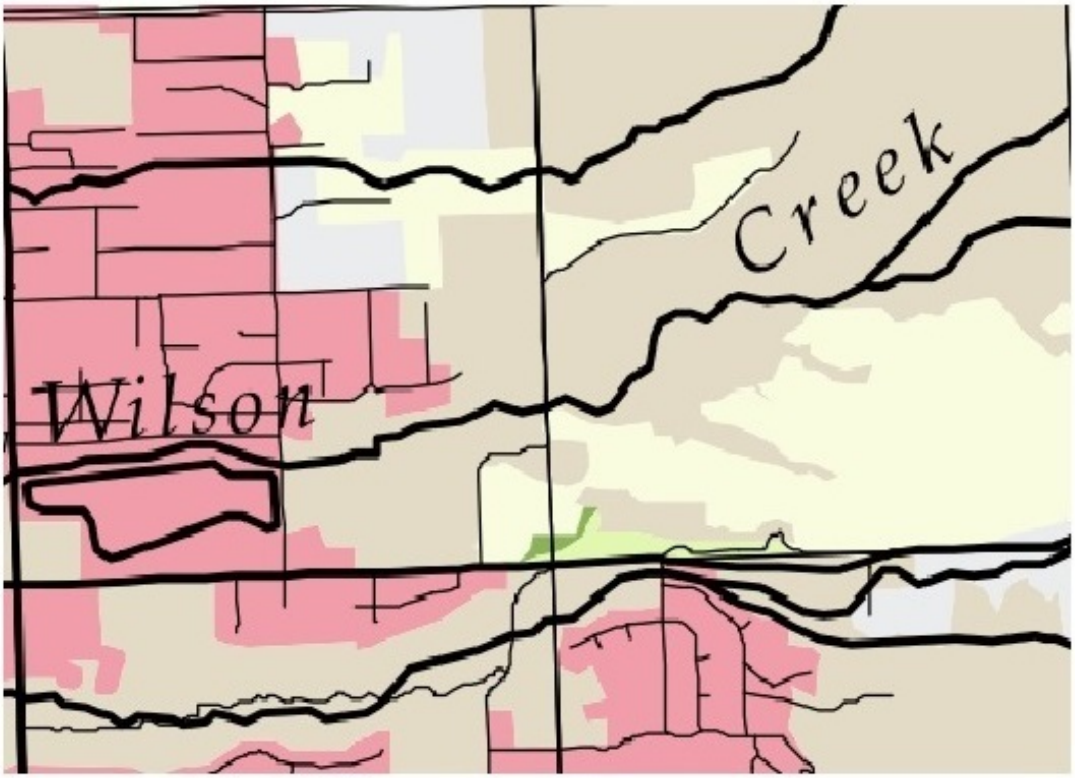
- Land Capability Classification; and
- Storie Index.

Site Assessment

The following are the four factors in the LESA Model that are used as site assessment scoring criteria:

- Project Size Rating;
- Water Resources Availability Rating;
- Surrounding Agricultural Land Rating; and
- Surrounding Protected Resource Land Rating.

Figure 3.2-1 – Prime and Unique Farmland



PRIME FARMLAND: PRIME FARMLAND HAS THE BEST COMBINATION OF PHYSICAL AND CHEMICAL FEATURES ABLE TO SUSTAIN LONG-TERM AGRICULTURAL PRODUCTION. THIS LAND HAS THE SOIL QUALITY, GROWING SEASON, AND MOISTURE SUPPLY NEEDED TO PRODUCE SUSTAINED HIGH YIELDS. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF STATEWIDE IMPORTANCE: FARMLAND OF STATEWIDE IMPORTANCE IS SIMILAR TO PRIME FARMLAND BUT WITH MINOR SHORTCOMINGS, SUCH AS GREATER SLOPES OR LESS ABILITY TO STORE SOIL MOISTURE. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

UNIQUE FARMLAND: UNIQUE FARMLAND CONSISTS OF LESSER QUALITY SOILS USED FOR THE PRODUCTION OF THE STATE'S LEADING AGRICULTURAL CROPS. THIS LAND IS USUALLY IRRIGATED, BUT MAY INCLUDE NONIRRIGATED ORCHARDS OR VINEYARDS AS FOUND IN SOME CLIMATIC ZONES IN CALIFORNIA. LAND MUST HAVE BEEN CROPPED AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF LOCAL IMPORTANCE: FARMLANDS WHICH INCLUDE AREAS OF SOILS THAT MEET ALL THE CHARACTERISTICS OF PRIME, STATEWIDE, OR UNIQUE AND WHICH ARE NOT IRRIGATED.

FARMLANDS NOT COVERED BY ABOVE CATEGORIES BUT ARE OF HIGH ECONOMIC IMPORTANCE TO THE COMMUNITY. THESE FARMLANDS INCLUDE DRYLAND GRAINS OF WHEAT, BARLEY, OATS, AND DRYLAND PASTURE.

GRAZING LAND: GRAZING LAND IS LAND ON WHICH THE EXISTING VEGETATION IS SUITED TO THE GRAZING OF LIVESTOCK.

URBAN AND BUILT-UP LAND: URBAN AND BUILT-UP LAND IS OCCUPIED BY STRUCTURES WITH A BUILDING DENSITY OF AT LEAST 1 UNIT TO 1.5 ACRES, OR APPROXIMATELY 6 STRUCTURES TO A 10-ACRE PARCEL. COMMON EXAMPLES INCLUDE RESIDENTIAL, INDUSTRIAL, COMMERCIAL, INSTITUTIONAL FACILITIES, CEMETERIES, AIRPORTS, GOLF COURSES, SANITARY LANDFILLS, SEWAGE TREATMENT, AND WATER CONTROL STRUCTURES.

OTHER LAND: OTHER LAND IS LAND NOT INCLUDED IN ANY OTHER MAPPING CATEGORY. COMMON EXAMPLES INCLUDE LOW DENSITY RURAL DEVELOPMENTS, BRUSH, TIMBER, WETLAND, AND RIPARIAN AREAS NOT SUITABLE FOR LIVESTOCK GRAZING, CONFINED LIVESTOCK, POULTRY, OR AQUACULTURE FACILITIES, STRIP MINES, BORROW PITS, AND WATER BODIES SMALLER THAN 40 ACRES. VACANT AND NONAGRICULTURAL LAND SURROUNDED ON ALL SIDES BY URBAN DEVELOPMENT AND GREATER THAN 40 ACRES IS MAPPED AS OTHER LAND.

WATER: PERENNIAL WATER BODIES WITH AN EXTENT OF AT LEAST 40 ACRES.

PRIME AND UNIQUE FARMLAND

AECOM | WILSON CREEK ESTATES PROJECT | FIGURE NO. 3.2-1

For a proposed project, each of these factors is separately rated on a 100-point scale. A single LESA score is generated for a given project after all of the individual Land Evaluation Factors and Site Assessment factors have been scored and weighted. The factors are then weighted relative to one another and combined, resulting in a single numeric score for a given project, with a maximum attainable score of 100 points. It is this project score that becomes the basis for making a determination of a project's potential significance, based upon a range of established scoring thresholds. According to the LESA Model, a project Regulatory Setting would result in a significant impact on agricultural resources if it meets the criteria specified in Table 9 of the LESA Manual. Table 3.2-1 provides the ratings that determine if a project will result in a significant impact to Farmland.

Table 3.2-1 LESA Significance Ratings

Total LESA Score	Scoring Decision
0 to 39 points	Not considered significant
40 to 59 points	Considered significant only if LE and SA sub-scores are each greater than or equal to 20 points
60 to 79 points	Considered significant unless either LE or SA sub-scores are each less than 20 points
80 to 100 points	Considered Significant

Source: California Land Evaluation and Site Assessment (LESA) Model, Table 9, California Department of Conservation, 1997.

An overview of the six different factors and the worksheets for the proposed Project are contained in Appendix B. Therefore, based on the evaluation in the LESA worksheets, the final score for the proposed Project is 91.65 points out of a possible 100 points. The score associated with the Land Evaluation factor was below the referenced threshold of 39 points. However, the Site Assessment score was above the threshold; therefore, implementation of the proposed Project would have a significant impact on Farmland and agricultural resources.

The portion of land located north of the main residence, designated as prime farmland, is located on a parcel of land that will not be developed and noted as "Not A Part" of the proposed subdivision. However, the 11-acre portion of land along the north side of Oak Glen Road, designated unique farmland, is located on the southern portion of nine proposed lots of the subdivision (lots 171 through 175 and lots 178 through 181). The project site is within the RL District zoning designation, which allows for row, field, tree, and nursery crop cultivation as a permitted use. Most of the North Bench area is planned for residential uses pursuant to the General Plan. With implementation of mitigation measure AG-1 impacts would be less than significant.

Will the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The City of Yucaipa utilizes a "one map system" in which the General Plan Land Use Designations and Zoning Categories are the same and combined onto one map. As such, the existing RL-1 District (Rural Living, minimum one-acre lot size) for the project site is both the General Plan designation and zoning. Agricultural uses are permitted in the RL-1 District subject to Section 84.0320 of the Yucaipa Municipal Code. According to the California Department of Conservation Williamson Act Program website, accessed July 2015 (http://www.conservation.ca.gov/dlrp/lca/Pages/Index.aspx), the City of Yucaipa does not have any properties under Williamson Act contracts. Therefore, no impact will occur.

Will the Project conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

Review of the City of Yucaipa 2004 General Plan indicates there is no forest land or timberland located within the project site. The surrounding project area is generally rural in nature with agricultural- and residential-related land uses. Furthermore, the Project does not involve redesignation of forest land. As such, the Project does not conflict with any issues relative to the use of timberland or forest land. No impact will occur.

Will the Project result in the loss of forest land or conversion of forest land to non-forest use?

Review of the City of Yucaipa 2004 General Plan indicates there is no forest land or timberland located within the project site. The surrounding project area is generally rural in nature with agricultural- and residential-related land uses. The proposed Project would not affect forest land or convert forest land to non-forest land use. Therefore, development of the Project will have no impact on forest land.

Will the Project involve other changes in the existing environment that, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?

The Project proposes single-family residential uses on lots with a minimum size of one gross acre. While the zoning designation of the Project allows for agricultural uses as a permitted use, the intent of the subdivision is for the development of single-family residential uses. Impacts to agricultural lands as a result of such conversion were found to be a less than significant with mitigation.

3.2.5 Mitigation Measures

The following mitigation measures are recommended as a means of avoiding and minimizing adverse impacts to agricultural resources:

> **AG-1:** The Olive Grove shall be maintained to the extent possible. Prior to recording the final tract map, developer shall submit an Olive Tree preservation plan for review and approval by the Planning Division for common/street areas and for individual parcels, to be used prior to removal of any olive trees as part of the tract map development, or the development of any parcel. The preparation of the document shall include the following attributes:
>
> - Delineation of grove boundaries
> - Maintenance responsibilities (who is responsible for trees in the future)
> - Method of tree preservation (easement, HOA, LLMD, CC&R's, etc.)
> - Ratio of acceptable take (i.e., retain at least 75% of the olive grove)

3.3 AIR QUALITY

Section 3.3 examines the degree to which the proposed Project may result in significant adverse changes to air quality. This section includes a description of existing air quality conditions, a summary of applicable regulations, and an analysis of potential short-term construction and long-term operational air quality impacts of the proposed Project. The following analysis is based on the Air Quality Impact Study, prepared by AECOM. This report is included as Appendix C of this EIR.

3.3.1 Setting

3.3.1.1 Climate and Meteorology of the South Coast Air Basin

The project site is located in the South Coast Air Basin that includes Orange, Los Angeles (non-desert portions), Riverside (non-desert portion), and San Bernardino (non-desert portion) Counties.

Meteorological (short-term) and climatological (long-term) conditions influence ambient air quality. The South Coast Air Basin both transports to and receives air pollutants from the coastal portions of Ventura and Santa Barbara Counties. The South Coast Air Basin also receives air pollutants from oil and gas development operations on the outer continental shelf in Santa Monica Bay and the San Pedro Channel.

Temperatures for the area are markedly higher during the summer months. The monthly climate summary is used from the nearest meteorological station, the Western Regional Climate Center (WRCC) #047306 at Redlands, located approximately eight miles west of the project area. The average maximum temperature was 94.3 degrees Fahrenheit (°F) in July, with an average minimum temperature of 39.4°F in January (WRCC 2015). The average annual temperature is 63.7°F.

During the winter months, a semipermanent, subtropical high-pressure system over the eastern Pacific Ocean moves south, allowing frontal systems that normally are blocked and forced to the north of the area to pass through the region. This results in most of the area's annual precipitation, which totals about 13.56 inches. Average maximum rainfall occurs in January (i.e., 2.68 inches), with minimum rainfall in July (i.e., 0.07 inches) (WRCC 2015).

On occasion during fall and winter months, a high-pressure system develops over Nevada and Utah and pushes air south and southwestward over the San Gabriel and San Bernardino Mountains. The resulting wind is known as a Santa Ana wind. Santa Ana winds, usually warm and dry, can be very strong, with wind speeds through mountain passes sometimes exceeding 62 miles per hour. They tend to clear the South Coast Air Basin of accumulated air pollutants but can also cause dust storms and high particulate levels.

The topographical features in the region around the project area restrict air movement through and out of the valley (especially in the northern portion). The San Gabriel and Santa Ana Mountains hinder wind access into the valley from the northwest, north, west, and southwest; the Agua Tibia range hinders winds from the south; and the San Bernardino and San Jacinto Mountains are significant barriers to the northeast, east, and southeast, causing a weak air flow

through the valley. This weak air flow is also frequently blocked vertically by temperature inversions.

3.3.1.2 Temperature Inversion

Air pollutants depend on buoyant forces (the polluted air being warmer than the surrounding atmosphere) enabling it to rise and disperse. When cool air flows into the South Coast Air Basin from the ocean, it sinks, pushes the warm air up, and creates a subsidence temperature inversion (i.e., atmospheric temperature increases with elevation). Subsidence inversions occur during warmer summer months. As the cooler ocean air absorbs pollutants and begins to rise, it becomes "trapped" by the warm air above and settles back into the Basin. As the sun warms the ground, the temperature of the lower atmosphere approaches the temperature of the base of the inversion (upper) layer and eventually becomes warmer than the warm air above, causing the inversion layer to finally break, and allowing vertical mixing within both layers. This phenomenon is observed from early to late afternoons on hot summer days, when the smog appears to suddenly clear up. Until the inversion breaks, the stagnant conditions can lead to high ground-level pollutant concentrations.

During evenings, mainly in the cooler winter months, surface or radiation inversions are formed when the ground surface becomes cooler than the air above it. The earth's surface undergoes such a process on clear nights with low wind speeds when heat energy is transferred from the ground to the cooler night sky. As the earth's surface cools during the evening hours, the air directly above it also cools, but the atmosphere at higher altitudes remains relatively warm. This type of inversion persists until sunrise when heat from the sun warms the ground and stimulates the air at ground level to break up the inversion. During winter months, these radiation temperature inversions usually break by mid-morning.

Temperature inversions play a significant role in determining ozone formation. Ozone precursors (i.e., nitrogen oxides [NO_X] and volatile organic compounds [VOCs]) will mix and undergo photochemical reactions to produce smog. Temperature inversions close to the ground will keep high concentrations of ozone precursors in an area, allow the chemical reactions to take place in the presence of abundant sunlight and, hence, create ground-level ozone. Concentration levels of ozone are directly related to inversion layer heights due to the limitation of the vertical mixing space.

On days with no temperature inversion or when high velocity winds are present, the concentration of air pollutants is generally lower. Conversely, during days of temperature inversion or when low wind speeds are present, air pollutants generated in the urbanized areas of the Basin are transported into Riverside and San Bernardino Counties and frequently create the highest concentrations. Summer wind flow patterns represent worst-case conditions, as this is the period of higher temperatures, generally lower wind speeds, and more sunlight, which result in ozone formation.

3.3.1.3 Predominant Air Pollutants in the South Coast Air Basin and Ambient Monitoring Concentrations in the Project Vicinity

The pollutants of greatest importance in the South Coast Air Basin are described in this section. Included are a description of the physical properties, the health and other effects of the pollutant, the sources of the pollutant, and the ambient air quality standards that have been developed to limit their exposure to the public.

Six air pollutants have been identified by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) as being of concern on a nationwide level and a statewide level: ozone; carbon monoxide (CO); nitrogen dioxide (NO_2); sulfur dioxide (SO_2); lead; and particulate matter (PM), which is subdivided into two classes based on particle size: PM equal to or less than 10 micrometers in diameter (PM_{10}) and PM equal to or less than 2.5 micrometers in diameter ($PM_{2.5}$). Because the air quality standards for these air pollutants are regulated using human health and environmentally based criteria, they are commonly referred to as "criteria air pollutants."

Health-based air quality standards were established for these criteria pollutants by EPA at the national level and by CARB at the state level. These standards were established to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution. These National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are reviewed on a legally -prescribed frequency and revised as new health and welfare effects data warrant. Each standard is based on a specific averaging time over which the concentration is measured. Different averaging times are based upon protection of short-term, high dosage effects or longer-term, low dosage effects. NAAQS may be exceeded no more than once per year; CAAQS are not to be exceeded. Table 3.3-1 presents the NAAQS and the CAAQS.

Permanent air monitoring stations are placed in strategic locations to collect ambient criteria air pollutant concentration data. The project site is located within the East San Bernardino Valley portion of Source/Receptor Area (SRA) 35 (East San Bernardino Valley). CO, $PM_{2.5}$ and NO_2 are not monitored at the East San Bernardino Valley station; therefore, data from the Central San Bernardino Valley station are provided. The communities within a given SRA are expected to have similar climatology. Table 3.3-2 presents the most recent data over the past three years from the monitoring stations as summaries of the highest pollutant levels recorded for years 2012 through 2014. These concentrations represent the existing, or baseline conditions, for the Project, based on the most recent information available.

Table 3.3-1 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [a]	National Standards [b]	
		Concentration [c]	Primary [c,d]	Secondary [c,e]
Ozone	1 hour	0.09 ppm (180 µg/m³)	–	Same as primary standard
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (147 µg/m³)	
Respirable particulate matter (PM_{10})[f]	24 hours	50 µg/m³	150 µg/m³	Same as primary standard
	Annual arithmetic mean	20 µg/m³	–	
Fine particulate matter ($PM_{2.5}$) [f]	24 hours	–	35 µg/m³	Same as primary standard
	Annual arithmetic mean	12 µg/m³	12 µg/m³	15 µg/m
Carbon monoxide (CO)	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	None
	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	
	8 hours (Lake Tahoe)	6 ppm (7 mg/m³)	–	–
Nitrogen dioxide (NO_2) [g]	Annual arithmetic mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	Same as primary standard
	1 hour	0.18 ppm (339 µg/m³)	100 ppb (188 µg/m³)	None
Sulfur dioxide (SO_2) [h]	Annual Arithmetic Mean	–	0.030 ppm (for certain areas) [h]	–
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas) [h]	–
	3 hours	—	–	0.5 ppm (1,300 µg/m³)
	1 hour	0.25 ppm (655 µg/m³)	75 ppb (196 µg/m³)	–
Lead [i,j]	30-day average	1.5 µg/m³	–	–
	Calendar quarter	–	1.5 µg/m³ (for certain areas) [j]	Same as primary standard
	Rolling 3-month average	–	0.15 µg/m³	
Visibility-reducing particles [k]	8 hours	See footnote j	No national standards	
Sulfates	24 hours	25 µg/m³		
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m³)		
Vinyl chloride [i]	24 hours	0.01 ppm (26 µg/m³)		

Notes: mg/m³ = milligrams per cubic meter; ppb = parts per billion; ppm = parts per million; µg/m³ = micrograms per cubic meter

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

[b] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standards.

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

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

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

[f] On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m3 to 12.0 µg/m3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3, as was the annual secondary standard of 15 µg/m3. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[g] 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. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards the units can be converted from 100 ppb to 0.100 ppm.

[h] 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 1 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. 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 of 0.075 ppm.

[i] 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.

[j] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until 1 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 standards are approved.

[k] In 1989, 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 the "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: CARB 2015a

Table 3.3-2 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Was Exceeded and Maximum Levels during Such Violations		
	2012	2013	2014
Ozone			
State 1-Hour > 0.09 ppm	41	22	38
State 8-hour > 0.07 ppm	77	53	76
Federal 1-Hour > 0.12 ppm	0	2	0
Federal 8-Hour > 0.07 ppm	54	36	51
Max. 1-Hour Conc. (ppm)	0.124	0.139	0.121
Max. 8-Hour Conc. (ppm)	0.109	0.112	0.099
Carbon Monoxide			
State 1-Hour > 20 ppm	0	0	0
State 8-Hour > 9.0 ppm	0	0	0
Federal 8-Hour > 9 ppm	0	0	0
Max 1-Hour Conc. (ppm)	NM	NM	NM
Max. 8-Hour Conc. (ppm)	1.64	NM	NM
Nitrogen Dioxide			
Annual Average (ppb)	NM	NM	18
Max. 1-Hour Conc. (ppb)	67	72	72
Inhalable Coarse Particulates (PM_{10})			
State 24-Hour > 50 µg/m^3	1	2	2
Federal 24-Hour > 150 µg/m^3	0	1	1
Max. 24-Hour Conc. (µg/m^3)	68.1	177.3	157.2
Inhalable Fine Particulates ($PM_{2.5}$)			
Federal 24-Hour > 35 µg/m^3	0	1	1
Max. 24-Hour Conc. (µg/m^3)	34.8	55.3	73.9

NM – not monitored.
ppm: parts per million; µg/m^3: micrograms per cubic meter
Source: CARB 2015b

Ozone

Ozone is the main component of photochemical smog. Ozone is a principal cause of lung and eye irritation in an urban environment. It is formed in the atmosphere through a series of reactions involving hydrocarbons and NO_X in the presence of sunlight.

Table 3.3-2 shows that the federal eight-hour ozone NAAQS of 0.07 parts per million (ppm) has been exceeded from 36 to 54 times within the last three years at the East San Bernardino Valley monitoring station. The highest eight-hour concentration was 0.112 ppm in 2013. The data presented in the table show that the CAAQS one-hour average also exceeded the 0.09 ppm standard during each of the last three monitored years.

Particulate Matter

PM includes both aerosols and solid particles of a wide range of size and composition. Of particular concern are those particles 10 microns and smaller (i.e., PM_{10}) and particles less than or equal to 2.5 microns (i.e., $PM_{2.5}$). The size of the PM is referenced to the aerodynamic diameter of the particulate. The principal health effect of airborne PM is on the respiratory system. Particulates in the air are caused by a combination of:

- Windblown fugitive dust or road dust;
- Particles emitted from combustion sources (usually carbon particles); and
- Organic, sulfate, and nitrate aerosols formed in the air from emitted hydrocarbons and sulfur oxides (SO_X), and NO_X.

As previously discussed, EPA groups PM into two categories, which are described below.

Particulate Matter Less Than or Equal to 10 Microns

PM with a diameter equal to or less than 10 microns is referred to as PM_{10}. This size allows PM_{10} to easily enter the lungs contributing to increased respiratory disease, lung damage, cancer, and premature death. PM_{10} can also contribute to reduced visibility. In 1987, EPA adopted standards for PM_{10} and phased out the total suspended particulate standards previously in effect.

Background PM_{10} data for the Southwest San Bernardino Valley Station are provided in Table 3.3-2. The PM_{10} data show that the 24-hour average CAAQS of 50 micrograms per cubic meter ($\mu g/m^3$) is consistently exceeded at the east San Bernardino Valley Station (between one to two days per year, with a maximum concentration of 177 $\mu g/m^3$ in 2013). In the past three years, the 24-hour average PM_{10} NAAQS of 150 $\mu g/m^3$ was exceeded once in 2013 and once in 2014.

Particulate Matter Less Than or Equal to 2.5 Microns

Fine particulates are referred to as $PM_{2.5}$, having a diameter equal to or less than 2.5 microns. The potential adverse health effects are the same as PM_{10}, except these particles can enter deeper into the lungs and cause greater lung impairment, especially in at-risk individuals.

The $PM_{2.5}$ data in Table 3.3-2 show that the 24-hour average (98th percentile) NAAQS of 35 $\mu g/m^3$ was exceeded once in 2013 and once in 2014. The 98th percentile maximum 24-hour $PM_{2.5}$ background concentration of 73.9 $\mu g/m^3$ was measured in 2014.

Carbon Monoxide

CO is a colorless and odorless gas, which in the urban environment is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. Peak CO levels occur typically during winter months, due to a combination of higher emission rates and stagnant weather conditions. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can lead to headaches, aggravation of cardiovascular disease, and impairment of central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations are typically found at or near ground level near crowded intersections along heavily used roadways carrying slow-moving traffic. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within a relatively short distance of heavily traveled roadways.

The data in Table 3.3-2- present CO averages for the Northwest San Bernardino Valley Station. The table indicates that one-hour maximum CO levels comply with the NAAQS and CAAQS. These standards have not been exceeded at the station in the last three years. The maximum NAAQS and CAAQS one-hour concentrations were not exceeded. The data in Table 3.3-2 also

show that eight-hour maximum CO levels do not exceed the NAAQS and CAAQS of 9.0 ppm. The maximum eight-hour concentration was 1.64 ppm, occurring in 2012. Due to the low concentrations of CO, local air pollutant monitoring stations in the vicinity of the Project have stopped measurements of CO.

Nitrogen Oxides

NOx emissions from vehicular sources are some of the precursors in the formation of ozone and secondary PM. Ozone and PM are formed through a series of photochemical reactions in the atmosphere. Because the reactions are slow and occur as the pollutants are diffusing downwind, elevated ozone levels are often found many miles from the source of precursor emissions. NO_X and the corresponding ground-level ozone can provoke lung irritation and lung damage.

NO_X emissions are primarily generated from the combustion of fuels. NO_X include nitric oxide (NO) and NO_2. Because NO converts to NO_2 in the atmosphere over time and NO_2 is the more toxic of the two, it is the listed criteria pollutant. Background NO_2 data from the Northwest San Bernardino Valley Station are provided in Table 3.3-2. The NAAQS of 0.05 ppm has not been exceeded in the project area in the last three years. The maximum annual concentration was 0.0177 ppm in 2013. The data in the table also show that maximum one-hour average NO_2 levels comply with the CAAQS of 0.030 ppm. This limit has not been exceeded in the project area in the last three years.

Sulfur Oxides and Sulfur Dioxide

SO_X constitute a class of compounds, of which SO_2 is of greatest importance. The oxides are formed during combustion of the sulfur components in motor fuels. Relatively few SO_X are generated from motor vehicles, since motor fuels are now de-sulfured. The health effects of SO_X include respiratory illness, damage to the respiratory tract, and bronchia constriction. SO_X are also emitted by chemical plants that treat or refine sulfur or sulfur-containing chemicals. Natural gas contains trace amounts of sulfur, while fuel oils and coal contain much larger amounts. SO_X react in the atmosphere to form acid rain, which is destructive to crops and vegetation, as well as to buildings, materials, and works of art. Historical data show that SO_X levels in the South Coast Air Basin have been lower than the standard for many years.

Lead

Lead is a stable compound, which persists and accumulates both in the environment and in animals. In humans, it affects the blood-forming system, and the nervous and renal systems. In addition, lead has been shown to affect the normal functions of the reproductive, endocrine, hepatic, cardiovascular, immunological, and gastrointestinal systems, although there is significant individual variability in response to lead exposure. Since 1975, lead emissions have been in decline, due in part to the introduction of catalyst-equipped vehicles, and less production of leaded gasoline. In general, an analysis of lead is limited to projects that emit significant quantities of the pollutant (i.e., lead smelters) and is generally not applied to projects that primarily generate vehicle trips (e.g. residential projects). Lead gasoline additives, nonferrous smelters, and battery plants were the most significant contributors to atmospheric lead emissions. Legislation in the early 1970s required gradual reduction of the lead content of gasoline over a period of time, which has dramatically reduced lead emissions from mobile and other

combustion sources. In addition, unleaded gasoline was introduced in 1975; combined, these controls have essentially eliminated violations of the lead standard for ambient air in urban areas.

Federal lead standards are based on a calendar quarterly averaging time, not to exceed 1.5 $\mu g/m^3$. The state standard is based on a monthly average of 1.5 $\mu g/m^3$. Historical data show that lead levels in the Basin are, and have been, below the standard for many years.

Particulate Sulfates

Particulate sulfates are the product of further oxidation of SO_2. Sulfate compounds consist of primary and secondary particles. Primary sulfate particles are directly emitted from open pit mines, dry lakebeds, and desert soils. Fuel combustion is another source of sulfates, both primary and secondary. Secondary sulfate particles are produced when SO_X emissions are transformed into particles through physical and chemical processes in the atmosphere. These particles are small and can be transported long distances.

The 24-hour average CAAQS for sulfates is 25 $\mu g/m^3$. There is no federal standard for sulfates. Historical levels of sulfates for the project area show that sulfate levels have been well below California standards for the past 5 years.

Other State-Designated Criteria Pollutants

In addition to the federal criteria pollutants, California has designated hydrogen sulfide and visibility-reducing particles as criteria pollutants. California is designated as unclassified for visibility-reducing particles, and the Basin is designated as unclassified for hydrogen sulfide.

3.3.1.4 Attainment Status for the South Coast Air Basin

Both EPA and CARB use ambient air quality monitoring data to designate areas according to their attainment status for criteria air pollutants. The purpose of these designations is to identify the areas with air quality problems and initiate planning efforts for improvement. Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards for that pollutant. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme. Attainment classifications apply to individual pollutants:

- Unclassified: the data are incomplete and do not support a designation of attainment or nonattainment for a pollutant;
- Attainment: the CAAQS were not violated at any site in the area during a three-year period for that pollutant; and
- Nonattainment: at least one violation of a CAAQS occurred for that pollutant in the area.

The attainment status for the South Coast Air Basin is listed in Table 3.3-3. The South Coast Air Basin is also designated as attainment for SO_2, lead, CO, visibility-reducing particles, and sulfates. The Project would be located in an area that is nonattainment for the one-hour and eight-hour ozone state standards and extreme nonattainment for the eight-hour ozone federal

standards. The project area is designated as nonattainment for the PM_{10} NAAQS. The South Coast Air Basin has been designated as nonattainment for $PM_{2.5}$.

Table 3.3-3 Designations of Criteria Pollutants for the South Coast Air Basin

Pollutant	Federal	State
Ozone (1-hour)	Not Applicable	Nonattainment
Ozone (8-hour)	Extreme Nonattainment (for 2008 standard) Designation Pending (for 2015 standard)	Nonattainment
NO_2 (annual)	Attainment (Maintenance)	Attainment
NO_2 (1-hour)	Unclassifiable/Attainment	Attainment
CO	Attainment (Maintenance)	Attainment
PM_{10} (annual)	not applicable	Nonattainment
PM_{10} (24-hour)	Attainment (Maintenance)	Nonattainment
$PM_{2.5}$ (annual)	Nonattainment (for 1997 standard) Serious Nonattainment (for 2012 standard)	Nonattainment
$PM_{2.5}$ (24-hour)	Serious Nonattainment (for 2006 standard)	Nonattainment
Lead	Attainment	Attainment
SO_2	Designations Pending (expect Unclassifiable/Attainment)	Unclassifiable/Attainment

Source: CARB 2015c

3.3.1.5 Toxic Air Contaminants

In addition to criteria pollutants, both federal and state air quality regulations also focus on toxic air contaminants (TACs). TACs can be separated into carcinogens and noncarcinogens based on the nature of the effects associated with exposure to the pollutant. For regulatory purposes, carcinogens are assumed to have no safe threshold below which health impacts would not occur. Any exposure to a carcinogen poses some risk of contracting cancer. Noncarcinogens differ as generally a safe level of exposure is assumed below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

TACs may be emitted by stationary, area, or mobile sources. Common stationary sources of TAC emissions include gasoline stations, dry cleaners, and diesel backup generators, which are subject to local air district permit requirements. The other, often more significant, sources of TAC emissions are motor vehicles on freeways, high-volume roadways, or other areas with high numbers of diesel vehicles, such as distribution centers. Off-road mobile sources are also major contributors of TAC emissions and include construction equipment, ships, and trains.

Particulate exhaust emissions from diesel-fueled engines (diesel PM) were identified as a TAC by CARB in 1998. Federal and state efforts to reduce diesel PM emissions have focused on the

use of improved fuels, adding particulate filters to engines, and requiring the production of new-technology engines that emit fewer exhaust particulates.

Diesel engines tend to produce a much higher ratio of fine particulates than other types of internal combustion engines. The fine particles that make up diesel PM tend to penetrate deep into the lungs and the rough surfaces of these particles makes it easy for them to bind with other toxins within the exhaust, thus increasing the hazards of particle inhalation. Long-term exposure to diesel PM is known to lead to chronic, serious health problems including cardiovascular disease, cardiopulmonary disease, and lung cancer.

3.3.2 Regulatory Framework

3.3.2.1 Federal

EPA has been charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the federal Clean Air Act, which was enacted in 1970. The most recent major amendments to the Clean Air Act were made by Congress in 1990. EPA, under the provisions of the Clean Air Act, requires each state with regions that have not attained the NAAQS to prepare a State Implementation Plan, detailing how these standards are to be met in each local area. The State Implementation Plan is a legal agreement between each state and the federal government to commit resources to improving air quality. The State Implementation Plan is not a single document, but a compilation of new and previously submitted attainment plans, emissions reduction programs, district rules, state regulations, and federal controls.

General conformity requires that all federal actions conform to the State Implementation Plan as approved or promulgated by EPA. General conformity requirements were adopted by Congress as part of the Clean Air Act Amendments and were implemented by EPA regulations in the November 30, 1993 Federal Register (40 Code of Federal Regulations (CFR) Sections 6, 51, and 93: "Determining Conformity of General Federal Actions to State or Federal Implementation Plans; Final Rule"). Federal actions are required to evaluate construction and operational emissions against the applicable General Conformity Rule thresholds of significance, which are called de minimis thresholds. The de minimis levels are based on the attainment/maintenance and nonattainment designations and classifications for the project area. If the emissions for a federal action would exceed the de minimis levels, a formal air quality conformity determination is required.

3.3.2.2 State

The 1976 Lewis Air Quality Management Act established the air pollution control districts and air quality management districts throughout the state. The California Clean Air Act of 1988 required nonattainment areas in the state to prepare air quality attainment plans. The attainment plans are required to achieve a minimum 5 percent annual reduction in the emissions of nonattainment pollutants unless all feasible measures have been implemented.

CARB coordinates and oversees both state and federal air pollution control programs in California. CARB oversees activities of local air quality management agencies and is responsible for incorporating Air Quality Management Plans (AQMPs) from local air basins into a State Implementation Plan for federal EPA approval. Significant authority for air quality control within these basins has been given to local air pollution control districts, such as the South Coast

Air Quality Management District (SCAQMD), which regulate stationary source emissions and develop local attainment plans.

3.3.3 Thresholds of Significance

The City utilizes the NOP and CEQA Guidelines Appendix G to establish thresholds of significance for air quality and identify potentially significant impacts on the environment. For purposes of this analysis, an impact to air quality is considered significant if it would:

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

South Coast Air Quality Management District Thresholds

The analysis of the Project's air quality impacts follows the guidance and methodologies recommended in SCAQMD's *Air Quality Analysis Guidance Handbook* (SCAQMD 2015), formerly the *CEQA Air Quality Handbook*. CEQA allows for the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. SCAQMD has established thresholds of significance for regional air quality emissions for construction activities and project operations.

Regional Significance Thresholds

SCAQMD has adopted regional construction and operational emissions thresholds to determine a project's impact on air quality in the South Coast Air Basin. Table 3.3-4 lists SCAQMD's regional significance thresholds for criteria pollutants.

Table 3.3-4 SCAQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Volatile Organic Compounds (VOCs)	75 lbs./day	55 lbs./day
Carbon Monoxide (CO)	550 lbs./day	550 lbs./day
Nitrogen Oxides (NOX)	100 lbs./day	55 lbs./day
Sulfur Oxides (SOX)	150 lbs./day	150 lbs./day
Coarse Inhalable Particulates (PM10)	150 lbs./day	150 lbs./day
Fine Inhalable Particulates (PM2.5)	55 lbs./day	55 lbs./day

lbs./day = pounds per day
Source: SCAQMD 2010, 2015; City of Yucaipa 2015

Localized Significance Thresholds

Localized concentrations of air pollutants refer to an amount of pollutant in a volume of air (parts per million or $\mu g/m^3$). Localized emissions of criteria air pollutants and precursors were assessed in accordance with SCAQMD's Localized Significance Threshold (LST) guidance. LSTs are applicable only to NO_X, CO, PM_{10}, and $PM_{2.5}$. The LST analysis only considers on-site emissions generated by construction activities. Emissions associated with vehicle trips to and from the project site during construction would be dispersed throughout the region and would have a nominal localized impact at the project site.

LSTs represent the maximum amount of emissions at a project site that would not cause or contribute to an exceedance of the most stringent NAAQS or CAAQS. LSTs are based on the ambient concentrations of that pollutant within the Project SRA and the distance to the nearest sensitive receptor. SCAQMD recommends that lead agencies perform project-specific air quality modeling for projects larger than five acres. For projects less than five acres, SCAQMD has developed look-up tables showing the maximum emissions that would not cause an exceedance of any LST. The South Coast Air Basin is divided into SRAs with common characteristics; these include meteorological conditions and air pollutant sources.

SCAMQD states that LSTs can be used as screening criteria for larger projects to determine whether dispersion modeling may be required. Table 3.3-5 lists the LSTs for a five-acre project site for sensitive receptors within 25 meters (approximately 82 feet). The use of thresholds for a 5-acre site is conservative because a much larger project site, such as the project at a total of 236 acres, would allow for greater separation between the emission sources and off-site sensitive receptors. Therefore, the LST look-up tables were considered appropriate for the analysis. As shown in Table 3.3-5, conservative LST values were used for the analysis, assuming a 25-meter distance and five-acre site within SRA 35, East San Bernardino Valley.

Table 3.3-5 SCAQMD Localized Significance Thresholds

Air Pollutant	Threshold (lbs./day) Construction[1]
Nitrogen Oxides (NO_2)	1
Carbon Monoxide (CO)	270
Coarse Particulates (PM_{10})	2,075
Fine Particulates ($PM_{2.5}$)	14

lbs./day = pounds per day

[1] Based on a five-acre site with receptors 25 meters (82 feet) from the source in SRA 35.

Source: SCAQMD 2009

Hot Spots

Localized CO impacts are determined based on the presence of congested intersections. The significance of localized project impacts depends on whether the project would cause substantial concentrations of CO. A project is considered to have significant impacts if project-related mobile-source emissions result in an exceedance of the California one-hour and eight-hour CO standards:

One hour = 20 ppm
Eight hour = 9 ppm

Methodology

Criteria pollutant emissions from construction activities are primarily from fugitive dust and exhaust emissions from construction equipment. Exhaust emissions are generated from off-road equipment, vehicles used to deliver construction material, and worker vehicles. Fugitive dust is generated from site grading and construction equipment traveling on unpaved roads (i.e., dirt roads). The California Emissions Estimator Model Version 2013.2.2 (CalEEMod) computer program was used to estimate the construction emissions. CalEEMod allows the user to enter project-specific construction information, such as types, number, and horsepower of construction equipment, and number and length of off-site motor vehicle trips. Where project-specific data were not available, the default values within CalEEMod were used.

Operational emissions may be both direct and indirect emissions, and would be generated by area and mobile sources associated with the project. Criteria air pollutant emissions from operational activities are primarily from mobile source emissions from project-generated vehicles. Mobile-source emissions would include vehicle trips by residents. Area-source emissions would be associated with activities such as maintenance of landscaping and grounds. Natural gas combustion for space and water heating is also a direct area source of emissions. Vehicle fleet characteristics, energy consumption, waste generation, and water use and wastewater generation data specific to San Bernardino County or specific to the Project were used in place of CalEEMod defaults, where available.

The Project is intended to be phased based upon projected demand and sales potential. Although production-type housing is not proposed by the applicant at this time, such occurrence is possible. Therefore, construction and operation of the residences could occur in phases through 2040. However, the analysis conservatively assumes that all construction could occur in one year (beginning in 2016), and that operation of the Project would begin in 2017. If construction and operation occur later than these years, emissions would be less due to a reduction in emission rates for future years due to cleaner vehicles.

3.3.4 Impacts

Will the Project conflict with or obstruct implementation of the applicable air quality plan?

Air quality plans describe air pollution control strategies to be implemented by a city, county, or regional air district. The primary purpose of the AQMP is to bring an area that does not attain federal and state air quality standards into compliance with those standards pursuant to the requirements of the Clean Air Act and California Clean Air Act.

A consistency determination plays an important role in local agency project review by linking local planning and individual projects to the AQMP. The regional emissions inventory for the South Coast Air Basin is compiled by SCAQMD, the San Bernardino Association of Governments (SANBAG), and the Southern California Association of Governments (SCAG). Regional population, housing, and employment projections developed by SANBAG and SCAG for the Regional Transportation Plan (RTP) are based, in part, on the City's General Plan land use designations. These demographic trends are incorporated into the RTP compiled by SCAG, to determine priority transportation projects and determine vehicle miles travelled within the SCAG region.

The Project would not require a General Plan amendment and would be consistent with the 2004 Yucaipa General Plan and Zoning Map. The project site is designated RL-1. The Project would result in the construction of 184 new residential lots consistent with that designation. Based on the average of 2.9 persons per household in the City of Yucaipa, it is estimated that the Project would result in approximately 534 additional residents (Census Bureau 2015). Because the Project is consistent with the assumptions associated with the current assumptions used to develop the General Plan and RTP, it is reasonable to assume that the intensity of operational emissions have been accounted for in the 2012 AQMP. Therefore, the Project would not conflict with or obstruct implementation of the applicable AQMP. The impact would be less than significant.

Will the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction

As discussed in Section 3.3.3, construction of the Project was assumed to occur over approximately one year. Emissions associated with construction of the Project were assessed for the years 2016 and 2017, which are the earliest years that construction could occur. However, the construction of the Project's residences would be based on market conditions and could occur over a longer period of time. The analysis is conservative since it assumes that construction activity for the residences would occur concurrently, resulting in higher daily emissions. Specific sources of emissions associated with construction would include exhaust from diesel construction equipment at the site and dust generated by the mechanical disturbance of the soil due to equipment and truck travel within the site. In addition, worker commuter trips would occur to and from the site for construction employees. A typical construction schedule of eight hours per day, five days per week was assumed.

Regional Criteria Pollutants

Maximum daily regional emissions from construction of the Project are shown in Table 3.3-6 and compared to the daily SCAQMD CEQA significance thresholds.

Table 3.3-6 Unmitigated Project Construction Emissions

Construction Phase[1]	Emissions (lbs./day)					
	VOCs	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Maximum Construction Day (2016)	5.15	54.73	42.35	0.04	10.19	6.63
Maximum Construction Day (2017)	29.20	69.69	48.04	0.07	11.03	4.96
SCAQMD Standard	75	100	550	150	150	55
Significant?	No	No	No	No	No	No

lbs./day = pounds per day

[1] PM emissions include fugitive dust control measures as promulgated by SCAQMD Rule 403, requiring an application of water at least twice per day to at least 80 percent of the unstabilized disturbed on-site surface areas, maintaining at least six inches of freeboard and placing a protective tarp on haul vehicles, replacing disturbed ground cover quickly, restricting speeds on unpaved roads to less than 15 miles per hour, and watering unpaved haul roads twice per day.

Source: Modeled by AECOM 2016

As shown in Table 3.3-6, construction-generated emissions of VOCs, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ would not exceed applicable daily thresholds established by SCAQMD. Therefore,

construction emissions would not violate an ambient air quality standard or contribute substantially to an existing violation. This impact would be less than significant.

Localized Construction Emissions in Comparison with SCAQMD Thresholds

As shown in Table 3.3-7, emissions generated at the five-acre development area would not exceed SCAQMD's LSTs.

Table 3.3-7 Maximum Daily Construction Emissions Compared with the LST

Maximum Emissions[1]	Pollutants (lbs./day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Site Preparation	54.63	41.10	9.98	6.58
SCAQMD Localized Significance Threshold	270	2,075	14	9
Exceeds Threshold?	No	No	No	No

lbs./day = pounds per day

1 PM_{10} and $PM_{2.5}$ generated by fugitive dust assumes implementation of SCAQMD Rule 403 for fugitive dust control, which includes the following dust control measures during ground-disturbing activities: replacing groundcover in disturbed areas quickly, watering exposed surfaces at least two times daily, implementation of equipment loading/unloading procedures to reduce fugitive dust, managing haul road dust by watering two times daily, and reducing speed on unpaved roads to less than 15 miles per hour.

Source: Modeled by AECOM 2016. Does not include emissions from on-road vehicles traveling outside the boundaries of the project site, in accordance with SCAQMD LSTs methodology.

Operational Impacts

Regional Emissions

Mobile source emissions were based on vehicle trips from the traffic impact analysis (AECOM 2016a). According to the traffic analysis, the Project would generate 1,752 average daily trips, with 138 trips in the morning peak hour and 184 trips in the evening peak hour. Area-source emissions would be associated with consumer products, hearths, and landscaping equipment. Natural gas combustion for space and water heating is also a direct area source of emissions. The results of the CalEEMod computer modeling for operation emissions associated with the buildout of the Project are included in Table 3.3-8 for the year 2017. Model runs are included in Appendix C.

Table 3.3-8 Regional Operational Phase Emissions

Operations Phase	VOCs	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	55.96	1.40	107.82	0.15	14.14	14.14
Energy	0.18	1.57	0.67	0.01	0.13	0.13
Mobile	7.07	22.12	84.68	0.20	13.68	3.85
Maximum Daily Operation Emissions	63.22	25.09	193.17	0.36	27.95	18.12
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Exceeds Threshold?	Yes	No	No	No	No	No

Source: Modeled by AECOM in 2016

As shown in Table 3.3-8, emissions generated during operation of the Project would not exceed SCAQMD's regional significance thresholds for NO_X, CO, SO_2, PM_{10} and $PM_{2.5}$, but will exceed the thresholds for VOCs. The exceedance of the VOC threshold is primarily due to hearth emissions, which account for an estimated 48 pounds per day. SCAQMD Rule 445 prohibits the installation of permanent indoor and outdoor wood-burning devices (such as fireplaces and

stoves) in new developments. However, that rule includes an exemption for residential developments in locations that are higher than 3,000 feet above mean sea level (msl). Since the project site is greater than 3,000 feet above msl, the requirements of Rule 445 do not apply and the Project can install wood-burning hearths. Therefore, operational VOC emissions could violate an ambient air quality standard or contribute substantially to an existing violation. Implementation of mitigation measure AQ-1 would be required to reduce impacts to less than significant.

Will the Project result in a cumulatively considerable net increase of criteria pollutant emissions associated with construction of the Project?

The SCAQMD cumulative analysis focuses on whether a specific project would result in cumulatively considerable contribution of emissions to the region. Per CEQA Guidelines Section 15064(h)(4), the existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the project's incremental effects are cumulatively considerable.

The South Coast Air Basin is considered a nonattainment area for ozone, and VOCs are one of the precursors to the photochemical formation of ozone. As discussed earlier, the Project would result in the generation of VOC emissions at levels that exceed the SCAQMD regional thresholds for operational activities. These thresholds are designed to identify those projects that would result in significant levels of air pollution and that would assist the region in attaining the applicable state and federal ambient air quality standards. When a Project exceeds these significance thresholds, it is considered to impede attainment and maintenance of ambient air quality standards.

Because the Project would exceed the SCAQMD project-level air quality significance thresholds for VOC emissions, the Project's operational emissions would have a cumulatively considerable contribution to the region's air quality. Therefore, the cumulative impact would be significant. Implementation of mitigation measure AQ-1 would be required to reduce impacts to less than significant.

Will the Project expose sensitive receptors to substantial pollutant concentrations?

Some members of the population are especially sensitive to air pollutant emissions and should be given special consideration when evaluating air quality impacts from projects. These people include children, older adults, persons with preexisting respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather are defined as sensitive receptors by SCAQMD. According to SCAQMD, sensitive receptors include residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The nearest sensitive receptors to the project site are residential homes located to the south and west of the project site. The residential units represent the nearest sensitive receptors with potential to be impacted by the Project.

Construction

The greatest potential for TAC emissions would be related to diesel PM emissions associated with heavy-duty construction equipment operations. According to SCAQMD methodology, health effects from carcinogenic TACs are usually described in terms of individual cancer risk, which is based on a 30-year lifetime exposure to TACs.

Building construction activities would last approximately 1 year, or be phased with individual residences constructed over time. If the duration of potentially harmful construction activities near a sensitive receptor was 1 year, then the exposure would be approximately 3% of the total exposure period used for typical health risk calculations (i.e., 30 years). If construction activities were phased over time, construction activity would be dispersed over the project site (i.e., 236 acres), and emissions would not occur in the vicinity of any individual receptor for a substantial period of time.

In addition, construction emissions would occur intermittently throughout the day and would not occur as a constant plume of emissions from the project site. Construction of the proposed project would also not exceed the SCAQMD localized significance thresholds, and unhealthful pollutant concentrations would not be generated. Therefore, the project would not expose sensitive receptors to substantial construction pollutant concentrations. The impact would be less than significant.

CO Hotspot Analysis

CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere. Adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Areas of vehicle congestion have the potential to create pockets of CO called "hotspots." Due to technological advances in catalytic converters and improved fuel economy, ambient levels of CO have been reduced and the presence of CO hotspots are rare at roadway intersections. Because increased CO concentrations are usually associated with roadways that are congested and have heavy traffic volumes, many agencies have established preliminary screening criteria to determine with fair certainty that project-generated, long-term operational local mobile-source emissions would not result in a CO hotspot.

If a project causes roads and intersections to deteriorate to Level of Service (LOS) E or worse, the resulting longer queue at the traffic signals could cause a localized significant air quality impact (UCD ITS 1997). According to the traffic study prepared for the Project, all intersections and roadway segments would operate at LOS B or better in 2040 with or without implementation of the Project (AECOM 2016).

Therefore, the CO concentrations resulting from the Project would not violate the CAAQS for the one-hour period (20 ppm) or the eight-hour period (9.0 ppm). This impact would be less than significant.

Operational TAC Emissions

CARB has also developed the *Air Quality and Land Use Handbook: A Community Health Perspective* to provide guidance on land use compatibility with sources of TACs (CARB 2005). These sources include freeways and high-traffic roads, commercial distribution centers, rail

yards, refineries, dry cleaners, gasoline stations, and industrial facilities. The handbook is not a law or adopted policy, but offers advisory recommendations for the siting of sensitive receptors near uses associated with TACs. The handbook indicates that land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

CARB recommendations relevant to the Project include avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day. The Project is located more than 5,000 feet (approximately one mile) from Bryant Street, which is the nearest rural road with the highest volume of 19,122 vehicles per day in 2040. Oak Glen Road is located adjacent to the project site and is estimated to have a maximum daily volume of 10,948 vehicles in 2040. These roadways do not meet the minimum traffic volumes in the CARB Handbook that require a setback distance. Since the Project is consistent with the recommendations of the CARB Handbook, no adverse health risks are anticipated based on the setback distances for the Project.

The land uses associated with the Project would be residential, which are not typical sources of TAC emissions. Therefore, the Project's long-term operational activities would not generate substantial TAC emissions and would not expose sensitive receptors to substantial operational TAC concentrations. The impact would be less than significant.

Will the Project create objectionable odors affecting a substantial number of people?

Odors do not generally result in health concerns but can constitute a public nuisance, under certain circumstances. Odors generated by a project have the potential to be an impact when they become objectionable, affecting a substantial number of people. The Project would use typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. Because of the amount and types of equipment, the temporary nature of these emissions, and the highly diffusive properties of diesel exhaust, nearby receptors would not be affected by diesel exhaust odors associated with Project construction.

Operation of the Project would not add any new odor sources. The land uses associated with the Project would be residential, which are not typically large generators of odor emissions. The Project would not have any significant odor sources, and any odors generated would be similar to existing odors associated with land uses in the area. As a result, the Project's construction and operational activities would not create objectionable odors affecting a substantial number of people, and the proposed residents would not be impacted by any existing odor sources. The impact would be less than significant.

3.3.5 Mitigation Measures

To reduce operational-related VOC emissions, the Project shall implement all applicable control measures, as follows:

> **AQ-1:** The Project shall comply with the requirements of SCAQMD Rule 445 with regard to the installation of permanent indoor wood-burning devices (such as fireplaces and stoves). The exemption for residential properties above 3,000 or more feet above msl shall not apply to the Project.

3.4 BIOLOGICAL RESOURCES

Section 3.4 summarizes the findings and conclusions contained in the reports prepared by ECORP Consulting, Inc. for the Project: Biological Resources Assessment for the Casa Blanca Specific Plan (November 2012), Biological Resource Assessment/Focused Rare Plant Survey/Burrowing Owl Survey Results for the Casa Blanca Specific Plan (August 2013), and Biological Resources Assessment for Wilson Creek Estates (Revised July 2015). These reports are available in Appendix D of this EIR for reference purposes.

The assessment includes results of field surveys conducted by qualified biologists, as well as a search performed using the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) [CDFW 2015] and the California Native Plant Society's Electronic Inventory [CNPS 2015]. Within these databases, the following nine USGS 7.5-minute topographic quadrangles were searched because they contained the property or adjacent areas: Beaumont, Big Bear Lake, El Casco, Forest Falls, Harrison Mountain, Keller Peak, Redlands, Sunnymead, and Yucaipa.

In addition, findings and conclusions of an Oak Tree Assessment report prepared for the Project by AECOM (2016) is included in this section. This includes results of an inventory and assessment of oak trees found on the project site that are protected by Division 9, Chapter 5 of the Yucaipa Municipal Code (Oak Tree Conservation).

3.4.1 Setting

Local topography consists of a single large canyon (Wilson Creek), and a few adjoining canyons, surrounded by ridges trending in an east to west direction. The property ranges in elevation between approximately 3,000 feet above msl in the southwest section to 3,460 feet above msl in the northeast. The nearest peak is Allen Peak at 5,795 feet, two miles northeast of the property.

Surrounding land uses are undeveloped properties with residential areas and park uses (El Dorado Ranch Park). Most developed properties surrounding the site contain single-family homes with adjoining lands of an acre or more. Agricultural uses occur both on the property and on adjoining ridges to the east. The area is used to grow grains and other dry row crops. The nearest areas of designated open space include the U.S. Forest Service lands of the San Bernardino National Forest, two and a half miles northeast of the property.

Vegetation within the site consists of a mixture of native shrubs and trees, agriculture, orchards, grasslands, and developed areas. Native vegetation tends to dominate the Wilson Creek area and its associated finger canyons, while agriculture and associated plant communities dominate the ridgelines. Several outbuildings occur in the southwestern corner of the property. The property is currently subject to some degree of human visitation with associated habitat degradation.

Based on the search results, separate Potential for Occurrence tables were created for plants and wildlife including federal, state, California Native Plant Society (CNPS, and Bureau of Land Management listing status, and their potential to occur based on the habitat in the study area. These tables were reviewed by biologists prior to conducting surveys to determine which species could be observed within the property.

All sensitive species found within the database searches were assessed for their potential to occur on the site based on the following designations:

Present: Species was observed on the site during a site visit or focused survey.

High: Habitat (including soils and elevation requirements) for the species occurs on the site and a known occurrence occurs within five miles of the site.

Moderate: Habitat (including soils and elevation requirements) for the species occurs on the site and a known occurrence occurs within the database search, but not within five miles of the site; or a known occurrence occurs within five miles of the site and marginal or limited amounts of habitat occurs on the site.

Low: Limited habitat (including soils and elevation requirements) for the species occurs on the site and a known occurrence occurs within the database search, but not within five miles of the site.

Assumed Absent: No suitable habitat (including soils and elevation requirements) occurs on the site, the site is located outside the species' known geographical range, or the species was determined to be absent during focused surveys.

Special-Status Plant Species

Information within the Biological Resources Assessment reports indicate no special-status plant species have been documented on the property in the public databases that were searched. However, the reports indicate that several special-status plant species have been documented within the vicinity of the site and have the potential to occur. No federal or state listed plant species were documented on the site during the surveys.

Ninety-seven special-status plant species were identified from the database searches. Plummer's mariposa lily (*Calochortus plummerae*) and Parry's spineflower (*Chorizanthe parryi* var. *parryi*) have a high potential to occur. Hall's monardella (*Monardella macrantha* ssp. *hallii*) has a moderate potential to occur. California androsace (*Androsace elongata* ssp. *acuta*), Jaeger's milk-vetch (*Astragalus pachypus* var. *jaegeri*), and Payson's jewel-flower (*Caulanthus simulans*) have a low potential to occur. None of these plants are state or federal listed species. The remaining plants were not federal or state protected or were not likely to occur.

Special-Status Wildlife Species

Information within the Biological Resources Assessment reports indicate no special-status wildlife species have been documented on the property in the public databases that were searched. However, several special-status wildlife species have been documented within the vicinity of the site and have the potential to occur. Several protected and federal and/or state listed wildlife species occur within a five-mile radius of the site. Many of these are montane species that would not have a potential to occur on the property due to elevation differences or lack of habitat.

Fifty-five special-status wildlife species were identified from the database searches. Most of the species reviewed are assumed absent, with the exception of some for which the property contains a small amount of suitable habitat. The California horned lark (*Eremophila alpestris actia*), Bell's sage sparrow (*Amphispiza belli belli*), Lawrence's goldfinch (*Carduelis lawrencei*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) are noted to have a high potential to occur. Harmonious sweat bee (*Halictus harmonius*), Coast (San Diego) horned lizard (*Phrynosoma coronatum blainvillei*), coastal western whiptail (*Aspidoscelis tigris stejnegeri*), San Bernardino ringneck snake (*Diadophis punctatus modestus*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), loggerhead shrike (*Lanius ludovicianus*), burrowing owl (*Athene cunicularia*), Dulzura pocket mouse (*Chaetodipus californicus femoralis*), southern grasshopper mouse (*Onychomys torridus ramona*), and American badger (*Taxidea taxus*) have a moderate potential to occur.

Vegetation Communities

There are six vegetation communities on the property: Annual Brome (diandrus) Grassland, California Buckwheat Scrub, Riparian, Oak (*Quercus* spp.) Woodland, Agriculture, and Orchard. There are also land use types—disturbed/developed—located on the property.

The vegetation communities are discussed below.

Annual Brome Grassland

Brome grasslands account for the largest acreage of grassland vegetation in cismontane California. Brome grassland inhabits all topographic settings in foothills, waste places, rangelands, and openings in woodlands. Dominant plant species observed within this community in the Southern California Mountains and Valleys region include slender wild oat (*Avena fatua*), short-podded mustard (*Hirschfeldia incana*), doveweed (*Eremocarpus setigerus*), Farmer's foxtail (*Hordeum murinum*), tocalote (*Centaurea melitensis*), and Russian thistle (*Salsola tragus*). Native species are generally present in low amounts and include deerweed (*Acmispon glaber*), annual lupine (*Lupinus bicolor*), western ragweed (Ambrosia psilostachia), blue wildrye (*Elymus glaucus*), common fiddleneck (*Amsinckia menziesii*), and western bindweed (*Calystegia macrostegia*). On the site, the plant community is located primarily along the periphery of agricultural areas and former agricultural areas. One location within the western part of Wilson Creek canyon that was previously mapped as agriculture was changed to this plant community.

California Buckwheat Scrub

California buckwheat is a somewhat small, semi-woody shrub that can grow to two meters in height and is found in low to mid-elevations throughout Central and Southern California. This species grows in a variety of topographic conditions and is generally found in coarse, well-drained soils. This alliance is often one of the first to form following disturbance such as fire, floods, grazing, or mechanical disturbance. California buckwheat is scattered throughout the site and is found along with deerweed, scale broom (*Lepidospartum squamatum*), thick-leaved yerba santa (*Eriodictyon crassifolium*), white sage (*Salvia apiana*), and our Lord's candle (*Yucca whipplei*). Inter-shrub spaces often have high amounts of non-native herbaceous species. This plant community dominates most of the Wilson Creek area and adjoining finger canyons. It can also be found in remnant patches along the southern site boundary, interspersed among orchard areas.

Riparian

Two riparian habitats are located on the property: Mulefat Thickets and Sycamore Woodland. Both plant communities are considered riparian habitat types and are subject to regulatory authority of the CDFW, under its Lake and Streambed Alteration Program.

> *Mulefat Thickets:* Mulefat is an evergreen shrub that is a member of the sunflower family. It occurs in both seasonally or intermittently flooded habitats, and is variable depending on the amount of inundation and scouring. Dense stands typically form along riparian corridors and lake margins. The mulefat thickets within the site consist mainly of mulefat, but also include Fremont's cottonwood (*Populus fremontii*), golden currant (*Ribes aureum*), and blue elderberry (*Sambucus nigra* ssp. *caerulea*) as well as brome grasses (*Bromus* spp.) and gum trees (*Eucalyptus* sp.). The thickets occur in patches along Wilson Creek, mostly consisting of one to five plants.
>
> *Sycamore Woodland:* Western sycamores (*Platanus racemosa*) are a winter-deciduous tree species that is commonly associated with larger floodplains and streams throughout California. Often associated with oak woodlands, this plant community is typically found in foothills of Southern California, and individual sycamores are often widely dispersed among other tree and shrub species within its habitat areas. Sycamores serve an important purpose as wildlife habitat, providing nesting trees for raptors and abundant leaf litter in their understory. Scattered sycamores occur along Wilson Creek, mostly consisting of one or two trees.

Oak Woodland

Oak woodlands are an evergreen plant community that is highly drought tolerant and fire resistant, occupying many of the Southern California foothills. There are many species of oaks located in California. The site contains Tucker's oak (*Quercus john-tuckeri*), coast live oak (*Quercus agrifolia*), and scrub oak (*Q. berberidifolia*). Tucker's oak dominates most of the oak woodland on the property and is a drought-resistant evergreen shrub that can grow from three to five meters in height and is found along the Transverse Mountain Range and the southern end of the Coast Ranges. Tucker's oak occurs in a variety of habitats including mountains, chaparral, desert-chaparral transition communities, pinyon-juniper woodland, and Great Basin sage. On the property, oak woodland is found along drainages and around otherwise disturbed and developed sites. Oak trees are protected by local Yucaipa ordinances.

Agriculture, Fallow Agriculture, Disturbed/Developed, and Orchard

Agriculture, fallow agriculture, disturbed/developed, and orchard are found through most of the property's ridges outside of the Wilson Creek area. Areas mapped with these designations are either largely devoid of vegetation due to human development or are dominated by unnatural vegetation such as agricultural fields, lawns, and landscaping. In many cases, areas surrounding development show high amounts of non-native ruderal species. This cover type is generally represented by the agricultural areas, the orchards, and the small area of development around the Casa Blanca house. Orchards include mainly citrus and olive groves. The agricultural areas are primarily grains and other row crops.

Jurisdictional Delineation

Wilson Creek, which is joined by a smaller unnamed feature in the upper part of the canyon, is also mapped on existing USGS topographic maps as a blue-line stream. The unvegetated stream bottom of these two features will be considered to be jurisdictional to the U.S. Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB). Vegetation within both Wilson Creek and its unnamed tributary consisted of scattered and sparse riparian vegetation along the banks and upper terraces. These vegetated riparian areas would be considered jurisdictional to the CDFW.

A total of 0.638 acres of potential waters of the U.S. were recorded on the property. This acreage represents a calculated estimation of the jurisdictional area within the Project boundaries, and is subject to modification following the USACE verification process. A total of 1.20 acres of CDFW habitat area were recorded on the property, and this finding needs to be verified by the CDFW.

Sensitive Plants

No special-status plant species were observed during the previous focused sensitive plant survey that was conducted, or during the updated biological assessment survey.

Sensitive Wildlife

No federal or state listed wildlife species were documented on the site during the surveys. Four sensitive species, Cooper's hawk (*Accipiter cooperii*), northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), and prairie falcon (*Falco mexicanus*), have been observed on the property previously. During this updated survey, both white-tailed kite and Cooper's hawk were observed hunting on the property. These species are described below.

Cooper's Hawk

Status: California Watch List

Cooper's hawks are found throughout most wooded portions of California and occur most frequently in dense stands of live oak, riparian deciduous, or other forest habitats near water. The species has shown declines in breeding numbers in the last few decades. Although it does not receive protection as a formally listed species, its nests are protected from impact by provisions of the federal Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (FGC). They are expected to nest on the site during the breeding season, which occurs from March through August. Previously, one Cooper's hawk was observed flying over the property during the focused burrowing owl surveys and another one was observed flying around the northern portion of the property during the biological update.

Northern Harrier

Status: California Species of Special Concern

Northern harriers frequent meadows, grasslands, open rangelands, desert sinks, and freshwater emergent wetlands. They breed and forage in habitats that provide adequate vegetative cover, an abundance of suitable prey, and scattered hunting, plucking, and lookout perches such as shrubs

or fence posts. The primary threat to the species is the loss and degradation of nesting and foraging habitat. Like the Cooper's hawk, this species' nesting areas are protected from impact by provisions of the federal MBTA and the FGC. Previously, multiple northern harriers were observed flying and hunting over the property during the focused burrowing owl surveys. None were observed during the updated survey.

White-Tailed Kite

Status: California Species of Special Concern; Fully Protected

The white-tailed kite is a raptorial species of open habitat areas, including agricultural areas, across the western United States. The species declined sharply during the latter part of the 20th century, but populations have rebounded in recent decades. Like the Cooper's hawk, this species' nesting areas are protected from impact by provisions of the federal MBTA and the FGC. They are expected to nest on the site during the breeding season, which runs from February through August. During previous surveys, three individuals were observed flying over the property and another was observed within ornamental trees on the property. During the updated survey, a single individual was observed hunting in the central part of Wilson Creek on the property.

Prairie Falcon

Status: California Species of Special Concern

Falcons are high-level, raptorial predators that nest in inaccessible locations such as remote cliff faces or high building ledges. Prairie falcons will range for many miles to hunt prey such as mammals and birds. The species has been stable throughout most of its range, but is considered sensitive due to its restrictive nesting requirements. During previous surveys, an individual was observed hunting over the property. None were observed during the updated survey. Like the Cooper's hawk, this species' nesting areas are protected from impact by provisions of the federal MBTA and the FGC. No nesting habitat (cliff faces) occurs on the property.

Burrowing Owl

Status: California Species of Special Concern

Burrowing owls are found throughout much of California and have been in sharp decline through much of their California range, especially near urban centers. The species favors open habitats such as grasslands and agricultural fields, but also uses open scrub and desert areas. Due to the species decline, and their ground-nesting habits, it has been protected by special provisions of the CDFW (previously California Department of Fish and Game [CDFG]) since 1995. project sites that support burrowing owls often need to relocate owls prior to impacting the project area.

A burrowing owl habitat assessment and protocol survey was conducted between March 11 and July 10, 2013. During the focused burrowing owl surveys, no owls were observed but there was documented presence of potential burrows and available foraging habitat. The updated survey found that these habitat suitability conditions have not changed. The property supports no burrowing owls currently, but does contain potential habitat.

Other Species

Bat species could occur within the old buildings and structures present on the property. Although no sensitive bat species are expected, there is still a potential for roosting areas on the property to serve as maternal colonies.

During the site assessment, no breeding birds were observed; however, several locations where large trees exist within and adjacent to the project area may contain nesting habitat for protected breeding birds such as raptors, hummingbirds, and other migratory birds. Breeding bird species could pose a constraint to development of the area, if development occurs during the breeding season. Generally, the breeding season is from February through August of each year.

Wildlife Movement Corridors and Linkages

The Wilson Creek Estates property consists of a large block of undeveloped land that rests at the eastern edge of the majority of developed portions of Yucaipa. The majority of the site supports a continuous area of undeveloped land and supports free wildlife movement. Native habitats within Wilson Creek are also currently connected to large tracts of open land that currently surround the site on the north and east, as well as El Dorado Ranch Park to the east. Rural residential areas are located west and south of the property and are not as suitable for wildlife movement due to the development and human presence. The properties to the north and east of the project area have approved projects associated with them (Coy and Cherrycroft) that, once built, would eliminate the majority of these areas from contributing to the overall open space block associated with Wilson Creek Estates. El Dorado Ranch Park would continue to provide wildlife habitat in the area after development of these projects. Wilson Creek Estates, as envisioned, would maintain an undeveloped, rural quality that would likely maintain wildlife use of the area.

Wilson Creek crosses the property and continues to the west through a narrow band surrounded by the more developed portions of Yucaipa. The creek alignment and undeveloped land associated with it narrows farther west of the property, from a width of about 700 feet just west of the property until it becomes no more than 100 feet wide where it stops just north of Yucaipa Boulevard. From that point, the creek crosses under the road through a culvert and enters an area of rural residential lots. Due to the ever-narrowing width of this corridor through Yucaipa, and its termination in a developed area, it is not considered an effective wildlife corridor. Although wildlife originating from the Wilson Creek Estates property can continue to the west, there is no direct connection through to the other side of the developed portions of Yucaipa.

The County of San Bernardino General Plan Open Space Element (Open Space Overlay Map) identifies the Live Oak Canyon Wildlife Corridor approximately three miles west of the project site, west of Yucaipa Regional Park. There is a "Wildlife Corridor" sign along Cherry Croft Drive near its intersection with Oak Glen Road. This sign was installed by the Yucaipa Animal Placement Society (YAPS) as a way to help the community co-exist with wildlife.

3.4.2 Regulatory Framework

3.4.2.1 Federal

Federal Endangered Species Act of 1973

Section 3 of the Federal Endangered Species Act (FESA) defines an endangered species as any species or subspecies of fish, wildlife, or plants ―in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species or subspecies likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Designated endangered and threatened species, as listed through publication of a final rule in the Federal Register, are fully protected from "take" without an incidental take permit administered by the U.S. Fish and Wildlife Service (USFWS) under Section 10 of FESA. "Take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct (50 CFR 17.3). The term "harm" in the definition of take in FESA means an act that 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 (50 CFR 17.3). The term "harass" in the definition of take means an intentional or negligent act or omission that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering (50 CFR 17.3). Proposed endangered or threatened species are those for which a proposed regulation, but not a final rule, has been published in the Federal Register.

Section 7 of FESA requires that federal agencies ensure that their actions are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its critical habitat. This obligation requires federal agencies to consult with USFWS on any actions (issuing permits including Section 404 permits, issuing licenses, providing federal funding) that may affect listed species to ensure that reasonable and prudent measures will be undertaken to mitigate impacts on listed species. Consultation with USFWS can be either formal or informal depending on the likelihood of the action to adversely affect listed species or critical habitat. Once a formal consultation is initiated, USFWS will issue a Biological Opinion (either a jeopardy or a no jeopardy opinion) indicating whether the proposed agency action will or will not jeopardize the continued existence of a listed species or result in the destruction or modification of its critical habitat. A permit cannot be issued for a project with a jeopardy opinion unless the project is redesigned to lessen impacts. In the absence of any federal involvement, as in a privately funded project on private land with no federal permit, only Section 10(a) of FESA can empower USFWS to authorize incidental take of a listed species, provided a Habitat Conservation Plan (HCP) is developed. To qualify for a formal Section 10(a) permit, strict conditions must be met including a lengthy procedure involving discussions with USFWS and local agencies, preparation of an HCP, and a detailed Section 10(a) permit application.

Migratory Bird Treaty Act

The MBTA (16 U.S. Code [USC] Sections 703–711) includes provisions for protection of migratory birds, including the non-permitted take of migratory birds, under the authority of USFWS. The MBTA regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 CFR Section 10.13. Migratory birds include geese, ducks,

shorebirds, raptors, songbirds, and many others. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered a "take." The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country, and is enforced in the United States by USFWS. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors).This act protects many of the bird species within the study area. The Project is within the migratory route of the burrowing owl.

Clean Water Act of 1977, Section 404

This section of the Clean Water Act (CWA) (33 USC Section 1251 et seq. and 33 CFR Sections 320 and 323) gives USACE authority to regulate discharges of dredge or fill material into waters of the U.S., including wetlands. Under Section 404 of the CWA, USACE is charged with regulating the discharge of dredge and fill materials into jurisdictional waters of the U.S. The terms "waters of the U.S." or "jurisdictional waters" have a broad meaning that includes special aquatic sites, such as wetlands. Waters of the U.S., as defined by regulation and refined by case law, include (1) the territorial seas; (2) coastal and inland waters, lakes, rivers, and streams that are navigable waters of the U.S., including their adjacent wetlands; (3) tributaries to navigable waters of the U.S., including adjacent wetlands; (4) interstate waters and their tributaries, including adjacent isolated wetlands and lakes, intermittent and ephemeral streams, prairie potholes, and other waters that are not a part of a tributary system to interstate waters or navigable waters of the U.S., the degradation or destruction of which could affect interstate commerce.

Clean Water Act of 1977, Section 401

Section 401 of the CWA requires that any applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. must obtain a Water Quality Certification, or a waiver thereof, from the state in which the discharge originates. In California, the RWQCB issues Water Quality Certifications. The RWQCB asserts jurisdiction over waters of the U.S. under Section 401 of the CWA, where such waters are also subject to USACE's jurisdiction, pursuant to Section 404 of the CWA.

3.4.2.2 State

California Endangered Species Act

The California Endangered Species Act (CESA) declares that deserving plant or animal species will be given protection by the State of California because they are of ecological, educational, historic, recreational, aesthetic, economic, or scientific value to the people of the state. CESA established that it is state policy to conserve, protect, restore, and enhance endangered species and their habitats. Under state law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. Listed species are generally given greater attention during the land use planning process by local governments, public agencies, and landowners than are species that have not been listed. CESA authorizes that private entities may "take" plant or wildlife species listed as endangered or threatened under FESA and CESA, pursuant to a federal incidental take permit issued in accordance with Section 10 of FESA, if CDFW certifies that the incidental take statement or incidental take permit is consistent with CESA (FGC Section 2080.1[a]).

Fish and Game Code of California

The California FGC provides specific protection and listing for several types of biological resources. Section 1600 of the FGC requires a Streambed Alteration Agreement (SAA) for any activity that would alter the flow, change, or use any material from the bed, channel, or bank of any perennial, intermittent, or ephemeral river, stream, and/or lake. Typical activities that require an SAA include excavation or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement. Notification is required prior to any such activities, and CDFW will issue an SAA with any necessary mitigation to ensure protection of the state's fish and wildlife resources.

FGC Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code. FGC Section 3503.5 protects all birds-of-prey (raptors) and their eggs and nests. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that elements of the proposed Project (particularly tree removal or construction near nest trees) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or USFWS.

Porter-Cologne Water Quality Control Act of 1970

The Porter-Cologne Water Quality Control Act of 1970 grants the State Water Resource Control Board (SWRCB) and its regional offices power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under Section 401 of the CWA. The Porter-Cologne Act grants the SWRCB authority and responsibility to adopt plans and policies, regulate discharges to surface and groundwater, regulate waste disposal sites, and require cleanup of discharges of hazardous materials and other pollutants. Typically, the SWRCB and RWQCB act in concert with USACE under Section 401 of the CWA in relation to permitting fill of federally jurisdictional waters.

3.4.2.3 City of Yucaipa

City of Yucaipa General Plan

The Open Space and Conservation Element provide the following biological resources-related policies:

Goal OS-2: Manage scarce natural resources for preservation. Scarce resources include sensitive biological resources, cultural resources, air quality, groundwater supply and quality and open space.

Policy G. Protect and maintain City open space resources of unique character and value where protection cannot be achieved through other agencies.

1. Inventory and identify specific areas of unique character and/or resources.

2. Cooperate with the Crafton Hills Open Space Conservancy, the Yucaipa Conservancy, and the Wildlands Conservancy in efforts to preserve and protect areas of unique character and/or resources.

Goal OS-5: Preserve rare and endangered species, and protect areas of special habitat value.

Policy A. Because all rare, endangered and threatened species' habitats require management for preservation, the following actions shall be taken:

1. All proposed Land Use Map changes and discretionary land use proposals for areas identified on the Biological Resources Map (Exhibit XH-2) shall be accompanied by a report that identifies all biotic resources located on the site and those on adjacent parcels which could be adversely affected by the proposal. The report shall outline mitigation measures designed to eliminate or reduce impacts to protected resources and shall be prepared by an appropriate expert such as a qualified biologist, botanist, herpetologist or other professional 'life scientist'. The mitigation plan shall be prepared following guidelines outlined on pages 58959 of the General Plan's Final Environmental Impact Report.

2. The conditions of approval for any land use application shall incorporate the identified mitigation measures to protect and preserve the habitats of the protected species.

3. The following management policies shall be applied to all proposed Land Use Map changes and discretionary land use proposals within areas included on the Biological Resources Map as recommended in the required Biological Resources Report.

    a. Provide for mitigation measures that would reduce impacts to populations, where feasible.

    b. Provide for mitigation measures that would reduce impacts to habitat areas due to encroachment of incompatible land uses or fragmentation of habitat areas, where feasible.

    c. Provide for mitigation measures that enhance populations, where feasible.

    d. Provide for mitigation measures that enhance habitat areas, such as buffer areas, where feasible.

Policy B. Because listed species and their habitats may exist throughout the City, in addition to those shown on the Biological Resources Map, all of the provisions of Policy A may be applied anywhere in the City, as determined by the Planning Director.

Policy C. Because species occurrences may be adversely affected by land use approvals, the provisions of Policy A may be applied in areas supporting these species if it can be shown that the species is 'threatened' as that term is used in the Federal Endangered Species Act.

Goal OS-6: Conserve existing populations of native plant and wildlife species by preserving adequate habitat wherever appropriate.

Policy A. Require the utilization of 'soft bottom' channels wherever feasible.

Policy B. Require open space dedications as mandated by the Hillside/Ridgeline Preservation Ordinance.

Policy C. Encourage the transfer of development rights through the Planned Development application process.

Policy D. Establish and implement a Heritage Tree Preservation Ordinance and require the preservation of oak trees as mandated by the Oak Tree Preservation Ordinance.

Policy E. Cooperate with other agencies and the Crafton Hills Open Space Conservancy, the Yucaipa Conservancy, and the Wildlands Conservancy in the establishment of wildlife corridors and the preservation of open space.

Goal OS-7: Establish an effective environmental mitigation monitoring process.

Policy A. Because the preservation and conservation of biological resources depends upon mitigation measures adopted as conditions of approval, monitoring programs shall be established as follows:

1. All discretionary approvals requiring mitigation measures for impacts to biological resources shall include the condition that the mitigation measures be monitored and modified if necessary, unless a finding is made that such monitoring is not feasible.

2. The monitoring program shall be designed specifically for the potential impacts identified in the Biological Resources Report.

3. The monitoring program shall be designed to determine if the mitigation measures were implemented and if they were effective.

4. The monitoring program shall be funded by the project applicant to ensure compliance with and effectiveness of the conditions of approval.

City of Yucaipa Municipal Code

City of Yucaipa Development Code, Division 9 Plant Protection and Management, Chapter 5 Oak Tree Conservation, establishes the policy of the City to require the conservation of all healthy oak trees unless reasonable and conforming use of the property justifies the removal,

cutting, pruning, and/or encroachment into the protected zone of an oak tree. As stated in the Development Code, the conservation program outlined in Chapter 5, Oak Tree Conservation, contributes to the welfare and aesthetics of Yucaipa, and retains the great historical and environmental value of these trees.

Section 89.0510 of the Development Code further outlines the policy by indicating, "any person who owns, controls, has custody or possession of any real property within the City that is improved or has been approved for development, or which is part of or associated with the City approved development of another piece of property, such as any parcel to be maintained as permanent open space or for recreational purposes, shall maintain all oak tree(s) located thereon in a state of good health pursuant to the Oak Tree Conservation and Protection Guidelines adopted by City Council resolution. Failure to do so will constitute a violation of this article."

Sections 89.0515 and 89.0520 of the Development Code describe the process for obtaining an oak tree permit when appropriate circumstances apply. The Code states that, "No person shall cut, remove, encroach into the protected zone, or relocate any oak tree on any public or private property within the City unless a valid oak tree permit has been issued by the City pursuant to the provisions of this chapter and the Oak Tree Conservation and Protection Guidelines."

3.4.3 Thresholds of Significance

The City utilizes the NOP and CEQA Guidelines Appendix G to establish thresholds of significance for biological resources and identify potentially significant impacts on such resources. For purposes of this analysis, an impact on biological resources is considered significant if it would:

- 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 CDFW or USFWS; or
- 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 CDFW or USFWS; or
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; or
- 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 a wildlife nursery site; or
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted HCP; Natural Community Conservation Plan (NCCP); or other approved local, regional, or state habitat conservation plan.

3.4.4 Impacts

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

The Biological Resources Assessment reports prepared for the Project (ECORP, November 2012 and July 2015) identified the presence of a white-tailed kite, a CDFW fully protected species, on the project site. Habitat suitable for the burrowing owl was also observed. Although no burrowing owls were observed during field surveys, there was documented presence of potential burrows and available foraging habitat and the Project is within the migratory route of this species. A less than significant impact will occur with the implementation of **Mitigation Measure BIO-1**, requiring vegetation clearing and grading activities to take place outside of the typical avian nesting season (February 15 through August 31) to the maximum extent practical, and the requirement for a pre-construction survey for burrowing owls prior to issuance of grading permits.

In addition, the report conducted surveys outside of the blooming period for most rare plant species that could occur on the property. A literature search was also conducted for special-status plant species on the site. Ninety-seven special-status plant species were identified from the database searches. Plummer's mariposa lily (*Calochortus plummerae*) and Parry's spineflower (*Chorizanthe parryi* var. *parryi*) were found to have a high potential to occur. A less than significant impact will occur with the implementation of **Mitigation Measure BIO-2**, requiring further field surveys for these species prior to final map recordation and prior to construction of common areas and streets, or of individual lots.

Will 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 CDFW or USFWS?

Two riparian habitats were identified on the Project property along Wilson Creek: mulefat thickets and sycamore woodland. Both plant communities are considered riparian habitat types and are subject to regulatory authority of CDFW, under its Lake and Streambed Alteration Program.

A less than significant impact will occur with the implementation of **Mitigation Measure BIO-1**, requiring further field surveys prior to any site grading activities associated with the Project, and **Mitigation Measure BIO-3** requiring the delineation of the limits of grading and construction activities within the Project footprint with temporary staking, flagging, or similar materials by the property owner or Project contractor.

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

The Jurisdictional Delineation prepared for the Project indicates a total of 0.64 acres of potential waters of the U.S. were recorded on the property. This acreage represents a calculated estimation of the jurisdictional area within the Project boundaries, and is subject to modification following

the USACE verification process. A total of 1.202 acres of CDFW habitat area were recorded on the property, and this finding needs to be verified by CDFW.

The placement of fill materials within any of these jurisdictional features as a result of Project implementation would require permitting pursuant to Section 404 and 401 of the federal CWA. CDFW jurisdiction completely overlaps the USACE jurisdiction. Areas considered jurisdictional waters of the U.S. are subject to permitting and authorization through USACE, which authorizes impacts under Section 404 of the federal CWA and the SWRCB, where such impacts can have an effect on water quality. CDFW authorizes impacts to waters of the state, including lakes and streambeds, under state codes (Section 1600). Wilson Creek runs through several of the lots within the proposed Project and is potentially impacted by jurisdictional area. A less than significant impact will occur with the implementation of **Mitigation Measure BIO-4**, requiring the property owner or Project contractor of these lots to obtain necessary CWA permits from USACE and CDFW prior to the issuance of a grading permit.

Will 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 wildlife nursery site?

The revised Biological Report prepared for the Project (ECORP, July 2015) indicates the majority of the project site supports a continuous area of undeveloped land and supports free wildlife movement. Native habitats within Wilson Creek are also currently connected to large tracts of open land with active development entitlements that currently surround the site on the north and east. El Dorado Ranch Park is also located to the east of the Project site. Wilson Creek crosses the property and continues to the west through a narrow band surrounded by the more developed portions of Yucaipa. The creek alignment and undeveloped land associated with it narrows farther west of the property. Due to the ever-narrowing width of this corridor through Yucaipa, and its termination in a developed area, it is not considered an effective wildlife corridor. Although wildlife originating from the Wilson Creek Estates property can continue to the west, there is no direct connection through to the other side of the developed portions of Yucaipa.

The County of San Bernardino General Plan Open Space Element (Open Space Overlay Map) identifies the Live Oak Canyon Wildlife Corridor is located approximately three miles west of the project site, west of Yucaipa Regional Park. There is a "Wildlife Corridor" sign along Cherry Croft Drive near its intersection with Oak Glen Road. This sign was installed by the Yucaipa Animal Placement Society (YAPS) as a way to help the community coexist with wildlife.

Four sensitive species, Cooper's hawk (*Accipiter cooperii*), northern harrier (*Circus cyaneus*), white-tailed kite (*Elatus leonurus*), and prairie falcon (*Falco mexicanus*), were observed during the November 2012 Biological Resources Assessment. During the 2015 survey, white-tailed kite and Cooper's hawk were again observed. During the oak tree survey conducted by AECOM in January 2016, northern harrier and two white-tailed kites were also observed using the habitat within the Project. A less than significant impact will occur with the implementation of **Mitigation Measure BIO-5**, requiring nesting surveys to be conducted within 72 hours of construction and preemptive vegetation removal outside of the raptor breeding season of January 1 through July 15.

Will the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Oak woodland was found along drainages and around otherwise disturbed and developed sites on the Project property. Impacts to oak trees that occur would be subject to Division 9, Chapter 5 of the Municipal Code (Oak Tree Conservation). Removal or encroachment would require a permit and would be subject to the conditions identified under Section 89.0525. Conformance with this ordinance would result in less than significant impacts.

The Project is anticipated to be built in phases, with the project proponent responsible for construction of paved streets and infrastructure (water and sewer lines, utilities, fire access), and subsequent residential units would be constructed as lots are sold and developed by individual property owners. Under this scenario, implementation of the Oak Tree Conservation Ordinance is being further supplemented by **Mitigation Measure BIO-6,** which specifies the responsibility and timing associated with the issuance of oak tree removal permits, consistent with Municipal Code requirements, to allow for the proposed phased construction of the Project. With the implementation of **Mitigation Measure BIO-6**, the impact will be less than significant.

Will 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?

An HCP is a long-term agreement with USFWS designated to offset any harmful effects that a proposed activity might have on federally listed threatened and endangered species. The HCP allows development to proceed while providing a mechanism to conserve listed species and provide for incidental take. A "No Surprises" policy provides assurances to landowners participating in HCP efforts.

The Natural Communities Conservation Planning Program of CDFW is an unprecedented effort by the State of California and numerous private and public partners that takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. An NCCP identifies and provides for the regional or area-wide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity.

According to the 2004 General Plan, the City of Yucaipa is not a part of any HCP or NCCP. There would be no impact.

3.4.5 Mitigation Measures

The following mitigation measures are recommended as a means of avoiding and minimizing adverse impacts to biological resources that have the potential to occur within the Project footprint:

> **BIO-1:** The property owner or Project contractor will be responsible to schedule vegetation clearing and grading activities outside of the typical avian nesting season (February 15 through August 31) to the maximum extent practical in order to comply with the MBTA and relevant sections of the California FGC. If active nests are observed, a minimum buffer zone from occupied nests is recommended to the maximum extent practicable. Once nesting has

ended, the buffer may be removed. In addition, a pre-construction survey for burrowing owls shall be conducted by a City-approved, licensed biologist, no more than 30 days prior to commencement of grading, and submitted to and approved by the Planning Division prior to issuance of a grading permit. The survey shall be conducted according to the recommended guidelines of the California Burrowing Owl Consortium (1993) and in consultation with CDFW.

BIO-2: Due to their potential for occurrence on the site, additional surveys for Parry's spineflower and Plummer's mariposa lily shall be completed during the spring blooming period prior to final map recordation and prior to construction of common areas and streets, or of individual lots. The blooming period for Parry's spineflower is April through June, and Plummer's mariposa lily is May through July. Surveys during May would encompass both species; however, known reference populations should be visited to determine if April/May for Parry's spineflower would be better and another survey in June should occur to locate Plummer's mariposa lily. Should surveys indicate of the presence of these species, the project proponent shall contact CDFW to determine appropriate strategies, which may include in-lieu payment, avoidance, or replacement of plants.

BIO-3: During Project grading activities, the limits of grading and construction activities within the Project footprint should be clearly delineated with temporary staking, flagging, or similar materials by the property owner or Project contractor. Grading of the Project footprint should be minimized to the greatest extent feasible and access to it should be via preexisting/maintained access routes to the greatest extent possible.

BIO-4: Prior to the issuance of grading permits on those lots within the subdivision that contain jurisdictional features, including FEMA 100-year flood zone facilities, the property owner or Project contractor shall obtain the applicable CWA Section 401 and 404 permits from USACE and CDFW as required.

BIO-5: Prior to the issuance of grading permits, nesting surveys shall be conducted within 72 hours of construction. Preemptive vegetation removal outside of the raptor breeding season of January 1 through July 15 may occur, where feasible, to avoid take of the fully protected nesting white-tailed kite, state protected Cooper's hawk, and any additional protected nesting birds under the MBTA.

- To comply with Section 10 of the MBTA and relevant sections of the California FGC (e.g., Sections 3503, 3503.4, 3504, 3505, et seq.), any vegetation clearing within the Project footprint shall take place during September through December, outside of the raptor breeding season (January 1 through July 15) and outside of the typical avian nesting season (February 15 through September 15).

- In the event that vegetation clearing is necessary during the breeding season (i.e., February 1 through September 1), a qualified biologist shall conduct a preconstruction survey no more than 72 hours prior to construction to identify the locations of avian nests. Should occupied nests be found in construction areas, an appropriate buffer area of 200 feet, or 500 feet for raptors and listed species, shall be established around each nest site (typically). No construction shall take place

within this buffer until the nest is no longer active. In the event that construction must occur within the buffer, the biological monitor will take steps to ensure that construction activities are not disturbing or disrupting nesting activities. If the biological monitor determines that construction activities are disturbing or disrupting nesting activities, then the biologist shall have the authority, upon consultation and concurrence with CDFW, to halt construction in order to reduce the noise and/or disturbance to the nests, as appropriate.

BIO-6: Prior to the issuance of grading permits for infrastructure facilities (Project roadways) it will be the responsibility of the project proponent (master developer) to obtain the necessary permits for removal of protected oak trees as applicable. Subsequent oak tree removal permits outside of the public right-of-way will be the responsibility of the individual lot owners as applicable. Removal of oak trees will also be subject to nesting surveys prior to the issuance of permits, consistent with the requirements identified under Mitigation Measure BIO-5.

3.4.6 Significant Effects after Mitigation

Application of Mitigation Measures BIO-1 through BIO-6 would reduce Project impacts on biological resources to a less than significant level. The mitigation will ensure that impacts related to nesting aviary species are reduced to less than significant by limiting clearing and grading activities outside of the typical avian nesting season and utilizing an on-site biologist to conduct a pre-construction nesting-bird survey and active nest buffer zones no more than 30 days prior to ground disturbance as required. The requirement to conduct additional surveys will address impacts to sensitive species noted as having high potential for occurrence within the project site. Mitigation will also ensure that impacts to jurisdictional features will obtain the necessary permits and authorization to comply with CWA requirements. Additionally, impacted oak trees subject to the City's Oak Tree Conservation Ordinance and proposed for removal as a result of Project implementation will require the appropriate permits from the City prior to issuance of grading permits.

3.5 CULTURAL RESOURCES

Section 3.5 describes the historical, archaeological, and paleontological resources on the project site; identifies the potential impacts associated with Project implementation; proposes mitigation measures to lessen the impacts; and describes the extent of impacts on cultural resources after mitigation. The analysis is based on the Cultural Resources Inventory and Evaluation report prepared by ECORP Consulting, Inc. in November 2012 and updated in September 2015, which is included as Appendix E of this EIR.

3.5.1 Setting

The project area is located within a former agricultural property located at 36104 Oak Glen Road, which was formerly known as the Dunlap Ranch, the Atwood Ranch, and Casa Blanca Ranch. The project area consists of four privately owned parcels located north of Oak Glen Road and east of Jefferson Street. The Area of Potential Effects (APE) boundary includes all areas that could be subject to ground disturbance as a result of construction activity within the four parcels.

The project area is situated in the Yucaipa Valley, an alluvial plain bordered by the San Bernardino Mountains on the north, east, and south, and the Crafton Hills on the west. Elevations range from approximately 3,035 to 3,295 feet above msl. The project area descends gently from northeast to southwest, and consists of several wide, flat benches separated by deep, steep-sided ravines. The nearest natural water source is Wilson Creek, a seasonal drainage course that runs northeast to southwest across the northern half of the project area. Oak Glen Creek is located nearby, across Oak Glen Road to the south.

The soil in the area consists of alluvial silt, sand, and gravel, with numerous rounded granitic cobbles and boulders, and sparsely scattered bedrock outcroppings. Vegetation consists of dense chaparral in the ravines, with wide expanses of grain and hay crops on the flat benches. Ornamental trees, including deodar cedar, olive, cypress, pepper, palm, sycamore, and eucalyptus provide shade in the vicinity of the ranch buildings. An olive grove borders the north side of Oak Glen Road, and a small fruit orchard is located north of the main residence. Disturbances consist of the construction of post-historic buildings, grading for unpaved driveways and access roads, plowing and other agricultural activities, disking for weed abatement, trenching for irrigation pipelines, erosion, and bioturbation.

To identify existing cultural resources that would be affected by the proposed Project, a records search was conducted at the San Bernardino Archaeological Information Center (SBAIC), and archival research was done to establish the history of Casa Blanca Ranch. Following a review of the records search results, an intensive field survey was conducted.

A complex of residential and agricultural buildings and features within the property, dating from 1882 to the late 20th century, were documented as a single site (CB-001). The buildings and features were evaluated, and the main Casa Blanca residence was found to possess historic and architectural significance, as well as the integrity, necessary to be eligible for listing in both the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). The remaining buildings and features within the site were found to lack the significance and integrity necessary for CRHR listing. This EIR presents the methods and results of the records search, archival research, field survey, and historic evaluation that were conducted for the Project, along with management recommendations.

Results of the records search conducted at the SBAIC indicate that the project area has not been previously surveyed for cultural resources. Fifteen cultural resources investigations have taken place within the records search radius, at distances ranging from adjacent to the project area to 0.5 mile (800 meters) distant, between 1977 and 2009 (Table 3.5-1).

Table 3.5-1 Previous Investigations within 0.5 Mile of the Project Area

Author(s)	Report Title and Number	Year	Location Relative to Project Area
Yohe, Robert M.	Environmental Impact Evaluation: Archaeological Assessment of Tentative Tract 13484 near Yucaipa in San Bernardino County, California. (NADB-1061653)	1987	Block survey, adjacent to the north boundary of the project area
White, Robert S., and Laura S. White	Cultural Resources Assessment of the 317.59-Acre Cherry Croft Project Site, Southeast Corner of Carter Avenue and Jefferson Street, Yucaipa, San Bernardino County. (NADB-1064847)	2005	Block survey, adjacent to the north boundary of the project area
Mason, Roger D.	Cultural Resources Survey Report for Ridgecrest Ranch Tract 16785, Yucaipa, San Bernardino County, California. (NADB 1065677)	2007	Block survey, adjacent to the northwest corner of the project area
Hearn, Joseph E.	Archaeological-Historical Resources Assessment of Tentative Tract 10318, Yucaipa Area. (NADB 1060634)	1988	Block survey, adjacent to the southwest corner of the project area
Budinger, Fred E.	Verizon Site: Bryant. (NADB 1064226)	2005	Cellular communications facility survey, 0.1 mile (160 meters) west of the project area
Love, Bruce	YVWD R15.1 Reservoir Site. (NADB 1063615)	2003	Block survey, 0.12 mile (190 meters) west of the project area
Mason, Roger D.	Cultural Resource Record Search & Survey Report for a Pacific Bell Mobile Services Telecommunications Facility: CM 221-01, City of Yucaipa. (NADB 1063614)	1994	Cellular communications facility survey, 0.2 mile (320 meters) west of the project area
Brown, Joan C.	Cultural Resources Reconnaissance of a One Mile Road from the Birmingham Ranch to Oak Glen Road in San Bernardino County, California. (NADB 1062427)	1990	Linear survey, 0.22 mile (350 meters) east of the project area
Jenkins, Richard C.	Vegetation and Watershed Management: Archaeological Review, Wilson Creek VMP. (NADB 1061816)	1989	Block survey, 0.25 mile (400 meters) northeast of the project area
Goodman, John D., and Mark T. Swanson	Cultural Resources Survey of Tentative Tract 11226-El Dorado Ranch, 238 Acres Northeast of Yucaipa, San Bernardino County, California. (NADB 1061817)	1989	Block survey, 0.25 mile (400 meters) northeast of the project area
Velasquez, Steph	Archaeological Survey Report for the Oak Glen-Yucaipa Fuel Break, BDU-41, CRP#09-023, San Bernardino, California. (NADB 1066415)	2009	Block survey, 0.25 mile(400 meters) northeast of the project area
Hogan, Michael	Archaeological Monitoring of Earth-Moving Operations, Oak Glen Creek/Wilson II Basin Project, City of Yucaipa, San Bernardino County, California. (NADB 1066418)	2009	Block survey, 0.3 mile(480 meters) southwest of the project area
Hearn, Joseph E.	Historical-Archaeological Resources Assessment of Approximately 25 Acres, Yucaipa Area. (NADB 1060477)	1977	Block survey, 0.3 mile (480 meters) southwest of the project area
Lerch, Michael K.	Cultural Resources Assessment of the Fremont Street Pipeline, Yucaipa Valley Water District, San Bernardino County, California. (NADB 1062052)	1989	Linear survey, 0.4 mile (640 meters) west of the project area
Scientific Resource Surveys, Inc.	Cultural Resource Assessment of the San Gorgonio Pass Water Agency Water Importation Project, Riverside and San Bernardino Counties, California. (NADB 1062868)	1992	Block survey, 0.45 mile (720 meters) west of the project area

The records search results also indicate that no cultural resources have been previously documented within the project area; however, three cultural resources have been recorded inside the records search radius. The closest of these, a small, rock-and-cement-lined historic-period cistern (CA-SBR-10605H, P36-010605), was recorded in 2000, 0.1 miles (160 meters) west of the northwest corner of the project area. The feature was destroyed during grading of the area in 2000, and no longer exists (Dice 2000; Dice and Irish 2002).

Recommendations and conclusions in the report deduce that all sites identified are not considered historically significant and that the materials identified are not considered to contain additional information important in prehistory or history.

As part of the NOP process, the Native American Heritage Commission (NAHC) was contacted for input on the Project. No comments were received from the NAHC.

In compliance with Assembly Bill (AB) 52, which mandates consultation with California Native American tribes during the CEQA process, the City of Yucaipa contacted the following Native American tribes:

- San Manuel Band of Mission Indians
- Soboba Band of Luiseño Indians

Comments were received from the Soboba Band of Luiseño Indians, who formally deferred consultation for the Project to the San Manuel Band of Mission Indians.

3.5.2 Regulatory Framework

3.5.2.1 Federal

The Secretary of The Interior Standards for the Treatment of Historic Properties

These guidelines for preserving, rehabilitating, restoring, and reconstructing historic buildings may be applied to one historic resource type or a variety of historic resource types; for example, a project may include a complex of buildings such as a house, garage, and barn; the site, with a designed landscape, natural features, and archeological components; structures such as a system of roadways and paths or a bridge; and objects such as fountains and statuary. The standards are intended to promote responsible preservation practices that help protect our Nation's irreplaceable cultural resources. The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings are intended to provide guidance to historic building owners and building managers, preservation consultants, architects, contractors, and project reviewers prior to treatment.

3.5.2.2 State

Cultural resources include archaeological and historical objects, sites, and districts; historic buildings and structures; cultural landscapes; and sites and resources of concern to local Native Americans and other groups. The Project Technical Report is consistent with compliance procedures for cultural resources set forth in CEQA, Sections 15064.5 and 15126.4, and in the

case of federal involvement, Section 106 of the National Historic Preservation Act codified at 36 CFR 800.

Under the provisions and guidelines of CEQA Sections 15064.5 and 15126.4, before impacts or mitigation of impacts can be addressed, site significance must be determined. Consideration of significance is measured by provisions considered under CEQA Sections 15064.5 and 15126.4, as well as the draft criteria regarding resource eligibility to the CRHR. To determine site significance through application of CRHR criteria to sites that are approximately 50 years old or older, several levels of potential significance that reflect different (although not necessarily mutually exclusive) values must be considered. These criteria are set forth in Section 15064.5, and are defined as any resource that:

- Is associated with events that have made a significant contribution to the broad patterns of California's cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

Project impacts to non-unique archaeological resources and resources that do not meet any of the criteria set forth for listing in the CRHR are afforded no further consideration under CEQA. CEQA Section 15064.5 assigns special importance to human remains, and specifies procedures to be used when Native American remains are discovered.

Assembly Bill (AB) 52

AB 52 adds tribal cultural resources to the categories of cultural resources in CEQA, which had formerly been limited to historic, archaeological, and paleontological resources. "Tribal cultural resources" are defined as either (1) "sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe" that are included in the state register of historical resources or a local register of historical resources, or that are determined to be eligible for inclusion in the state register; or (2) resources determined by the lead agency, in its discretion, to be significant based on the criteria for listing in the state register.

Under AB 52, a project that may cause a substantial adverse change in the significance of a tribal cultural resource is defined as a project that may have a significant effect on the environment. Where a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact.

AB 52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. If the tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe. Consultation may include discussing the type of environmental review necessary, the significance of tribal cultural resources, the significance

of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe.

Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be considered to avoid significant impacts if there is no agreement on appropriate mitigation. Recommended measures include:

- Preservation in place;
- Protecting the cultural character and integrity of the resource;
- Protecting the traditional use of the resource;
- Protecting the confidentiality of the resource; and
- Permanent conservation easements with culturally appropriate management criteria.

3.5.2.3 City

City of Yucaipa General Plan Goals and Policies

The Open Space and Conservation Element provides the following cultural resources policies applicable to the Project:

Goal OS-11: Preserve and protect the City's historical, archaeological and cultural resources.

Policy A. Because portions of the City could have cultural resource sensitivity, the following measures are required for all new project proposals that are located in areas identified by the County Museum as having potential cultural resources:

1. A cultural resource field survey and evaluation prepared by a qualified professional shall be required with project submittal. The format of the report and standards for evaluation shall follow the 'Guidelines for Cultural Management Reports submitted to the San Bernardino County Office of Planning'.

2. Mitigation of impacts to important cultural resources shall follow the standards established in Appendix K of the CEQA Guidelines as amended to date.

Policy B. Because archaeological and historic resources occur in all environmental and topographic contexts, including many areas not mapped on the Cultural Resources Overlay of the Resource Overlay Maps, all land use applications in planning areas that involve disturbance of previously undisturbed ground shall be subject to a review of potential impacts to cultural resources as follows.

1. A preliminary cultural resource review shall be conducted by the Archaeological Information Center at the San Bernardino County Museum prior to application acceptance.

2. Should the preliminary review indicate the presence of known cultural resources or moderate to high sensitivity for the potential presence of cultural resources, a field survey and evaluation prepared by a qualified professional shall be required with project submittal. The format shall follow the 'Guidelines for Cultural Management Reports submitted to the San Bernardino County Office of Planning'.

3. Mitigation measures for impacts to important cultural resources shall follow the standards established in Appendix K of the CEQA Guidelines as amended to date.

Policy C. When such resources cannot feasibly be preserved in place, preserve the information they contain through implementation of appropriate data recovery programs in conjunction with the Yucaipa Valley Historical Society.

Policy D. Because the underlying purpose of both avoidance/preservation in place and data recover as forms of mitigation of impacts to cultural resources if the preservation of information and heritage values such resources contain, standards for reporting, curation and site avoidance shall be as follows.

1. Site record forms and reports of surveys, test excavations and data recovery programs shall be filed with the Archaeological Information Center at the San Bernardino County Museum and shall be reviewed and approved in consultation with that office. Preliminary reports verifying that all necessary archaeological and historical field work has been completed shall be required prior to project grading and/or building permits. Final reports shall be submitted and approved prior to project occupancy permits.

2. Any artifacts collected or recovered as a result of cultural resource investigations shall be catalogued per County Museum guidelines and adequately curated in an institution with appropriate staff and facilities for their scientific information potential to be preserved.

3. When avoidance or preservation of an archaeological site or historic structure is proposed as a form of mitigation, a program detailing how such long-term avoidance or preservation is assured shall be developed and approved prior to conditional approval.

Policy E. Because it is desirable for as much of the City as possible to be covered by mapped cultural resource overlays to aid both planners and the public in anticipating when field surveys and evaluation studies will be necessary, cultural resource overlays will be prepared for the entire City, including information already available through the County's efforts.

Goal OS-12: Ensure that the community objectives for cultural resources avoid or minimize potential conflicts with traditional Native American beliefs and concerns.

Policy A. Because contemporary Native Americans have expressed concern over the handling of the remains of their ancestors, particularly with respect to archaeological sites containing human burials or cremations, artifacts of ceremonial or spiritual significance and rock art, the following actions shall be taken when decisions are made regarding the disposition of archaeological sites that are the result of prehistoric or historic Native American cultural activity:

1. The Native American Heritage Commission and local reservation, museum and other concerned Native American leaders shall be notified in writing of any proposed evaluation or mitigation activities that involve excavation of Native American archaeological sites and their comments and concerns solicited.

2. The concerns of the Native American community shall be fully considered in the planning process.

Goal OS-13: Ensure that significant paleontologic resources exposed during grading are recovered and preserved for their scientific value.

Policy A. Because development activities that involve substantial grading in areas of known or potential paleontologic sensitivity have the potential to destroy significant fossil resource, such projects mapped on the Paleontologic Overlay shall be subject to the following standards:

1. In areas of potential but unknown sensitivity, field surveys prior to grading shall be required to establish the need for paleontologic monitoring.

2. Projects requiring grading plans that are located in areas of known fossil occurrences on the overlay or demonstrated in a field survey to have fossils present shall have all rough grading (cuts greater than three feet) monitored by trained paleontologic crews working under the direction of a qualified professional so that fossils exposed during grading can be recovered and preserved. Fossils include large and small vertebrate fossils, the latter recovered by screen washing of bulk samples.

3. All recovered specimens shall be prepared to the point of identification and adequately curated into retrievable collections of an institution with appropriate staff and facilities for their scientific information potential to be preserved.

4. A report of findings with an itemized accession inventory shall be prepared as evidence that monitoring has been successfully completed. A preliminary report shall be submitted and approved prior to the granting of building permits, and a final report shall be submitted and approved prior to granting of occupancy permits. The adequacy of paleontologic reports shall be determined in consultation with the Curator of Earth Science of the San Bernardino County Museum.

3.5.3 Thresholds of Significance

The City utilizes CEQA Guidelines Appendix G to identify potentially significant impacts on cultural resources. For purposes of this analysis, an impact of the Project is considered significant if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5; or
- Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5; or
- Directly or indirectly destroy a unique paleontological resource or site or unique geological feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

For potential impacts to historical resources to be considered significant, the resources in question must be listed in or determined to be eligible for listing in the CRHR, be included in a local register of historic resources, or be determined by the lead agency to be historical resources. The term "historical resource" may also apply to archaeological sites. However, for an archaeological site that does not meet the criteria of "historical resources," a determination must be made as to whether it qualifies as a "unique archaeological resource."

3.5.4 Impacts

Will the Project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

The cultural resources investigation prepared for the Project (ECORP, November 2012) identified that the main Casa Blanca residence located on the site possesses the historic and architectural significance, as well as the integrity, necessary to be eligible for listing in both the (NRHP and CRHR. The project proponent has excluded the main Casa Blanca residence from the proposed subdivision project and it will remain within a 4.13-acre parcel of land noted as "Not A Part" of the Project. The proposed Project includes the construction of new homes immediately adjacent to the Casa Blanca property, thereby altering the existing rural setting of the property by surrounding it with single-family homes and new infrastructure, including new streets and a public trail.

Because of its eligibility for listing in both the NRHP under criteria A through C and in the CRHR under criteria 1 through 3, any impacts to the main Casa Blanca residence from demolition, substantial alteration, or significant changes to the immediate setting of the house would be considered significant under Section 106 of the National Historic Preservation Act and CEQA. CEQA Guidelines Section 15126.4(b) states that mitigation measures should be taken to prevent or minimize any adverse effects to a historical resource that could result from a project. Above all, demolition or substantial alteration of the house would represent an impact that cannot be mitigated below a level of significance by any type of recordation.

Demolition, substantial alteration, and other potential impacts, such as damage caused by collisions from construction vehicles and equipment, must be avoided to not cause a significant

impact to this historical resource. In addition, security measures shall be implemented to prevent arson and further vandalism, including the installation of an alarm system, and a locked gate at the lower end of the driveway by Oak Glen Road. To preserve some measure of the Casa Blanca residence's integrity of setting, preservation of the landscaping and plantings in the area immediately surrounding the house is necessary. This includes the front yard and its border of deodar cedar and olive trees, the deodar cedar trees that line the driveway, the stone retaining wall with rings for tethering horses in the back yard of the house, and the olive trees on the steep hill slope south of the house. Keeping the olive trees on the hill slope would have the added effect of maintaining the historical visual barrier between Oak Glen Road and the house. Retaining the Casa Blanca house and its immediate surroundings will provide an aesthetic focal point for any new residential development, as well as an important link to the history of the region and its pioneers.

With the implementation of **Mitigation Measures CR-1 and CR-2**, impacts would be less than significant.

Will the Project cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Sec. 15064.5?

The cultural resources investigation prepared for the Project (ECORP, November 2012 and September 2015) concluded no prehistoric archaeological sites or isolated finds were identified within the project area as a result of the cultural resources records search and field survey. The archaeological sensitivity of the project area is believed low. The cultural resources report concludes that all sites identified are not considered historically significant as determined under CEQA Section 15064.5 and that materials identified are not considered to contain additional information important in prehistory or history. Although the cultural resources survey was conducted in as thorough a manner as possible, there is the possibility that previously unidentified archaeological and paleontological resources could be discovered during Project construction and impacts would be potentially significant. With the implementation of Mitigation Measure CR-3 as identified in Section 3.5.5, impacts would be less than significant.

In addition, consultation with Native American tribes, as provided by AB 52, had been requested and initiated for this Project. AB 52 is further described in Section 3.5.2.2. Such consultation shall be undertaken, consistent with the provisions of AB 52, and shall be concluded through either of the following actions:

- Execution of a Treatment and Disposition Agreement between the applicant and/or Developer and the appropriate tribe(s), or;
- Adoption of conditions of approval found acceptable to the tribe(s), which have been included into the project's Conditions of Approval and **Mitigation Measure CR-3 and CR-4**.

Will the Project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

The City's General Plan has identified that the project site is located in an area that exhibits "High" paleontological resource sensitivity. The records search and field survey conducted and

discussed in the Cultural Resources Report also support a conclusion that no unique paleontological resources or geological features exist on the project site. Furthermore, as discussed in Section 3.5.1 above, the six previously recorded cultural resources within the project area are not considered historically significant and materials identified are not considered to contain additional information important in prehistory or history.

Although the survey was conducted in as thorough a manner as possible, there is the possibility that previously unidentified archaeological and paleontological resources could be discovered during Project construction and impacts would be potentially significant. With the implementation of **Mitigation Measure CR-3**, impacts would be less than significant.

Will the Project disturb any human remains, including those interred outside of formal cemeteries?

Buried cultural resources that have not been previously identified could be encountered during the Project construction phase, and additional unknown subsurface features, such as prehistoric artifacts, historic-period privies and dumps, may be discovered during ground-disturbing activities. Based on survey results, the proposed Project would not disturb any known human remains, including those interred outside of formal cemeteries. Since no formal cemeteries are within the Project area, a low likelihood exists that human remains could be uncovered during ground-disturbing activities. Similar to the findings provided through research and surveys conducted for cultural and paleontological resources, there is the possibility that unidentified human remains could be discovered during Project construction and impacts would be potentially significant. With the implementation of **Mitigation Measure CR-4**, impacts would be less than significant.

3.5.5 Mitigation Measures

CR-1: Prior to recordation of the final map, the following security measures shall be implemented by the project proponent to the existing Casa Blanca residence to prevent arson and further vandalism:

- Installation of an alarm system to the main residence.
- Installation of a locked gate at the lower end of the driveway by Oak Glen Road.

CR-2: Prior to the issuance of building permits to restore the Casa Blanca residence, a landscaping plan shall be submitted to the City for review and approval. The landscaping plan shall show how the landscaping and plantings in the area immediately surrounding the house shall be preserved for the Casa Blanca residence's integrity of setting. Keeping the olive trees on the hill slope would have the added effect of maintaining the historical visual barrier between Oak Glen Road and the house. Retaining the Casa Blanca house and its immediate surroundings would provide an aesthetic focal point for any new residential development, as well as an important link to the history of the region and its pioneers. Additionally, restoration would be done in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995). The Standards are described in Section 3.5.2.1.

CR-3: Although the cultural resources survey was conducted in as thorough a manner as possible, there is the possibility that previously unidentified archaeological and paleontological resources could be discovered during Project construction. Prior to the issuance of grading permits, the project proponent or contractor will be responsible to retain the services of a qualified archaeologist and/or paleontologist who shall monitor grading activities during Project construction. In the event that any prehistoric or historic-period cultural resources (chipped or ground stone lithics, animal bone, ashy midden soil, structural remains, historic glass or ceramics, etc.) are discovered during the course of construction when a monitor is not present, the Project contractor will be responsible to cease all work in the vicinity and wait until the archaeologist and/or paleontologist has evaluated the significance of the find and has removed the resource as required by law.

CR-4: If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made necessary findings as to origin and disposition of the remains pursuant to PRC Section 5097.98. The following actions must be taken by the project proponent or contractor in the event that human remains are discovered on private or state land:

- Stop work immediately and contact the County Coroner. The County Coroner must be notified immediately of the find.
- The Coroner has two working days to examine human remains after being notified by the responsible person. If the remains are determined to be prehistoric or Native American, the coroner will notify the NAHC within 24 hours.
- The NAHC will immediately notify the person it believes to be the most likely descendent (MLD) of the deceased Native American. With the permission of the landowner or agency, or an authorized representative, the MLD may inspect the site of the discovery.
- The MLD makes recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods.
- If the NAHC is unable to identify a descendent, the descendent identified fails to make a recommendation, or the landowner rejects the recommendations of the descendent and the mediation provided for in subdivision (k) of Section 5097.94 fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with the Native American burial(s) with appropriate dignity on the property in a location not subject to further subsurface disturbance.

Applicable requirements of AB52 tribal consultation would occur when implementing CR3 and CR4.

3.5.6 Significant Effects after Mitigation

With application of Mitigation Measures CR-1 through CR-4 as proposed, the Project would have a less than significant effect on paleontological, archaeological, or historic resources. The mitigation will ensure that impacts related to cultural resources are reduced to a less than

significant impact by retaining the services of a qualified archaeologist and/or paleontologist to be available to monitor grading activities during Project construction. Additionally, specific actions have been identified that must be taken by the property owner or Project contractor in the event that human remains are found during construction that are determined to be prehistoric or Native American.

3.6 GEOLOGY/SOILS

Section 3.6 provides a summary of the findings and conclusions of the 2012 Geotechnical/Geologic Feasibility Study prepared by Petra Geotechnical, Inc. The Geotechnical Study is included as Appendix F of this EIR.

3.6.1 Setting

The site is situated within the San Gabriel Mountains Block (upper plate of the San Vincent thrust), within the northern part of the Peninsular Ranges geomorphic province. The San Gabriel Mountains Block is underlain by granitic and metamorphic crystalline rock Cretaceous in age or older. The block is bounded on the east-northeast by the San Andreas Fault Zone and the San Bernardino Mountains, on the south-southwest by the Banning Fault, and on the north-northwest by the Vincent Thrust. In closer proximity, the subject site is located just east of an area of northeast-trending thrust faulting associated with the Vincent Thrust and the Crafton Hills Fault Zone. The site lies less than half a mile north of the Yucaipa Ridge, just under one mile southwest of the San Bernardino Mountains, and approximately two miles east of the Crafton Hills.

The site is on the southern portion of a narrow alluvial valley located between the San Bernardino Mountains and Yucaipa Ridge emanating from Potato Canyon to the east. These Quaternary alluvial deposits extend southwest in to the Yucaipa basin from the flanks of the San Bernardino Mountains, Yucaipa Ridge, and Crafton Hills. The active alluvial drainage, Wilson Creek, intersects at the northeast corner of the property and exists at the west-central portion of the site. Oak Glen Creek generally flows westward just south of the project site.

The site does not lie within the boundaries of an Earthquake Fault Zone as defined by the State of California Alquist-Priolo Earthquake Fault Zoning Act. The closest Alquist-Priolo zoned active faults to the site include the South Branch of the San Andreas Fault Zone – San Bernardino Mountain Section, approximately 0.5 miles to the north, and the Crafton Hills Fault Zone – Western Hills Fault, less than two miles to the west/northwest.

3.6.2 Regulatory Framework

3.6.2.1 State

State Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Special Studies Zones Act was signed into law in 1972 (in 1994, it was renamed the Alquist-Priolo Earthquake Fault Zoning Act). The primary purpose of the Act is to mitigate the hazard of fault rupture by prohibiting the location of structures for human occupancy across the trace of an active fault (Hart and Bryant 1999). The Act requires the State Geologist to delineate "Earthquake Fault Zones" along faults that are "sufficiently active" and "well defined."

The boundary of an "Earthquake Fault Zone" is generally about 500 feet from major active faults, and 200 to 300 feet from well-defined minor faults.

Alquist-Priolo maps are distributed to all affected cities and counties 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. State law exempts single-family wood-frame and steel-frame dwellings that are less than three stories and are not part of a development of four units or more. However, local agencies can be more restrictive than state law requires.

Seismic Hazards Mapping Act

In 1990, California passed the Seismic Hazards Mapping Act (SHMA), which addresses non-surface fault rupture earthquake hazards, including strong ground shaking, liquefaction, and seismically induced landslides. The California Geological Survey (CGS) is the principal state agency charged with implementing the Act. Pursuant to the SHMA, the CGS is directed to provide local governments with seismic hazard zone maps that identify areas susceptible to liquefaction, earthquake-induced landslides, and other ground failures.

The goal of the SHMA is to minimize loss of life and property by identifying and mitigating seismic hazards. The seismic hazard zones delineated by the CGS are referred to as "zones of required investigation." Site-specific geological hazard investigations are required by the SHMA when construction projects fall within these areas. The CGS, pursuant to the 1990 SHMA, has been releasing seismic hazards maps since 1997; with emphasis on the large metropolitan areas of Los Angeles, Orange and Ventura Counties (funding for this program limits the geographic scope of this study to these three counties in Southern California).

Real Estate Disclosure Requirements

Since June 1, 1998, the Natural Hazards Disclosure Act has required 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. If a property is located in a Seismic Hazard Zone as shown on a map issued by the State Geologist, the seller or the seller's agent must disclose this fact to potential buyers.

The law specifies two ways in which this disclosure can be made. One is to use the Natural Hazards Disclosure Statement as provided in Section 1102.6c of the California Civil Code. The other way is to use the Local Option Real Estate Disclosure Statement as provided in Section 1102.6a of the California Civil Code. The Local Option Real Estate Disclosure Statement can be substituted for the Natural Hazards Disclosure Statement only if the Local Option Statement contains substantially the same information and substantially the same warning as the Natural Hazards Disclosure Statement.

The Alquist-Priolo Earthquake Fault Zoning Act and the Seismic Hazards Mapping Act also require that real estate agents, or sellers of real estate acting without an agent, disclose to prospective buyers that the property is located in an Earthquake Fault or Seismic Hazard Zone.

Uniform Building Codes/California Building Codes

California Health and Safety Code Sections authorize development of definitions of earthquake performance categories for earthquake ground motion. Based on these definitions, building codes are developed that are used throughout the state. The sensitivity of structures intended for uses such as habitation and emergency preparedness are held to the highest building code standards.

Unreinforced Masonry Law

Enacted in 1986, the Unreinforced Masonry Law (Section 8875 et seq. of the California Government Code) required all cities and counties in Seismic Zone 4 (zones near historically active faults, per the building code at the time) to identify potentially hazardous unreinforced masonry (URM) buildings in their jurisdictions, establish a URM loss reduction program, and report their progress to the state by 1990. The owners of such buildings were to be notified of the potential earthquake hazard these buildings pose.

Since 1997, California has required all jurisdictions to enforce the 1997 Uniform Code for Building Conservation (UCBC) Appendix Chapter 1 as the model building code, although local governments may adopt amendments to that code under certain circumstances (ICBC 2001; SSC 2006). The UCBC standards are meant to significantly reduce but not necessarily eliminate the risk to life from collapse of the structure. Prior to 1997, local governments could adopt other building standards that preceded the UCBC, and in fact, in many jurisdictions, retrofits were conducted in accordance with local ordinances that may only partially comply with the latest UCBC.

3.6.2.2 Local

City of Yucaipa General Plan Goals and Policies

The Safety Element provides the following seismic and geologic hazards policies applicable to the Project:

Goal S-1: Minimize the potential risks resulting from the exposure of City residents to man-made and natural hazards with the following priorities: loss of life or injury, damage to property, litigation, excessive maintenance and other social and economic costs.

Policy E. Because risks from geological hazards can be successfully mitigated through a combination of engineering, construction, land use and development standards, the City shall implement the following actions.

1. Require formation of geologic hazard abatement districts as authorized by Public Resources Code Section 26500 et seq. where existing or proposed development is threatened by such hazards and prevention, mitigation, abatement or control of a geologic hazard is deemed feasible.

2. Require sites to be developed and all structures designed in accordance with recommendations contained in any required geotechnical or geologic reports, through conditions, construction plans and field inspections.

3. Require that all recommended mitigation measures be clearly indicated and described on all grading and construction plans.

4. Require that clearances around structures and road widths in geologic hazard areas, as shown on the Hazard Overlay Map, meet the requirements found in Policy Y, Action 1 for this Goal, S-1.

5. Require all facilities to meet appropriate geologic hazard specifications as determined by the City Engineer for discretionary and ministerial authorizations.

Policy F. Because increased public awareness of geologic hazards can reduce the risk of those hazards, the City shall implement the following actions.

1. Develop a geologic educational program for use by schools, developers and the public at large, covering hazards, abatements, and emergency plans and procedures as part of the City's Emergency Preparedness Management Plan.

2. Make geotechnical data and mapping readily available to the public through the County-wide Geotechnical Information System coordinated by the County Geologist as described in Policy C for Goal S-2.

Policy G. Because the County is traversed by many major active faults resulting in a relatively high level of risk, the City shall implement the following actions.

1. Adopt all future upgrading of the seismic design section of the Uniform Building Code.

2. Require new structures and facilities to be designed and constructed to meet seismic safety and related design requirements of the most recent Uniform Building Code, or more stringent requirements if indicated by site investigations.

Policy H. Because of the potential for displacement along faults not classified as active, the City shall reserve the right to require site-specific geotechnical analysis and mitigation for development located contiguous to potentially active faults, if deemed necessary by the City Engineer.

Policy N. Because portions of the City have moderate landslide potential, posing measurable risk to life and property, and because once landslides are recognized many can be safely mitigated, the City shall implement the following actions.

1. Require that a stability analysis be required in Landslide Hazard areas designated 'Generally Susceptible' and 'Mostly Susceptible' on the Hazards Overlay Maps and where required by the Geologist.

2. Require site development and construction in compliance with soil and geologic investigation report recommendations.

3. Apply the Land Use Compatibility Chart for Landslides when reviewing all discretionary and ministerial actions.

4. Fund and prepare a land use plan that is in conformance with the Land Use Compatibility Chart for Landslides in designated high landslide hazard areas as they are identified.

5. Restrict avoidable alteration of the land which is likely to increase hazard within areas of demonstrated or potential landslide hazard, including concentrations of water through drainage or septic systems, removal of vegetative cover, steepening of slopes and undercutting the base of a slope.

6. Restrict grading to minimal amounts necessary to provide access and require grading permits to have an approved site plan which minimizes grading and conforms to the recommendations of any required geologic investigation.

7. Require development on hillsides to be sited in the least obtrusive fashion, thereby minimizing the extent of topographic alteration required.

8. Restrict development in areas of known landslides or landslide-prone deposits on steep slopes, except where engineering and geologic site investigations indicate such sites are stable or can be made stable by the application of appropriate mitigating measures. In such cases, it must be shown to the satisfaction of the City that the risk to persons, property and public liability can be reduced to an acceptable degree.

9. Require that foundation and earth work be supervised and certified by a geotechnical engineer and, where deemed necessary, an engineering geologist, in projects where evaluations indicate that state-of-the-art measures can correct instability.

Policy CC. Because erosion control is an important concern of the property owner and because many areas in the City are highly susceptible to erosion, the City shall implement the following actions.

1. Apply the provisions of the adopted Erosion and Sediment Control Ordinance City-wide.

2. Regulate grading, land clearance and grazing in susceptible areas to prevent erosion.

3. Establish an education program for homeowners, emphasizing land use for erosion control; coordinate this program with the Soil Conservation Service.

4. Restrict the use of off-road vehicles in areas susceptible to erosion.

3.6.3 Thresholds of Significance

The City utilizes CEQA Guidelines Appendix G to identify potentially significant impacts on geologic and soil resources. For purposes of this analysis, an impact of the Project is considered significant if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - rupture of a known earthquake fault,
  - strong seismic ground shaking,
  - seismic related ground failure,
  - landslides; or
- Result in substantial soil erosion or the loss of topsoil; or
- 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; or
- Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code, creating substantial risks to life or property; or
- 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.

3.6.4 Impacts

Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic related ground failure, or landslides?

The site does not lie within the boundaries of an Earthquake Fault Zone as defined by the State of California Alquist-Priolo Earthquake Fault Zoning Act. The closest Alquist-Priolo zoned active faults to the site include the South Branch of the San Andreas Fault Zone – San Bernardino Mountain Section, approximately 0.5 miles to the north, and the Crafton Hills Fault Zone – Western Hills Fault, less than two miles to the west-northwest. It is unknown as to when earthquake events will occur in relationship to the identified faults, but seismic ground shaking and ground rupture due to movement of the faults is a potential hazard in Yucaipa (Yucaipa 2004). The Project will be required to comply with the Yucaipa Municipal Code and the Building Code, which is designed to mitigate earthquake hazards.

In accordance with the Landslide Hazard Identification Act, USGS Division of Mines and Geology maintains Landslide Susceptibility Maps, including Landslide Hazards in the Yucaipa and Forest Falls Quadrangle (USGS 1990). USGS categorizes locations into Relative Landslide Susceptibility Areas one (1) through Ares four (4), with Area 1 being the least susceptible to

landslides, Area 2 being marginally susceptible, Area 3 being generally susceptible, and Area 4 being the most susceptible. The proposed Project area is located within Area 2 – Marginally Susceptible Area. USGD defines this area as:

- This area includes gentle to moderate slopes underlain by relatively competent material, such as mildly dissected, well consolidated old alluvial deposits. The stability of slopes within area 2 may change radically in response to future natural or artificial alteration of the adjacent terrain.

A less than significant impact is anticipated with compliance with standard conditions of approval and no mitigation measures are required as all new structures or expansions to existing structures must meet the latest Building Code standards.

Would the Project result in substantial soil erosion or the loss of topsoil?

The Geotechnical/Geologic Feasibility Study identified that soils within the project site are generally granular in nature, are occasionally oversteepened, and are subject to erosion. During and following site development, erosion control measures will be required. As stated in Section 3.6.2.2, Goal S-1, Policy CC of the Yucaipa General Plan states that the City would apply the provisions of the adopted Erosion and Sediment Control Ordinance City-wide, regulate grading, land clearance and grazing in susceptible areas to prevent erosion, establish an education program for homeowners, emphasizing land use for erosion control, and restrict the use of off-road vehicles in areas susceptible to erosion.

Development within the City is required to prepare an erosion control plan to minimize erosion during grading and construction, and such plan is required to be prepared in compliance with the RWQCB standards. In addition, the Project's excavation and grading activities will be required to be carried out pursuant to a National Pollutant Discharge Elimination System (NPDES) permit that requires adoption of an appropriate Storm Water Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) to reduce erosion from storm water runoff. The land developer would provide the SWPPP and compliance with a Water Quality Management Plan (WQMP) prior to construction. Additionally, individual parcel owners developing their own parcel would comply prior to obtaining building permits on their individual lots. These plans are a standard condition for projects over one (1) acre in size and are intended to minimize soil erosion and prevent the off-site discharge of pollutants. To control post-construction erosion and pollution discharge and manage those facilities, a WQMP shall be filed as part of the issuance of building permits and each recorded phased of the subdivision. The SWPPP and WQMP establish criteria for reducing sediment and water quality issues during construction and during the operational/residential living stage of the overall project and individual parcels. A less than significant impact is anticipated with compliance with standard conditions of approval and no mitigation measures are required.

Will 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?

Based upon the City's Geological Overlay Districts map, dated November 2010, the project site is not located within an area that is susceptible to liquefaction. The Geotechnical/Geologic Feasibility Study identified that no landslides have been mapped within or adjacent to the site; however, several of the steeper canyon slope areas have been mapped as having a moderate to high potential for developing small shallow landslides during periods of prolonged precipitation. Site reconnaissance shows evidence of slope creep, erosion and very shallow surficial failures along the flanks of the canyons. The study further indicates that, based on the predominant soils types encountered at the project site, the expansion potential is anticipated to be in the very low category.

Subsidence is the downward movement of the ground caused by specific underlying soil conditions. Certain soils, such as clay, are particularly vulnerable since they shrink or swell depending on their moisture content. Land subsidence can also be caused during liquefaction. Liquefaction can result in the settling and compacting of unconsolidated sediment in an event of a major earthquake. This can result in the lowering of the land surface. Liquefaction is a phenomenon whereby saturated granular (coarse-grained) materials lose their inherent shear strength due to increased pore water pressures, which may be induced by cyclic loading such as that caused by an earthquake. A low relative density of the granular materials, shallow groundwater, long duration and high acceleration of seismic shaking are some of the factors favorable to cause liquefaction. Groundwater at the site is noted to be between 40 to 67 feet below ground surface. Based on the deep groundwater level, the liquefaction susceptibility at this location is rated as low. Further, the project site is not identified as a location for potential liquefaction hazard by the State of California. As such, the site is not in an area where conditions indicate a potential for permanent ground displacements such that mitigation as defined in PRC Section 2693(c) would be required.

Surficial earth materials observed on-site and on published geologic maps indicate the area consists of man-made undocumented fill, active alluvial wash deposits, young alluvium and colluvium (middle to late Holocene), and older alluvium (middle to late Pleistocene). Based on review of San Bernardino County Geologic Hazard Overlays, the site does not lie within a zone that is susceptible to liquefaction. Based on review of prevalent soil types, the potential for liquefaction is considered very low due to the absence of a shallow groundwater table and an assumed relative high density of the coarse-grained alluvial soils underlying the site. As such, the potential impact of landslide, lateral spreading, subsidence, liquefaction, or collapse upon the project site will be less than significant and no mitigation measures are required.

Will the Project be located on expansive soil, as defined in section 1802.3.2 of the California Building Code, creating substantial risks to life or property?

Expansive soils are generally considered a threat because of the pressure that may be induced upon structures. Fine-grained soils, such as silts and clays, may contain variable amounts of expansive clay minerals. These minerals can undergo significant volumetric changes with changes in moisture content. The upward pressures induced by the swelling of expansive soils can have significant harmful effects upon structures and other surface improvements.

Section 1802.3.2 (Expansive soils) of the California Building Code (2010) describes expansive soil as meeting all four of the following provisions:

- Plasticity index (PI) of 15 or greater, determined in accordance with ASTM D 4318.
- More than 10 percent of the soil particles pass a No. 200 sieve (75 mm), determined in accordance with ASTM D 422.
- More than 10 percent of the soil particles are less than 5 micrometers in size, determined in accordance with ASTM D 422.
- Expansion index greater than 20, determined in accordance with ASTM D 4829.

Based on the predominant soils types encountered at the site, granular sand to silty sands with gravels, the expansion potential is anticipated to be very low. Therefore, the soils are not considered expansive and construction will not be impacted. As such, impacts due to expansive soils are less than significant and no mitigation measures are required.

Will 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 connected to an approved sewer system operated by YVWD. However, a potential exists for up to 10 percent of the Project to utilize septic systems for wastewater disposal due to the difficulty of providing sewer lines with adequate gradient to provide for their discharge along lower elevations of the site that are located on the eastern corner of the project site. Depending on the lot size, approval would occur through the Santa Ana RWQCB or the City of Yucaipa, provided an approved percolation rate is established.

YVWD would permit installation of septic systems utilizing the Santa Ana RWQCB's Septic Tank Offset Program that permits installation of septic systems provided an equivalent number are removed and connected to the sewer system. This program will ensure the Project does not adversely affect the region's groundwater quality. Further, the types of soils within the project area, as discussed above, consists of man-made undocumented fill, active alluvial wash deposits, young alluvium and colluvium (middle to late Holocene), and older alluvium (middle to late Pleistocene) and the potential for soils incapable of supporting the use of septic tanks is considered low. Therefore, the Project will not have an impact upon the soil in this respect.

3.6.5 Mitigation Measures

As discussed in the preceding section, implementation of the Project would not cause significant impacts on or to geologic and soil resources. As such, no mitigation is required.

3.7 GREENHOUSE GAS EMISSIONS

This section describes the proposed Project's impact related to greenhouse gas (GHG) emissions generated during construction and operation, as well as the proposed Project's consistency with applicable GHG emissions and climate change legislation. GHG emissions data, including modeling output worksheets, are included in Appendix C of this EIR. This section also evaluates the environmental effects related to GHG emissions associated with implementation of the proposed Project. The following analysis is based on the Air Quality Impact Study, prepared by AECOM. This report is included as Appendix C of this EIR.

3.7.1 Setting

Earth's global climate has continuously changed, as evidenced by extremes in global climate over the last 500,000 years. Global climate change refers to changes in climatological characteristics that occur across Earth as a whole, such as temperature, wind patterns, precipitation, and storms. Global temperatures are affected by naturally occurring GHGs. These gases allow sunlight into Earth's atmosphere, but inhibit radiative heat from escaping into outer space, thus altering Earth's energy balance by retaining that heat. This phenomenon is often referred to as the "greenhouse effect."

Climate change as it is currently used refers to the change in temperature in Earth's climate over time, whether due to natural variability or as a result of human activities. The climate system is interactive and dynamic, consisting of five major components: the atmosphere, the hydrosphere (ocean, rivers, and lakes), the cryosphere (sea ice, ice sheets, and glaciers), the land surface, and the biosphere (flora and fauna). The atmosphere is the most unstable and rapidly changing part of the system. It consists of 78.1 percent nitrogen (N_2), 20.9 percent oxygen (O_2), and 0.93 percent argon (Ar). These gases have only limited interaction with the incoming solar radiation and do not interact with infrared (long-wave) radiation emitted by Earth. However, a number of trace gases, such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone, absorb and emit infrared radiation (heat) and therefore have an effect on climate. These are GHGs, and while they comprise less than 0.1 percent of the total volume mixing ratio in dry air, they play an essential role in influencing climate (IPCC 2001).

The following are the principal GHG pollutants that contribute to climate change:

- Carbon Dioxide: CO_2 is a colorless, odorless gas at standard temperature. Atmospheric concentrations of CO_2 fluctuate slightly with the change of the seasons and are more predominant in the winter months. CO_2 enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and as a result of other chemical reactions.
- Methane: CH_4 is a colorless, odorless gas at standard temperature. It is the principal component of natural gas. CH_4 is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. CH_4 is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
- Nitrous Oxide: N_2O is a colorless nonflammable gas, with an odor and taste described as slightly sweet. N_2O is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, sewage treatment, and mobile and stationary combustion of fossil fuel. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests.

Fluorinated gases are synthetic, strong GHGs emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases include:

- Perfluorocarbons (PFCs) are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, along with hydrofluorocarbons (HFCs), to ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are also used in manufacturing. Sulfur hexafluoride (SF_6) is a colorless gas soluble in alcohol and ether, and slightly soluble in water. SF_6 is a strong GHG used primarily as an insulator in electrical transmission and distribution systems.
- HFCs contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing.

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO_2. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time (i.e., lifetime) that the gas remains in the atmosphere ("atmospheric lifetime"). The reference gas for GWP is CO_2; therefore, CO_2 has a GWP of 1. The other main GHGs attributed to human activity include CH_4, which has a GWP of 28, and N_2O, which has a GWP of 265 (IPCC 2013). For example, one ton of CH_4 has the same contribution to the greenhouse effect as approximately 28 tons of CO_2. GHGs with lower emissions rates than CO_2 may still contribute to climate change because they are more effective at absorbing outgoing infrared radiation than CO_2 (i.e., high GWP). The concept of carbon dioxide equivalents (CO_2e) is used to account for the different GWP potentials of GHGs to absorb infrared radiation.

Although the exact lifetime of any particular GHG molecule is dependent on multiple variables, it is understood by scientists who study atmospheric chemistry that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. GHG emissions related to human activities have been determined as "extremely likely" to be responsible (indicating 95 percent certainty) for intensifying the greenhouse effect and leading to a trend of unnatural warming of Earth's atmosphere and oceans, with corresponding effects on global circulation patterns and climate (CARB 2014).

Global climate change resulting from the GHG emissions is an emerging environmental concern being raised and discussed at the international, national, and statewide levels. At each level, agencies are considering strategies to control emissions of gases that contribute to global warming.

3.7.2 Regulatory Framework

3.7.2.1 Federal

On April 2, 2007, the U.S. Supreme Court held that EPA must consider regulation of motor vehicle GHG emissions. In Massachusetts v. Environmental Protection Agency et al., 12 states and cities (including California) along with several environmental organizations sued to require EPA to regulate GHGs as pollutants under the Clean Air Act (127 S. Ct. 1438 [2007]). The Supreme Court ruled that GHGs fit within the Clean Air Act's definition of a pollutant and that EPA had the authority to regulate GHGs.

Greenhouse Gas Findings under the Federal Clean Air Act

On December 7, 2009, EPA signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

Although these findings did not themselves impose any requirements on industries or other entities, this action was a prerequisite to finalizing EPA's Proposed Greenhouse Gas Emission Standards for Light-Duty Vehicles. On May 7, 2010, the final Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards were published in the Federal Register. The emissions standards will require model year 2016 vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, which is equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements.

On August 28, 2012, the U.S. Department of Transportation (USDOT) and EPA issued a joint Final Rulemaking requiring additional federal GHG and fuel economy standards for model years 2017 through 2025 passenger cars and light-duty trucks. The standards would require these vehicles to meet an estimated combined average emissions level of 163 grams of CO_2 per mile in model year 2025, which is equivalent to 54.5 miles per gallon if the improvements were made solely through fuel efficiency.

In addition to the standards for light-duty vehicles, USDOT and EPA adopted complementary standards to reduce GHG emissions and improve the fuel efficiency of heavy-duty trucks and buses on September 15, 2011. These standards together form a comprehensive heavy-duty national program for all on-road vehicles rated at a gross vehicle weight at or above 8,500 pounds for model years 2014 through 2018. The standards will phase in with increasing stringency in each model year from 2014 through 2018. The EPA standards adopted for 2018 will represent an average per-vehicle reduction in GHG emissions of 17 percent for diesel vehicles and 12 percent for gasoline vehicles (EPA 2011). The President has directed USDOT and EPA to develop and issue the next phase of heavy-duty vehicle fuel efficiency and GHG standards by March 2016.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, EPA released its final Greenhouse Gas Reporting Rule (Reporting Rule). The Reporting Rule is a response to the fiscal year 2008 Consolidated Appropriations Act (House of Representatives Bill 2764; Public Law 110-161), which required EPA to develop "…mandatory reporting of GHGs above appropriate thresholds in all sectors of the economy…." The Reporting Rule applies to most entities that emit 25,000 metric tons (MT) of CO_2e or more

per year. Since 2010, facility owners have been required to submit an annual GHG emissions report with detailed calculations of the facility's GHG emissions. The Reporting Rule also mandates compliance with recordkeeping and administrative requirements to enable EPA to verify annual GHG emissions reports.

Council on Environmental Quality Guidance

On December 18, 2014, the Council on Environmental Quality (CEQ) released revised draft guidance that supersedes the draft GHG and climate change guidance released by CEQ in February 2010. The revised draft guidance applies to all proposed federal agency actions, including land and resource management actions. This guidance explains that agencies should consider both the potential effects of a proposed action on climate change, as indicated by its estimated GHG emissions, and the implications of climate change for the environmental effects of a proposed action (CEQ 2014). The guidance encourages agencies to draw from their experience and expertise to determine the appropriate level (broad, programmatic or project- or site-specific) and type (quantitative or qualitative) of analysis required to comply with the National Environmental Policy Act. The guidance recommends that agencies consider 25,000 MT CO_2e on an annual basis as a reference point below which a quantitative analysis of GHG emissions is not recommended unless it is easily accomplished based on available tools and data (CEQ 2014).

3.7.2.2 State

The legal framework for GHG emission reductions has come about through executive orders, legislation, and regulations. The major components of California's climate change initiative are reviewed below.

Assembly Bill 1493

AB 1493 required that CARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state." To meet the requirements of AB 1493, in 2004 CARB approved amendments to the California Code of Regulations (CCR) adding GHG emissions standards to California's existing standards for motor vehicle emissions.

Executive Order S-3-05

Executive Order S-3-05, signed in June 2005, proclaimed that California is vulnerable to the impacts of climate change. Executive Order S-3-05 declared that increased temperatures could reduce the Sierra Nevada's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the executive order established total GHG emissions targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

Assembly Bill 32

In 2006, California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.). AB 32 further details and puts into law the mid-term GHG reduction target established in Executive Order S-3-05:

reduce GHG emissions to 1990 levels by 2020. AB 32 also identifies CARB as the state agency responsible for the design and implementation of emissions limits, regulations, and other measures to meet the target.

In December 2008, CARB adopted its Climate Change Scoping Plan (Scoping Plan), which contains the main strategies California will implement to achieve the GHG reductions required by AB 32 (CARB 2008). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of California's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles;
- Low Carbon Fuel Standard;
- Energy efficiency measures in buildings and appliances; and
- Renewable portfolio standard for electricity production.

The Scoping Plan states that land use planning and urban growth decisions will play an important role in the state's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed.

CARB is required to update the Scoping Plan at least once every five years to evaluate progress and develop future inventories that may guide this process. CARB approved the *First Update to the Climate Change Scoping Plan: Building on the Framework* in May 22, 2014. The Scoping Plan update includes a status of the 2008 Scoping Plan measures and other state, federal, and local efforts to reduce GHG emissions in California and potential actions to further reduce GHG emissions by 2020 (CARB 2014).

Executive Order S-1-07

Executive Order S-1-07, which was signed by then California Governor Arnold Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, at more than 40 percent of statewide emissions. Executive Order S-1-07 establishes a goal that the carbon intensity of transportation fuels sold in California should be reduced by a minimum of 10 percent by 2020. This order also directed CARB to determine if this low-carbon fuel standard (LCFS) could be adopted as a discrete early action measure after meeting the mandates in AB 32. CARB adopted the LCFS on April 23, 2009.

Senate Bill 97

Senate Bill (SB) 97 required the Governor's Office of Planning and Research to develop recommended amendments to the CEQA Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

Senate Bill 375

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or an Alternative

Planning Strategy (APS), which will prescribe land use allocation in that MPO's RTP. On September 23, 2010, CARB adopted regional GHG targets for passenger vehicles and light trucks for 2020 and 2035 for the 18 MPOs in California. If MPOs do not meet the GHG reduction targets, transportation projects would not be eligible for funding programmed after January 1, 2012.

This bill also extends the minimum time period for the Regional Housing Needs Allocation cycle from five years to eight years for local governments located within an MPO that meet certain requirements. City or county land use policies (including general plans) are not required to be consistent with the RTP (and associated SCS or APS). However, new provisions of CEQA would incentivize qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

Senate Bills 1078, 107, and X1-2

SB 1078 established California's Renewable Portfolio Standard in 2002. SB 1078 required retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 changed the target date to 2010. Executive Order S-14-08 expanded California's Renewable Energy Standard to 33 percent renewable power by 2020. This new goal was codified in 2011 with the passage of SB X1-2.

Executive Order B-30-15

In April 2015, Governor Edmund Brown issued an executive order establishing a statewide GHG reduction goal of 40 percent below 1990 levels by 2030. The emission reduction target acts as an interim goal between the AB 32 goal (i.e., achieve 1990 emission levels by 2020) and Governor Brown's Executive Order S-03-05 goal of reducing statewide emissions 80 percent below 1990 levels by 2050. In addition, the executive order aligns California's 2030 GHG reduction goal with the European Union's reduction target (i.e., 40 percent below 1990 levels by 2030) adopted in October 2014.

3.7.2.3 Local

In September 2015, the City of Yucaipa adopted a Climate Action Plan (CAP) that includes GHG emission inventories, identifies the effectiveness of California initiatives to reduce GHG emissions, and identifies local measures to reduce GHG emissions. The City has selected a goal to reduce community-wide GHG emissions by 15 percent below 2008 baseline levels by the year 2020. The City's target is consistent with AB 32 and ensures that the City is providing GHG reductions locally that will complement the state and international efforts of stabilizing climate change. The City will meet this goal through a combination of state and local measures that address emissions related to building energy, on-road and off-road transportation, wastewater, water conveyance, and solid waste.

3.7.3 Thresholds of Significance

The City utilizes CEQA Guidelines Appendix G to identify potentially significant impacts related to GHG emissions. For purposes of this analysis, an impact of the Project is considered significant if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

The CEQA Guidelines require lead agencies to adopt GHG thresholds of significance. When adopting these thresholds, the amended Guideline allows lead agencies to consider thresholds of significance adopted or recommended by other public agencies, or recommended by experts, provided that the thresholds are supported by substantial evidence, and/or to develop their own significance threshold.

The SCAQMD GHG CEQA Significance Threshold Stakeholder Working Group recommended options for evaluating nonindustrial projects, including thresholds for residential, commercial, and mixed-use projects (SCAQMD 2009). The draft thresholds released by SCAQMD include a threshold of 3,000 MT CO_2e per year for residential projects. At the time of this analysis, these draft thresholds have not been adopted by SCAQMD. The City of Yucaipa has adopted the same threshold for GHG emissions in the CAP. Since the proposed Project would include only residential land uses, the proposed SCAQMD and City of Yucaipa threshold of 3,000 MT CO_2e per year will be used for this analysis.

3.7.4 Impacts

Will the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction

Construction activities would generate a total of approximately 622 MT CO_2e. SCAQMD's methodology involves amortizing construction emissions over the life of the Project, which is assumed 30 years. The amortized annual GHG emissions would be 21 MT CO_2e per year. As mentioned earlier, SCAQMD recommends that construction-related GHG emissions be amortized and compared to the thresholds of significance along with operational GHG emissions.

Operation

GHG emissions generated during the operational phase of the Project would include emissions from mobile, energy consumption, water consumption, waste disposal, and area sources. For the operational phase of the Project, the Project's GHG emissions are separated into emission sources for the applicable GHG emissions sectors. Mobile source emissions make up the largest proportion of emissions associated with a project. The second largest source of emissions is from energy consumption.

As shown in Table 3.7-1, the net increase in emissions would be 3,580 MT CO_2e per year. The analysis conservatively omits emission benefits of future emission reductions associated with improved vehicle standards, the Renewable Portfolio Standards, and Title 24 building code standards. The Project-related GHG emissions, including amortized construction and annual operational GHG emissions would exceed the SCAQMD and City of Yucaipa threshold of 3,000

MT CO_2e per year. Therefore, the Project would generate GHG emissions that may have a significant impact on the environment. This impact would be potentially significant. With the implementation of Mitigation Measure GHG-1, impacts would be less than significant.

Table 3.7-1 Annual Operational Phase GHG Emissions

Source	GHG Emissions MT CO_2e/Year
Amortized Construction	21
Area	62
Energy	740
Mobile	2,576
Waste	98
Water	84
Total All Project Sources	3,580
SCAQMD Significance Threshold	3,000
Exceeds Threshold?	Yes

Notes: MT = metric ton
Source: Modeled by AECOM in 2016

Will the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

In accordance with AB 32, CARB developed the Scoping Plan to outline the state's strategy to achieve 1990 level emissions by year 2020. The following emission reduction measures were identified in the Scoping Plan that are relevant to the Project to reduce GHG emissions.

1. **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.

2. **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).

3. **Renewables Portfolio Standard** – Achieve 33 percent renewable energy mix statewide.

4. **Low Carbon Fuel Standard** – Develop and adopt the Low Carbon Fuel Standard. Reduce the carbon intensity of California's transportation fuels by at least ten percent by 2020.

5. **Regional Transportation-Related Greenhouse Gas Targets** – Develop regional greenhouse gas emissions reduction targets for passenger vehicles.

6. **Vehicle Efficiency Measures** – Implement light-duty vehicle efficiency measures.

7. **Million Solar Roofs Program** – Install 3,000 MW of solar-electric capacity under California's existing solar programs.

8. **Green Building Strategy** – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.

9. **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.

10. **Water** – Continue efficiency programs and use cleaner energy sources to move and treat water.

The Scoping Plan did not directly create any regulatory requirements for construction and operation of the Project. However, measures included in the Scoping Plan would indirectly address GHG emissions levels associated with construction activities, including the phasing-in of cleaner technology for diesel engine fleets (including construction equipment) and the development of an LCFS. The Project would comply with any mandate or standards set forth by the Scoping Plan update.

The City's Development Review Process provides strategies for reducing community-wide emissions associated with new development and utilizes Screening Tables to mitigate Project GHG emissions that exceed the threshold level of 3,000 MT CO_2e per year. As shown in Table 3.7-1, the average annual emissions for the Project would exceed the threshold of significance. Therefore, consistency with the CAP would be based on whether the Project implements the measures in the Screening Tables. The point values in the CAP Screening Tables correspond to the minimum emissions reduction expected from each feature of a project. The menu of features allows maximum flexibility and options for how development projects can implement the GHG reduction measures.

As stated in the CAP, those projects that garner a total of 100 points or greater would have a less than significant individual and cumulative impact for GHG emissions. The CAP includes screening tables for implementation of GHG reduction measures. Residential development could include measures to address energy efficiency, renewable energy generation, water conservation, vehicle trips, bicycle infrastructure, and neighborhood electric vehicle infrastructure. A development application for the project that would achieve a total of 100 points would also be consistent with the CAP.

The residential lots on the project site will be sold to home buyers to build and construct on an individual basis. Each homeowner would act as their own developer and would be responsible for hiring professionals to prepare plans for review and approval by the City. No production-type housing is proposed by the project applicant at this time. Individual residential development would provide a completed checklist during the Development Review Process to indicate which of the GHG reduction measures would be included in the development of each lot in the Project.

Since the details of development for each lot are not available at the time of this analysis, the Project cannot be said to be consistent with the CAP. Therefore, without specific project measures or mitigation, the Project would conflict with an applicable plan, policy, or regulation

for the purpose of reducing GHG emissions. This impact would be potentially significant. With the implementation of Mitigation Measure GHG-1, impacts would be less than significant.

3.7.5 Mitigation Measures

To reduce operational-related GHG emissions, the Project shall implement all applicable control measures, as follows:

GHG-1: Prior to issuance of building permits, each development proposal located within the Project shall demonstrate that the development of each lot would attain at least 100 points under the Screening Table for residential projects in the City of Yucaipa Climate Action Plan.

3.8 HAZARDS/HAZARDOUS MATERIALS

Section 3.8 provides a summary of the findings and conclusions of the December 2011 Limited Phase I Environmental Assessment and September 2014 Limited Phase II Near Surface Soil Investigation documents prepared by Petra Geotechnical, Inc. The documents are included as Appendix G of this EIR.

Certain chemical and physical properties of a substance may cause it to be considered hazardous. As defined by CCR Title 22, Section 66084, a "hazardous material" is a "substance or combination of substances which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (2) pose a substantial present or potential hazard to human health or to the environment when improperly treated, stored, transported or disposed of or otherwise managed."

According to California Health and Safety Code, Section 25124, a "hazardous waste" is any hazardous material that is abandoned, discarded or in storage prior to recycling. For example, excavated soil containing hazardous materials would be a hazardous waste if the concentration of contaminants exceeded specific CCR Title 22 criteria. Hazardous materials, as defined by the California Health and Safety Code Section 25501 (n) and (o) are substances with certain physical properties that could pose a substantial present or future hazard to human health or to the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic (causes human health effects);
- Ignitable (has the ability to burn);
- Corrosive (causes severe burns or damage to materials); and
- Reactive (causes explosions or generates toxic gases).

3.8.1 Setting

This section identifies current locations within the proposed project site that have the potential for contamination from hazards and hazardous materials. This section also identifies sites with potential contamination due to the possibility of migration of contaminants from nearby

hazardous waste sites. Potential for the Project to create a significant hazard to the public or the environment due to construction or operation is also analyzed in this section.

The project site is a vacant ranch with hilltops and canyons used for agriculture, and has a gentle to moderate gradient descending from the eastern to the western portion of the site. Several buildings are located within the southwest portion of the site, which is the operation center of the ranch. The operation center includes the ranch house and mobile home, garage, caretaker's house, workshop with attached storage shed, and packing building. The workshop and attached storage shed contained drums and containers of oil, solvents, and gasoline, along with fluorescent lights, and various tools and equipment. Two pole-mounted transformers were observed adjacent to the workshop with attached shed. South and east of the main residence are groves adjacent to Oak Glen Road. A large dry pond area was observed within the groves below the workshop area. A small pond is east-northeast of the main residence close to the grove. A second grove area with adjacent smaller dry pond was observed just north of the packing building. The remainder of the site is agricultural fields and natural land with dirt access roads throughout the property.

3.8.2 Regulatory Framework

3.8.2.1 Federal

Department of Transportation

Transportation of hazardous materials on highways is regulated through the USDOT) and Caltrans. This includes a system of placards, labels, and shipping papers required to identify the hazards of shipping each class of hazardous materials. Existing federal and state laws address risks associated with the transport of hazardous materials. These laws include regulations outlined in the Hazardous Materials Transportation Act administered by USDOT. Caltrans is mandated to implement the regulations established by USDOT, which is published as the Federal Code of Regulations, Title 49, commonly referred to as 49 CFR. The California Highway Patrol enforces these regulations. Regulations of hazardous materials and wastes include the manufacture of packaging and transport containers; packing and repacking; labeling; marking or placarding; handling; spill reporting; routing of transports; training or transport personnel; and registration of highly hazardous material transport.

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate disposal in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA Amendments provided the framework for a regulatory program designed to prevent releases from leaking underground storage tanks (USTs). The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards. As of 2001, an estimated 85 percent of USTs complied with the required standards.

3.8.2.2 State

California Health and Safety Code

The California Environmental Protection Agency has established rules governing the use of hazardous materials and the management of hazardous wastes. California Health and Safety Code Section 25531, et seq. incorporates the requirements of Superfund Amendments and Reauthorization Act and the Clean Air Act as they pertain to hazardous materials. Health and Safety Code Section 25534 directs facility owners storing or handling acutely hazardous materials in reportable quantities to develop a RMP. The RMP must be submitted to the appropriate local authorities, the designated local administering agency, and EPA for review and approval.

State Water Resource Control Board

The SWRCB was created by the state legislature in 1967, with the joint authority of water allocation and water quality protection. The SWRCB runs Geo Tracker, a database of environmentally regulated facilities in California. Within the State of California there are nine RWQCBs. The mission of the regional boards is to develop and enforce water quality objectives and implementation plans that will best protect the state's waters, recognizing local differences in climate, topography, geology, and hydrology. The City of Yucaipa is within the Santa Ana RWQCB's jurisdiction.

3.8.2.3 Local

City of Yucaipa Hazardous Waste Management Plan

The City has adopted the County of San Bernardino Hazardous Waste Management Plan to identify specific standards for the processing, treatment, handling and disposal of hazardous materials, and is supported by a contract with the County. The following topics are addressed in the plan:

- Existing Programs for Dealing with Hazardous Materials and Waste
- Waste Generation Levels, Facility Inventory and Needs Assessment
- Waste Minimization
- Siting of Hazardous Waste Facilities
- Handling and Storage of Hazardous Materials
- Regulatory Program for Generators
- Land Use Requirements for Generators and Handlers
- Household Hazardous Waste
- Transportation
- Enforcement and Emergency Response
- Site Mitigation and Long Term Remedial Action
- Public Education and Participation
- Implementation Schedule and Organizational Responsibilities

City of Yucaipa General Plan Goals and Policies

The following are applicable Goals and policies of the City of Yucaipa's General Plan:

Goal S-1: Minimize the potential risks resulting from the exposure of City residents to man-made and natural hazards with the following priorities: loss of life or injury, damage to property, litigation, excessive maintenance and other social and economic costs.

Policy A. Aggressively enforce all federal, state and local regulations pertaining to the transportation, storage and use of all hazardous materials.

Policy B. The City shall support the development of fire protection facilities to the appropriate levels of service defined by the California Department of Forestry.

Policy C. Inform and educate the public of the risks from natural and man-made hazards, of methods available for hazard abatement, prevention, mitigation and avoidance and of procedures to following during emergencies.

Policy D. Promote the establishment of a household hazardous waste collection center.

Policy E. Because risks from geological hazards can be successfully mitigated through a combination of engineering, construction, land use and development standards, the City shall implement the following actions.

1. Require formation of geologic hazard abatement districts as authorized by Public Resources Code Section 26500 et seq. where existing or proposed development is threatened by such hazards and prevention, mitigation, abatement or control of a geologic hazard is deemed feasible.

2. Require sites to be developed and all structures designed in accordance with recommendations contained in any required geotechnical or geologic reports, through conditions, construction plans and field inspections.

3. Require that all recommended mitigation measures be clearly indicated and described on all grading and construction plans.

4. Require that clearances around structures and road widths in geologic hazard areas, as shown on the Hazard Overlay Map, meet the requirements found in Policy Y, Action 1 for this Goal, S-1.

5. Require all facilities to meet appropriate geologic hazard specifications as determined by the City Engineer for discretionary and ministerial authorizations.

3.8.3 Thresholds of Significance

The City utilizes CEQA Guidelines Appendix G to identify potentially significant impacts related to hazards and hazardous materials. For purposes of this analysis, an impact of the Project is considered significant if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; or
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; or
- Be located on a site which is included on a list of hazardous materials sites and as a result create a substantial hazard to the public or the environment; or
- For a project within the vicinity of an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or public use airport, would the project result in a safety hazard people residing in the project area; or
- For a project within the vicinity of an airstrip, would the project result in a safety hazard for people residing or working in the vicinity of the project area; or
- Physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

3.8.4 Impacts

Will the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Before determining the impact of hazardous materials, it is important to be clear on what is considered a hazardous material. According to California Health and Safety Code Section 25501 (o), the term Hazardous Material refers to any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, and any material which a handler or the administering regulatory agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

The proposed Project is a residential subdivision within the RL-1 zoning district, which allows for agricultural and farm-related animal raising as a primary use subject to lot size restrictions. The Project proposes single-family residential units on lots of at least one acre gross in size, and would not specifically involve the use, disposal, or transport of hazardous materials. During Project operations, materials such as fertilizer and pesticides may be used for agricultural and ornamental landscape purposes, as well as normal cleaning solvents for home maintenance. It is unlikely significant amounts of packaged cleaners or solvents would be stored due to the Project's operation as a single-family subdivision.

The proposed Project would have the potential to discharge hazardous materials during construction. It is not anticipated that the Project would directly involve the routine transport of hazardous materials; however, equipment used at the site during construction activities could utilize substances considered by regulatory bodies as hazardous, such as diesel fuel and gasoline, which occur from typical construction equipment. The amount of hazardous material discharge during construction or operation is expected to be less than significant, and the Project would be required to comply with applicable laws, ordinances and procedures, and with SWPPP and WQMP requirements to prevent the off-site discharge of pollutants during construction and operation of the Project. Additionally, a less than significant impact will occur with respect to the transport, use, or disposal of hazardous materials with Project compliance with all applicable laws and regulations.

Will the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

A Phase I Environmental Site Assessment (Petra Geotechnical, December 2011) and Limited Phase II Near Surface Soil Investigation Report (Petra Geotechnical, September 2014) were prepared and submitted with project application materials. These reports are included as Appendix G of this EIR. The reports identified potential Recognized Environmental Conditions (RECs) to include the existing workshop, shed, packing building and pole mounted transformers on-site.

Significant amounts of hazardous materials are not to be brought to the site as part of the construction or operations phase of the Project. As such, any significant level of upset or accident related to the use of hazardous materials is unlikely. An SWPPP and WQMP are required and would minimize the potential for a significant release of hazardous materials.

Floods, earthquakes, and fires are a few of the most common ways that hazardous materials are accidentally released in the environment. However, as stated in response to the previous threshold, it is not anticipated that the project site will contain or include the use of significant amounts of hazardous materials. It is also important to consider the land use designation for the project site and the types of uses that could occur in the land use associated with the site. The proposed land use is rural living, one-acre gross lots (RL-1), and the construction of single-family homes is not anticipated to create a significant hazard involving the release of hazardous materials. Therefore, with respect to the release of hazardous materials into the environment, the Project will have a less than significant impact.

Will the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Review of the City's General Plan and current aerial photos has identified no existing or proposed schools located within one-quarter mile of the proposed Project. The nearest school to the project site is Ridgeview Elementary, located approximately two miles west of the project site.

A less than significant impact will occur, as all schools are of sufficient distance away from the project site that any potential hazardous emissions associated with the Project would not pose a health risk.

Will the Project be located on a site which is included on a list of hazardous materials sites and as a result create a substantial hazard to the public or the environment?

A Phase I Environmental Site Assessment (Petra Geotechnical, December 2011) and Limited Phase II Near Surface Soil Investigation Report (Petra Geotechnical, September 2014) were prepared and submitted with project application materials. The Phase I ESA included a search of federal, state, and local government listings performed by Environmental Data Resources, Inc., and revealed no listings for the project site. A review of the Cortese List on the State of California Department of Toxic Substances Control website, consisting of several lists that are maintained and updated by EPA, also indicates there are no hazardous materials sites existing within the City of Yucaipa. As such, impacts would be less than significant.

For a Project within the vicinity of an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or public use airport, would the Project result in a safety hazard people residing in the Project area?

The 2004 General Plan identifies the closest airport to the Project is Redlands Municipal, located approximately 10 miles to the northwest. Due to the airport's distance from the project site, the proposed development would not result in a safety hazard for people residing or working in the area. Therefore, the Project will not interfere with activity at the airport. No impacts are anticipated.

For a Project within the vicinity of an airstrip, would the Project result in a safety hazard for people residing or working in the vicinity of the Project area?

The 2004 General Plan identifies the closest airport to the Project is Redlands Municipal, located approximately 10 miles to the northwest. Due to the airport's distance from the project site, the proposed development would not result in a safety hazard for people residing or working in the area. The project site is not located within an airport land use plan and is not within two miles of a public airport, public use airport, or private airstrip. No impacts to an airstrip will occur as a result of Project construction or operations and no mitigations are required.

Will the Project impair implementation physically of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed Project will not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

The proposed Project is located north of Oak Glen Road, which is a paved roadway, and east of Jefferson Avenue and Cherry Croft Road. The proposed Project will maintain accessibility to these roadways with a realignment and paving of Jefferson Avenue and establishment of an internal roadway system connecting to each street. Since the project site abuts both streets and would maintain the use of these existing roadways, the proposed Project would not physically interfere with an adopted emergency response plan or emergency evacuation plan.

The Project includes adequate access for emergency response vehicles and personnel as required. The project proponent shall construct all required roadways to their full width as specified by the City of Yucaipa and provided in the TTM and related street improvement plans for the proposed Project. Less than significant impacts are anticipated.

Will 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?

A review of California Department of Forestry and Fire Protection (CAL FIRE), California Fire Hazard Severity Zone Map Update Project Fire Hazard Severity Zones dated 2007, available on-line and prepared by CAL FIRE, does not identify the area as being in a high fire hazard area. The Local Responsibility Area maps available from CAL FIRE, dated 2007, indicate the Project is within a very high fire hazard severity zone.

Project improvements include the extension of adequately sized water pipelines to the property, consistent with the requirements of the YVWD. The closest fire station to the site is located on Bryant Street just south of Oak Glen Road, approximately one mile west of the project site. Proposed homes would be required meet the standards of the Fire Code pertaining to structures in a high fire zone, which include the installation of appropriate interior sprinkler systems and the placement of new fire hydrants at applicable intervals.

3.8.5 Mitigation Measures

No Project-related significant impacts were identified with regard to hazards and hazardous materials. The Project will be required to comply with standard conditions of approval prior to issuance of permits to address potential impacts related to hazards and hazardous materials, including submittal of soils reports and other relevant documentation. As such, no mitigation is required.

3.9 HYDROLOGY/WATER QUALITY

3.9.1 Setting

Local topography consists of a hilly landscape. The project site ranges in elevation between approximately 3,000 feet above msl in the southwest section to 3,460 feet above msl in the northeast. The nearest peak is Allen Peak at 5,795 feet, located within two miles to the northeast of the property.

The drainage on the property flows southwesterly into Wilson Creek, then east into the Santa Ana River. The property is considered part of the Santa Ana River Watershed and is within the Yucaipa Creek Subwatershed. The Yucaipa Creek Subwatershed is located in the northeastern portion of the Santa Ana Watershed and represents less than 3 percent of the total area within the watershed. The Santa Ana River Watershed encompasses nearly 2,700 square miles spanning parts of San Bernardino, Riverside, Los Angeles, and Orange Counties following the path of the Santa Ana River. Headwaters of the Santa Ana River are located in the San Bernardino Mountains, within National Forest lands to the east of San Bernardino. Headwaters of various contributing streams along the river's length generally flow from the south side of the San

Bernardino Mountains, the Cajon Pass, the San Timoteo Badlands, western side of the San Jacinto Mountains, portions of the Santa Ana Mountains, and portions of the eastern San Gabriel Mountains. The river flows approximately 100 miles, through a combination of natural areas and urban environments, to enter into the Pacific Ocean near Fountain Valley. The Santa Ana River is the main water body that brings the water from Wilson Creek on the property to the Pacific Ocean. The drainages on the project site are connected to the Pacific Ocean, via the Santa Ana River. This connectivity qualifies them as jurisdictional waters of the U.S.

The other waters of the U.S. that occur within the project area consist of ephemeral stream areas with an ordinary high water mark (OHWM) that had evidence of regular hydrology. An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral streambeds are located above the water table year-round, meaning that groundwater is not a significant source of water. Flow indicators and the extent of jurisdiction within an ephemeral stream reflect the degree of runoff during an average year. The stream mapping on the property was based on the location of OHWM, as indicated by presence of bed and bank, scouring, and vegetative differences. The OHWM boundaries of the ephemeral streams are formed by the regular scouring of storm flows.

The two ephemeral streams on the property are natural-bottomed channels that contain normal features. Wilson Creek, the larger of the two features, is a USGS blue-line stream channel. The second feature, an unnamed drainage (Drainage 1), is a small tributary to Wilson Creek that exhibited weak indications of OHWM. Drainage 1 appeared to also be a USGS blue-line stream, though the location of the stream on existing USGS mapping did not seem to correspond exactly with the location of the stream in the field.

Wilson Creek originates in the southern face of the San Bernardino Mountains, where it flows through steep rugged canyons into the valley floor and on to Yucaipa. Upstream of the project site, Wilson Creek flows through a rural residential and agricultural area. On the project site, Wilson Creek is a narrow, cobbled stream channel that meanders through chaparral and oak woodland habitats. The channel bottom comprises scoured sands, gravels, and cobbles with little to no vegetation. Along the banks are occasional sycamores and mulefat thickets. The stream exhibits no signs of water retention or ponding areas.

Drainage 1 is a small tributary to Wilson Creek on the property. The creek originates on the parcel to the north, where it flows southwest into Wilson Creek. Signs of OHWM were extremely weak, with few scoured channel bottom areas and minimal defined bed and bank. The channel was surrounded by a mixture of chaparral and oak woodland vegetation.

According to the Flood Insurance Rate Map (FIRM) Flood Insurance Rate Map (Panel #06071C8745H), this site is located predominantly within Zone X, which is designated by FEMA as being outside of the 500-year flooding zone. A portion of the site, consistent with the boundaries for Wilson Creek, is within Zone A, of which no base flood elevations have been determined. Zone A is a special flood hazard area subject to inundation by the 1 percent annual chance of flood (100-year flood).

Several additional natural streams exist within the project limits that carry 100-year storm runoffs. These streams are identified in Figure 2-4, Preliminary Flood Hazard Map, as streams C,

D, F, G, H, I, J, K, and M. Streams C through H and stream M are also tributary to Wilson Creek.

3.9.2 Regulatory Framework

3.9.2.1 Federal

Federal Emergency Management Agency (FEMA) Flood Zones

FEMA is an agency of the United States Department of Homeland Security created to coordinate the response to a disaster that has occurred in the United States that overwhelms the resources of local and state authorities. FEMA also has the responsibility of protecting lives from major flooding events. FEMA has developed and defined geographic flood zone areas by varying levels of flood risk. These zones are depicted on a community's FIRM or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area.

Clean Water Act

In 1972, the CWA was amended to prohibit the discharge of pollutants to waters of the U.S. unless the discharge is in compliance with an NPDES permit. The CWA focused on tracking point sources, primarily from wastewater treatment facilities and industrial waste dischargers, and required implementation of control measures to minimize pollutant discharges. In essence, the statute employs a variety of regulatory and non-regulatory tools to help sharply reduce the direct discharge of pollutants into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. The CWA also continued requirements to set water quality standards for all contaminants in surface waters. The CWA made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions (EPA 2006).

In November 1990, EPA published final regulations that established the application requirements for specific categories of industries, including construction projects that encompass greater than or equal to five acres of land. The Phase II Rule became final in December 1999, expanding regulated construction sites to those greater than or equal to one acre. The activity, which discharges either directly to surface waters or indirectly through municipal separate storm sewer systems (MS4s), must be regulated by an NPDES permit.

3.9.2.2 State

Porter Cologne Water Quality Control Act

Division 7 of the California Water Code, also known as the Porter-Cologne Water Quality Control Act, contains provisions that cover water quality protection and management for California's waters. The Porter-Cologne Act establishes the SWRCB) and the nine RWQCBs as the principal state agencies responsible for the protection and the enhancement of the quality of California's waters. The SWRCB sets statewide policy and, together with the RWQCBs, implements state and federal laws and regulations. In California, the NPDES permit program is administered by the SWRCB, through the RWQCBs. The Porter-Cologne Water Quality Control Act Section 13000 directs each of the RWQCBs to develop a Water Quality Control Plan (Basin Plan) for all areas within its region and jurisdiction. The RWQCB jurisdiction under Porter-Cologne would likely extend to all ephemeral drainages associated with this Project.

National Pollution Discharge Elimination System Permit

Project construction water quality compliance would be achieved via the guidelines presented in the SWRCB NPDES Construction General Permit Order 2009-0009-DWQ effective July 1, 2010. Based on the requirements of this general permit, the development and implementation of a SWPPP would be required prior to commencement of any construction-related activities. The SWPPP would be designed to (1) prevent all construction pollutants from contacting storm water and with the intent of keeping all products of erosion from moving off-site into receiving waters; (2) eliminate or reduce non-storm water discharges to storm sewer systems and other waters of the U.S.; and (3) perform inspections of all BMPs. Further, the SWPPP would outline a series of erosion control, sediment control, and non-storm water BMPs and BMP monitoring and sampling protocols for the proposed Project to help reduce the impacts to storm water discharges as a result of construction activities.

California Department of Fish and Wildlife

CDFW monitors streambed alteration to conserve, protect, and manage California's fish, wildlife, and native plant resources. Section 1602 of the FGC requires any person, state, or local governmental agency or public utility to notify CDFW before beginning an activity that would substantially divert, obstruct, or change the natural flow of the bed, channel, or bank (including associated riparian vegetation) of a river, stream, or lake and/or use material from, or deposit material into, a streambed prior to commencement of the activity. Streams include, but are not limited to, intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams, and watercourses with subsurface flow. If CDFW determines that the action could have an adverse effect on existing fish and wildlife resources, a Lake or Streambed Alteration Agreement is required.

3.9.2.3 Local

City of Yucaipa General Plan Goals and Policies

The following are applicable goals and policies of the City of Yucaipa's General Plan:

Goal IPF-3: Protect and maintain high-quality water with the objective or protecting surface and groundwater from degradation and ensuring drinking water of the highest and most beneficial use.

Policy A. Because Federal, State, regional and local responsible water authorities are jointly responsible for developing, implementing and continuing to manage basin-wide water management plans for the continuous provision of potable water supplies, the following actions shall be implemented.

1. Recognize the jurisdiction ad authority of all agencies providing water service within the City with consideration given to the City's diverse geographic regions.

2. Coordinate with all agencies providing water service and protection to achieve effective local and regional planning in order to accomplish the following.

    a. Promote cooperation and sharing of information.

b. Provide mutual assistance in regional projects.

c. Keep members informed of projects and activities.

3. Upon request by local responsible authority and pursuant to State law, assist in the development and implementation of regional water resource management plans incorporating individual district plans that will accomplish the following.

   a. Identify needs for recharge of overdrafted basins, and proceed with plans for development and management.

   b. Prioritize critical areas of basins in overdraft, sole source basins, or quality degradation problems.

   c. Maintain or enhance natural water recharge characteristics.

   d. Create recharge areas for overdrafted basins offsetting increased consumption attributable to new development.

   e. Cooperate with State water contract agencies in the purchase and distribution of State Water Project water.

   f. Share information on supply and demand for water and projected service levels and capacities that can be utilized in Infrastructure Assessment models.

Policy B. Because more and more water resources require treatment before they can be used, the City and responsible authority shall implement the following actions.

1. Support reasonable water quality standards and adequate wastewater discharge requirements for surface and groundwater which will safeguard public health.

2. Support the safe management of hazardous materials to avoid the pollution of both surface and groundwaters. Hazardous waste disposal facilities should be prohibited within any area known or suspected of supplying principal recharge to a regional aquifer.

3. Assist in the development of groundwater quality management plans with emphasis on protection of the quality of underground waters from non-point pollution sources.

4. Protect drinking water supply and groundwater through the regulation of well construction and destruction.

5. Cooperate with local sewering agencies to encourage the development of general sewering plans for the urbanizing areas to protect groundwater quality.

6. Work with Regional Water Quality Control Boards to establish uniform criteria for appropriate sewering options for new development.

7. Cooperate with State, regional, and responsible authorities to expand water sampling programs to determine ambient groundwater quality conditions affecting public, agricultural, and private wells, Identify the sources, extent and types of organic and inorganic groundwater contaminants, and evaluate their impacts to the groundwater resources.

8. Provide local input to the Santa Ana Water Quality Control Board Basin Plan review and update process to closely reflect the water quality concerns impacting water resource and land use planning decisions.

9. Establish setbacks from ephemeral and perennial streams regulating the location of septic systems, habitable structures, and other impervious or potentially polluting uses.

3.9.3 Thresholds of Significance

The City utilizes CEQA Guidelines Appendix G to identify potentially significant impacts related to water resources. For purposes of this analysis, an impact of the Project is considered significant if it would:

- Violate any water quality standards or waste discharge requirements; or
- 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; or
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; or
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or surface runoff in a manner which would result in flooding on- or off site; or
- Create or contribute runoff that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or
- Otherwise substantially degrade water quality; or
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map; or
- Place within a 100-year flood hazard area structures, which would impede or redirect flood flows; or

- Expose people or structures to a significant risk of loss, injury or death involving flooding, including as a result of the failure of a levee or dam; or
- Expose people or structures to inundation by seiche, tsunami, or mudflow.

3.9.4 Impacts

Will the Project violate any water quality standards or waste discharge requirements?

The proposed Project would be required to connect to the YVWD sewer collection and treatment system. As described in Section 3.6.4, a potential exists for up to 10 percent of the Project to utilize septic systems for wastewater disposal due to the difficulty of providing sewer lines with adequate gradient to provide for their discharge along lower elevations of the site that are located on the eastern corner of the project site. Depending on the lot size, approval would occur through the Santa Ana RWQCB or the City of Yucaipa, provided an approved percolation rate is established.

YVWD would permit installation of septic systems utilizing the Santa Ana RWQCB's Septic Tank Offset Program that permits installation of septic systems provided an equivalent number are removed and connected to the sewer system. This program will ensure the Project does not adversely affect the region's groundwater quality and, as described further in Section 3.6, the potential for soils incapable of supporting the use of septic tanks is considered low.

Prior to issuance of building permits, the Project would be required to comply with all applicable NPDES requirements through adoption and implementation of a SWPPP and WQMP during the construction and operational phases. BMPs and other measures included in the SWPPP and WQMP would address water quality and waste discharge concerns associated with the Project and a less than significant impact is anticipated.

Will the Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?

The proposed Project would require water from YVWD. YVWD currently obtains water from groundwater through local wells, and surface water collected from Birch Creek, Oak Glen Creek, Adams Tunnel, and Clark Tunnel. Additionally, YVWD purchases imported water from the State Water Project through the San Bernardino Valley Municipal Water District and the San Gorgonio Pass Water Agency for direct filtration and for recharge of the groundwater basin. YVWD's basins are in a controlled overdraft condition in which adequate water can be extracted to meet future demand without adversely affecting aquifer volume or lowering the groundwater table. YVWD will provide all domestic water to serve the Project; the Project does not include the installation of groundwater extraction wells. The Project is consistent with the planned uses of the site and is not expected to substantially deplete groundwater supplies; the impact is considered less than significant.

Will the Project alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

The Jurisdictional Delineation report prepared for the Project identified Wilson Creek as an existing blue-line stream within the project site, as well as a small tributary to the creek that was not conclusively determined to be a blue-line stream. Thus, applicability of CWA Section 404 jurisdiction is currently uncertain on the project site. Verification of the 2012 delineation would occur during the permitting phase for those lots that impact state or federal waters.

The limits of Wilson Creek will run through several lots of the proposed Project, which will be potentially impacted by jurisdictional area. A less than significant impact will occur with the implementation of **Mitigation Measure WQHYDRO-3,** requiring the property owner or Project contractor of these lots to obtain necessary CWA permits from USACE and CDFW prior to the issuance of a grading permit.

Will the Project alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or surface runoff in a manner which would result in flooding on- or off site?

Wilson Creek and the tributary streams run through several lots of the proposed Project grading, which may potentially impact the tributary streams. A less than significant impact will occur with the implementation of **Mitigation Measure WQHYDRO-1,** requiring the property owner or the project applicant for future development projects to prepare additional Project drainage studies and submit for approval by the City Engineer when future development plans are available. Such studies will identify any increase in developed condition peak flows, identify measures to manage any incremental increase in storm flows (e.g., detention/retention basins, other storm water BMPs), measure impacts to adjacent properties, and provide the timing of additional improvements needed to serve the subdivision at buildout.

Will the Project create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Prior to issuance of building permits, the project would be required to comply with all applicable NPDES requirements through adoption and implementation of a SWPPP and WQMP during the construction and operational phases. BMPs and other measures included in the SWPPP and WQMP would address water quality and waste discharge concerns associated with the project and a less than significant impact is anticipated.

Will the Project otherwise substantially degrade water quality?

Prior to issuance of building permits, the Project would be required to comply with all applicable NPDES requirements through adoption and implementation of a SWPPP and WQMP during the construction and operational phases. BMPs and other measures included in the SWPPP and WQMP would address water quality and waste discharge concerns associated with the Project and a less than significant impact is anticipated.

Will the Project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map?

Based on materials submitted with the project application, the following lots within the proposed subdivision are located within a 100-year floodplain: 4, 8 through 20, 24, 28, 29, 39 through 47, 49, 50, 52, 53, 58 through 65, 71 through 74, 81, 82, 84 through 86, 89 through 92, 102, 111, 118, 119, 122 through 138, 140, 141, 145, 151, 154, 158, 159, 171, 173 through 180, 182, and 184. The project proponent proposes a "minimal grading" concept for the property in addition to the recordation of easements on the impacted lots to restrict the building of structures within designated floodplains.

The proposed Project has been identified as being potentially impacted by jurisdictional area. A less than significant impact will occur with the implementation of **Mitigation Measures WQHYDRO-4 and WQHYDRO-5**, where building plans and grading plans will be submitted to the Engineering Department for approval and will be designed so that infrastructure and grading associated with the proposed Project are situated outside jurisdictional areas of streams and drainages (e.g., channels and banks). This means housing will not be placed within 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map.

Will the Project place within a 100-year flood hazard area structures, which would impede or redirect flood flows?

Based on materials submitted with the project application, the following lots within the proposed subdivision are located within a 100-year floodplain: 4, 8 through 20, 24, 28, 29, 39 through 47, 49, 50, 52, 53, 58 through 65, 71 through 74, 81, 82, 84 through 86, 89 through 92, 102, 111, 118, 119, 122 through 138, 140, 141, 145, 151, 154, 158, 159, 171, 173 through 180, 182, and 184. The project proponent proposes a "minimal grading" concept for the property in addition to the recordation of easements on the impacted lots to restrict the building of structures within designated floodplains.

The proposed Project has been identified as being potentially impacted by jurisdictional area. A less than significant impact will occur with the implementation of **Mitigation Measures WQHYDRO-4 and WQHYDRO-5**, where building plans and grading plans will be submitted to the Engineering Department for approval and will be designed so that infrastructure and grading associated with the proposed Project are situated outside jurisdictional areas of streams and drainages (e.g., channels and banks) and will not impede or restrict flood flow.

Will the Project expose people or structures to a significant risk of loss, injury or death involving flooding, including as a result of the failure of a levee or dam?

Based on materials submitted with the project application, several lots within the proposed subdivision are located within streams and within the 100-year floodplain. The streams within the project limits are natural streams, unaffected by man-made levees or dams.

A less than significant impact will occur with the implementation of mitigation measures to eliminate the construction and grading within the 100-year flood zone and maintain the existing natural streams as is.

There are three dams in the Yucaipa Regional Park, which is located approximately two miles west of the project site. Significant impacts to the project site are not anticipated upon failure of these facilities due to distance from the Project and existing topography.

Will the Project expose people or structures to inundation by seiche, tsunami, or mudflow?

Based on review of the 2004 General Plan and recent aerial photo maps, the proposed Project is not subject to the potential effects of a seiche, tsunami, or mudflows caused by such due to lack of upstream water bodies. The City of Yucaipa is located just north of the I-10 freeway and is over 55 miles east of the Pacific Ocean. As such, the City is not under threat of a tsunami, otherwise known as a seismic sea wave. Similarly, the potential for a seiche to occur is remote, given the limited number of large water bodies within Yucaipa and its sphere of influence. Therefore, the impact would be less than significant.

3.9.5 Mitigation Measures

The proposed Project would implement required construction and post-construction SWPPP, WQMP, and associated BMPs, as applicable, for the life of the Project. Both the Statewide Construction and Industrial General Permits require short- and long-term discharges to be managed appropriately. The SWPPP and WQMP documents provide the baseline information for meeting these requirements. Implementation of the BMPs would eliminate or reduce the potential substantial adverse impacts related to water quality and hydrology to a less than significant level.

Construction BMPs

- Owners shall develop a SWPPP for the site to ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion.
- Roads shall be designed so that changes to surface water runoff are avoided and erosion is not initiated.
- Owners shall obtain all applicable federal and state permits, as required.
- Existing drainage systems shall not be altered, especially in sensitive areas such as erodible soils or steep slopes. Potential soil erosion shall be controlled at culvert outlets with appropriate structures. Catch basins, roadway ditches, and culverts shall be cleaned and maintained regularly.

Post-Construction BMPs

- Owners shall develop a WQMP consistent with NPDES No. CAS618036, Order No. R8-2010-0036 for the site to ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion.

Project-Specific Mitigation Measures

WQHYDRO-1: The property owner or the project applicant for future development projects shall prepare additional project drainage studies and submit for approval by the City Engineer when future development plans are available. Such studies will need to identify any increase in

developed condition peak flows, measures to manage any incremental increase in storm flows (e.g., detention/retention basins, other storm water BMPs), measure impacts to adjacent properties, and the timing of additional improvements needed to serve the subdivision at buildout.

WQHYDRO-2: Local storm drain facilities shall be sized to convey the 10- and/or 100-year storm event per a final drainage plan reviewed and approved by the City Engineer, or per the requirements of other responsible agencies.

WQHYDRO-3: Prior to the issuance of grading permits on those lots within the subdivision that contain jurisdictional features, including 100-year FEMA flood zone facilities, the property owner or Project contractor shall obtain the applicable CWA Section 401 and 404 permits from USACE and CDFW as required.

WQHYDRO-4: Building plans submitted to, and approvable by, the Engineering Department shall be designed so that infrastructure associated with the proposed Project is situated outside jurisdictional areas of streams and drainages (e.g., channels and banks). A drainage easement will be recorded as approved by the City Engineer, aligned consistent with the centerline of the wash. A conservation easement exceeding the limits of the 100-year flood shall be recorded. No buildings or structures will be permitted within the easement, which shall be maintained as close to its natural state as possible.

WQHYDRO-5: Grading plans submitted to and approvable by the Engineering Department shall delineate the limits of grading and construction activities and should clearly outline the limits of the drainage easements and the 100-year flood limits.

WQHYDRO-6: Building plans submitted to and approvable by the Engineering Department shall be designed so that new construction and substantial improvement of any residential structure shall have the lowest floor, elevated to one foot above base flood elevation. Upon the completion of the structure, the elevation of the lowest floor, including the basement, shall be certified by a registered professional engineer or licensed land surveyor, and verified by the City Building Official to be properly elevated above the floodplain elevation at the time of certification.

WQHYDRO-7: The property owner or the project applicant for future development projects shall prepare additional project drainage studies and submit for approval by the City Engineer when future development plans are available. Such studies will need to identify any increase in developed condition peak flows, measures to manage any incremental increase in storm flows (e.g., detention/retention basins, other storm water BMPs), measure impacts to adjacent properties, and identify and quantify whether diversion of flow will occur.

WQHYDRO-8: The property owner or the project applicant for future development projects shall ensure that fill materials placed adjacent to streambeds are compacted according to the City's development standards. It must be demonstrated that fill will not settle and is protected from erosion, scour, or differential settlement.

WQHYDRO-9: Storm water drainage inside the proposed Project boundaries will be designed to minimize soil erosion and provide for sediment control. Drainage control measures will be

installed so that surface runoff will not be increased as it exits the site and does not increase velocity, to prevent erosion of downslope properties. Final design of the site drainage shall be subject to all requirements of the grading permit.

WQHYDRO-10: The property owner or the project applicant for future development projects shall provide employee training concerning water quality and site management (as is required in the WQMP). The employee training documents shall be submitted to the City Engineering Department prior to the issuance of final occupancy permits.

WQHYDRO-11: The property owner or the project applicant for future development projects shall prepare and submit a Notice of Intent to comply with the Construction General Permit to the California State Water Resources Board.

WQHYDRO-12: The property owner or the project applicant for future development projects shall prepare a SWPPP per requirements of the Construction General NPDES Permit.

WQHYDRO-13: During Project construction and operation, the property owner or Project contractor will be required to use or store hazardous materials in a safe manner and at an appropriate distance from known or identified natural drainages. Material Safety Data Sheets will be made available to all site workers for cases of emergency.

WQHYDRO-14: The property owner or the project applicant for future development projects shall prepare a final WQMP for approval by the City Engineer addressing post-construction water quality BMPs.

3.9.6 Significant Effects after Mitigation

All of the mitigation measures require implementation prior to permit issuance. Implementation of the Project-specific mitigation measures, including additional drainage studies approval by the City; obtaining drainage easement; submittal of site and grading plans for approval by the City; obtaining the appropriate permits from CWA, USACE, and CDFW; and preparation of a SWPPP and WQMP with associated BMPs and all required regulations set forth in the regulatory regulations of this section, results in the proposed Project's potential impacts after mitigation upon hydrology and water quality resources are considered less than significant.

3.10 LAND USE/PLANNING

This section evaluates Project compatibility with existing and planned surrounding land uses, as well as compliance with the Yucaipa 2004 General Plan and Municipal Code requirements.

3.10.1 Setting

The site is in the RL-1 General Plan and Zoning districts. Currently, the project site is improved with a vacant ranch that includes hilltops and canyons used for agricultural purposes. Several farm-related structures exist on the project site, including a ranch house and other small habitable buildings, as well as structures used for storage, workshop, and packing purposes. It should be noted that Wilson Creek, a USGS blue-line stream and FEMA-designated 100-year floodplain, traverses through the north and central portions of the project site.

Vacant and open land zoned for rural residential uses, which includes hillsides and canyons, is located to the north of the project site. Vacant and open land zoned for rural residential and open space uses is located to the east of the project site. Large lot, rural (one- to five-acre minimum lot sizes) and single-family (20,000 square feet minimum lot size) residential uses are located to the west and south of the project site.

3.10.2 Regulatory Framework

3.10.2.1 City of Yucaipa General Plan Goals and Policies

California State Law (Government Code 65300) requires that cities and counties adopt a comprehensive, long-term General Plan to guide their development. The land use element has the broadest scope of the state-required elements, since it regulates how land is to be utilized. Government Code Section 65302(a) requires the land use element to designate the proposed general distribution, and general location and extent of the following land uses: housing, business, industry, open space, agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid waste disposal facilities, and other categories of public and private land uses. The following are the applicable City land use goals and policies as adopted in the General Plan.

Land Use

Goal LU-2: Encourage a harmonious mix of residential, commercial and industrial land uses which will generate sufficient tax revenues to pay the costs of maintaining the desired levels of services and adequate infrastructure facilities.

Policy A. Because the City wants to promote and provide safe, attractive, varied residential areas convenient to public facilities, employment and shopping centers, the following actions shall be implemented.

1. Require that the design and siting of new residential development meet locational and development standards that ensure compatibility with adjacent land uses and community character.

2. Allow varied approaches to residential development in order to foster a variety of housing types and densities and more efficient use of the land.

3. Adopt regulations encouraging innovative residential development. Continue to use the Planned Development process to permit flexible design and siting standards such as setbacks, yards and building relationships. Promote clustering as a means of achieving more efficient housing construction and providing larger areas of usable common open space. Establish a system to award density bonuses in return for special design, infrastructure improvements, extra amenities, usable open space or other developer efforts.

4. Encourage actions that strengthen the community identity by supporting the rehabilitation of older structures, the adoption of urban design guidelines and the establishment of architectural themes consistent with existing development.

5. Provide additional signalized intersections where traffic volumes warrant.

6. Promote the use of public transit through the placement of benches for public use and through the designation of bus pullout locations in commercial areas.

Goal LU-5: Determine the provision of residential density consistent with topographic constraints to reduce landform alteration in hillside areas.

Policy A. Implement and update, according to this General Plan, the Hillside Development Ordinance currently in effect within the City.

Policy B. Designate land uses consistent with the land's natural suitability and minimize conflict with the natural environment.

Goal LU-7: Encourage the enhancement of the 'rural atmosphere' of Yucaipa by retaining the opportunity to raise and keep animals.

Policy A. The keeping of horses in residential subdivisions, where such use is permitted by the Development Code, may be reasonably regulated by CC&Rs, but shall not be prohibited.

Policy B. Promote and preserve the rural setting in designated areas of the community. This may be accomplished by identifying and maintaining specific areas for low density residential or agriculture uses and by establishing development standards that enhance the rural character within identified areas.

Goal UD-3: Respect the unique character of existing individual neighborhoods.

Policy A. The keeping of horses in residential subdivisions where such use is permitted may be reasonably regulated by CC&Rs, but shall not be prohibited.

Policy B. Provide appropriate design guidelines for the development of vacant areas in each Planning Area.

1. Adopt a Custom Home Overlay District to establish custom homes as the primary permitted land use by implementing appropriate development standards to promote and maintain the viability and character of existing rural neighborhoods.

Goal GM-1: Ensure that future development proceeds at a pace consistent with the provision or acquisition of required infrastructure facilities and public services.

Policy A. Because long term, City-wide commitments to levels of service and development standards are necessary for efficient capital improvement programming and will promote the orderly provision of the needed and desired improvements to maintain the quality of life, the following procedures addressing service level boundaries and development standards shall be implemented.

3. Utilize Improvement Levels to control and condition the timing and intensity of future development and ensure that, as applicable, future development is approved contingent on the provision of infrastructure facilities and public services specified by the applicable Improvement Level.

10. Require that new development pay a proportional fair share of the costs to provide infrastructure facilities required to service such development. If an applicant is required to pay more than a proportional share, reimbursement agreements may be utilized.

Policy B. Because the City wants to ensure that future development does not become a fiscal burden to residents of the City and to ensure that there is a balance between the infrastructure facilities/services demanded by a development and the resources available or required to provide the infrastructure facilities/services, the following actions shall be implemented.

1. Require project proponents to provide Fiscal Impact Analyses (FIA) of required services and infrastructure, including both short and long-term financing mechanisms and/or strategies for all new commercial, industrial or institutional developments of six acres or larger or residential developments of 50 units or more.

3.10.2.2 Yucaipa Municipal Code

Rural Living District

The Project is located with the RL District zoning designation. Permitted land uses, land uses subject to Conditional Use Permit, and property development standards are provided in Section 84.0320 of the Development Code.

Custom Home Overlay District

The project site is located within the Custom Home (CH) Overlay District. Overlay districts are established to map environmental hazard constraints, identify environmental resource amenities, or identify additional development concerns when land development is being proposed, and establish regulations in addition to those imposed by the land use district. The CH Overlay District is intended to promote the compatibility and viability of certain rural residential neighborhoods by incorporating special design standards that promote and maintain the development of neighborhoods that exhibit an excellence of design that is greater than what could otherwise be achieved using conventional development standards. Applicable development standards for structures within the CH Overlay District are provided in Section 85.040510 of the Development Code.

3.10.2.3 Other Development Plans

County of San Bernardino General Plan

The County of San Bernardino 2007 General Plan (County of San Bernardino 2007) contains policies that relate to particular planning regions within the County, and are referred to as

Regional Policies. The City of Yucaipa is within the Valley Planning Region in the County of San Bernardino. The following is the applicable Valley Region Goal of the Land Use Element:

Goal V/LU 1.1: Provide opportunities, where possible, for a rural lifestyle that preserves the unique character within suitable locations of the Valley Region.

The following are the applicable County-wide land use goals and policies as adopted in the General Plan:

Goal LU 1: The County will have a compatible and harmonious arrangement of land uses by providing a type and mix of functionally well-integrated land uses that are fiscally viable and meet general social and economic needs of the residents.

> Policy LU 1.1 Develop a well-integrated mix of residential, commercial, industrial, and public uses that meet the social and economic needs of the residents in the three geographic regions of the County: Valley, Mountain, and Desert.
>
> Policy LU 1.2 The design and siting of new development will meet locational and development standards to ensure compatibility of the new development with adjacent land uses and community character.
>
> Policy LU 1.4 Encourage preservation of the unique aspects of the rural communities and their rural character.

Goal LU 2: Residential land uses will be provided in a range of styles, densities, and affordability and in a variety of areas to live, ranging from traditional urban neighborhoods to more "rural" neighborhoods.

> Policy LU 2.1 Promote varied approaches to residential development to foster a variety of housing types and densities and more efficient use of the land.

Goal LU 10: Encourage distinct communities with a sense of "place" and identity.

> Policy LU 10.1 Adopt community plans with goals, policies and programs to recognize unique characteristics, issues, and opportunities for communities within the County.

Southern California Association of Government (SCAG)

SCAG is the largest of nearly 700 councils of government in the United States, functioning as the MPO for Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial Counties. The region encompasses a population exceeding 18 million persons in an area of more than 38,000 square miles. The City of Yucaipa is located within the SCAG planning area. As the designated MPO, SCAG is mandated by the federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality.

Although SCAG does not have formal regulatory authority and, therefore, cannot directly implement land use decisions, SCAG guides land use planning for the region through intergovernmental coordination and consensus building. SCAG also serves as the regional clearinghouse for Projects requiring environmental documentation under state and federal law. In

this role, SCAG reviews proposed development and infrastructure Projects within Southern California and analyzes their potential impacts on regional planning programs such as the Regional Comprehensive Plan and the RTP.

Habitat Conservation Plan/Natural Community Conservation Plan

No HCP or NCCP has been adopted in the City to date; however, the County of San Bernardino is presently collaborating with other public agencies to develop the countywide San Bernardino Valley Multi-Species HCP.

3.10.3 Thresholds of Significance

The following analysis is based upon the 2004 General Plan. The Project would be compatible with the land use goals mentioned in Section 3.10.2.1 of this EIR and the City's official Land Use District Map designation of RL-1 (Rural Living, one-acre minimum lot size). The Project provides for a harmonious arrangement of land uses by proposing rural residential land uses in an area designated for such development to take place. The majority of land uses surrounding the project site are rural in nature, or are vacant and/or zoned for development similar to the proposed Project type.

The City utilizes CEQA Guidelines Appendix G to identify potentially significant impacts to land use and planning resources. For purposes of this analysis, an impact of the Project is considered significant if it would:

- Physically divide an established community; or
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including; but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable HCP or NCCP.

3.10.4 Impacts

Will the Project physically divide an Established Community?

Dividing an established community typically involves creating a physical barrier that changes the connectivity between areas of the community. Connectivity is typically provided by roadways, pedestrian paths such as sidewalks, and bicycle or equestrian trails. Factors that could divide a community include the construction of a major highway or roadway, construction of storm channels, closing bridges or roadways, and construction of utility transmission lines. An established community could mean any number of things, including a neighborhood, city, county, or region.

As outlined in the 2004 Yucaipa General Plan, the City is divided into five residential neighborhoods: North Bench, Central Yucaipa, Wildwood Canyon, Dunlap Acres, and Freeway Corridor, based on topography and creeks. The proposed site is situated in the North Bench residential area of Yucaipa, north of Oak Glen Road. The location of the Project has been a historic ranch with vacant lands to the north and east. To the west and south of the project site

are large rural single-family residential plots as outlined in the City General Plan and Zoning Maps. As such, the proposed Project would add residential development along the north and east of existing residential development, and the proposed Project would not physically divide and existing community.

The proposed Project would add streets to connect to existing roadways ensuring connectivity. The Project does not propose any action that would physically divide an established community.

Will the Project conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the Project?

The assessment of land use impacts focuses on the potential for incompatibility with applicable plans. The Project would develop portions of a historic ranch, which is specifically designated to accommodate rural residential development on sites of one acre in size. As such, the Project is consistent with the goals in the City's General Plan, specifically those related to residential density and the enhancement of the rural atmosphere of Yucaipa. Therefore, the Project will not have a significant negative impact regarding land use.

The proposed Project would comply with 2004 Yucaipa General Plan and Zoning Map. The proposed land use is rural living, on one-acre lots (RL-1), which is consistent with the current land use designation and zoning category as identified. The General Plan is currently being updated. The December 2015 Draft General Plan is available on the City's website. The proposed Project would be consistent with the General Plan Update density requirements, and the proposed Project property would remain RL-1. The proposed Project would also be consistent with applicable General Plan policies and goals, as described in Section 3.10.2.1, above, as well as applicable County General Plan land use goals.

Proposed improvements to the site would be conducted in a manner consistent with adopted development standards and good planning practices, including those required within the City's Development Code for the RL-1 zoning designation and CH Overlay District. Grading and subsequent improvements would be undertaken consistent with appropriate City standards and drainage design criteria. As such, the Project is not anticipated to conflict with applicable policies or regulations and a less than significant impact is expected.

Will the Project conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan?

An HCP is a long-term agreement with USFWS and is designed to offset any harmful effects that a proposed activity might have on federally listed threatened and endangered species. The HCP allows development to proceed while providing a mechanism to conserve listed species and provide for incidental take. A "No Surprises" policy provides assurances to landowners participating in HCP efforts.

The CDFW Natural Communities Conservation Planning Program is an unprecedented effort by the State of California and numerous private and public partners that takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. An NCCP identifies and provides for the regional or area-wide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity.

According to the 2004 General Plan, the City of Yucaipa is not part of an established HCP or NCCP; therefore, it would not have an impact upon any conservation plan.

3.10.5 Mitigation Measures

As discussed in the preceding section, implementation of the Project would not physically divide an established community; conflict with land use plans, policies, or regulations; or conflict with an HCP or other type of approved biological habitat management plan. As such, no land use mitigation is required.

3.11 MINERAL RESOURCES

3.11.1 Setting

Mineral resources are naturally occurring chemicals, elements, or compounds formed by inorganic processes or organic substances. These resources include bituminous rock, gold, sand, gravel, clay, crushed stone, limestone, diatomite, salt, borate, potash, geothermal, petroleum, and natural gas resources. Construction aggregate refers to sand and gravel (natural aggregates) and crushed stone (rock) that are used as Portland-cement-concrete aggregate, asphaltic-concrete aggregate, road base, railroad ballast, riprap, and fill and for the production of other construction materials. Sand and gravel are the most prevalent mineral resources within California. Resources are generally found along major drainage channels.

According to the City of Yucaipa 2004 General Plan Open Space and Conservation Element, a detailed inventory of mineral resources in the City has not been conducted. The entire City of Yucaipa lies within Mineral Resource Zone (MRZ)–3, a State of California classification for an area containing mineral deposits, the significance of which cannot be evaluated from available data.

3.11.2 Regulatory Framework

3.11.2.1 Federal

U.S. Department of Labor, Mine Safety and Health Administration, Code of Federal Regulations

Mining activities in the United States are regulated by CFR 30, Mineral Resources (42 FR 62677, Dec. 13, 1977). According to Section 710.4, Responsibility, "The States are responsible for issuing permits, inspection and enforcement on lands on which operations are regulated to insure compliance with the initial performance standards in parts 715 through 718 of this chapter. States are required to file copies of inspection reports with the Office and are also responsible for assuring that permits are not issued which would be in conflict with the restrictions on mining found in section 510 of the Act, particularly with regard to alluvial valley floors and prime farm lands, and section 522(e) of the Act in regard to prohibitions of mining on certain lands."

3.11.2.2 State

Surface Mining and Reclamation Act

Mining activities in California are regulated by the Surface Mining and Reclamation Act (SMARA) of 1975, Revised 2007. The SMARA provides for the reclamation of mined lands and directs the State Geologist to classify (identify and map) the non-fuel mineral resources of the state to show where economically significant mineral deposits are likely to occur, based upon the best available scientific data. Based on guidelines adopted by the CGS, MRZs are classified according to the presence or absence of significant deposits, as defined below. These classifications indicate the potential for a specific area to contain significant mineral resources.

MRZ-1: Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

MRZ-2a: Areas underlain by mineral deposits where geologic information indicates that significant measured or indicated resources are present.

MRZ-2b: Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present.

MRZ-3a: Areas containing known mineral deposits that may qualify as mineral resources. Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2a or MRZ-2b categories.

MRZ-3b: Areas containing inferred mineral deposits that may qualify as mineral resources.

MRZ-4: Areas where geologic information does not rule out either presence or absence of mineral resources. The distinction between the MRZ-1 and MRZ-4 categories is important for land use considerations. It must be emphasized that the MRZ-4 classification does not imply that there is little likelihood for the presence of mineral resources, but rather there is a lack of knowledge regarding mineral occurrence.

Mineral Resources and Mineral Hazards Mapping Program

The California Mineral Resources and Mineral Hazards Mapping Program is administered by the CGS and is divided into two projects: the Mineral Resources Project, which provides data on non-fuel mineral resources, and the Mineral Hazards Project, which provides data on minerals that pose public health issues such as naturally occurring heavy metals, asbestos, mercury, and radon. The Mineral Resources Project deals mainly with mineral land classification under the SMARA.

3.11.2.3 Local

City of Yucaipa General Plan

Goal OS-3: Manage other types of natural resources, including mineral resources, soils and energy resources, for conservation for future beneficial uses.

Policy A. Because the need for minerals is a present and future requirement for the City's development and well-being, the City shall participate in the establishment of a County-wide mineral resource information, storage and retrieval system that will pursue the following actions.

1. Solicit, coordinate, and acknowledge lands designated by the State Mining and Geology Board and classified by the State Geologist.

2. Incorporate the mineral classification or designation information, including the maps, where they are completed by the State Mining and Geology Board and the Division of Mines and Geology, including new and updated information.

3. Recognize and protect areas within the City that show or have proven to have significant mineral resources, and protect access to those areas.

4. Protect mineral resources and access from incompatible land uses.

5. Maintain and coordinate files and records to be kept with the Planning Department of the City.

Policy C. Because of the protection of significant mineral resources and access to them is required for present and future development and extraction, the City shall implement the following actions.

1. Protect mineral resources and access from incompatible land uses.

2. Review land development proposals near resource areas or mining operations with the goal of achieving land use compatibility with mining.

3. Use the following land use compatibility categories.

    a. Incompatible. This category require high public or private investment in structures, land improvements and landscaping which would prevent mining because of higher economic value of those lands and their improvements. Examples of this category include both high and moderate density residential development with high unit value, public facilities, and non-mining related industrial and commercial operations.

    b. Compatible. This category requires low public or private investment in structures, land improvements and landscaping which would be amenable to mining because of low economic value of land and improvements. Examples of this category include other mining operations, very low residential development (i.e., 1 dwelling unit per 10 acres where an adequate buffer is presented as defined in d) below), low unit value, extensive industrial, recreational (public/commercial), agricultural, silvicultural, grazing, and open space.

c. Interim. This use requires temporary structures, land improvements and landscaping of limited useful life which from an economic and political standpoint can be converted to mining at the end of that limited life. The period of interim use should be compatible with the orderly and timely production of mineral resources and the useful life of the improvements.

d. Buffer. This use would provide sufficient distances or barriers between mining and incompatible land uses. Such barriers would be utilized to mitigate noise, dust, vibration and the visual impacts of mining. These barriers would also be designed to mitigate the impacts to public health and safety.

Policy D. Because the City of Yucaipa needs to support mineral extraction and processing operations, the City shall implement the following actions.

1. Adopt a Mining/Reclamation application form that requests information necessary to assure compliance with the requirements of SMARA and the City.

2. Provide for natural resource management in the development of Specific Plans and other planning efforts within the undeveloped portions of the City.

3. Provide methods and procedures to review Mining/Reclamation plans and methods for the extraction and processing of mineral resources. Assure adequate recovery of mineral resources and provide for the reclamation of mined lands before issuing permits.

4. Provide for the monitoring of mining operations for compliance with the established operating guidelines, conditions of approval, and the reclamation plan.

3.11.3 Thresholds of Significance

The City utilizes CEQA Guidelines Appendix G for impact criteria for determining significant impacts to mineral resources. The Project would result in a significant or potentially significant impact if it would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or
- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

3.11.4 Impacts

Will the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The City of Yucaipa is not known to contain any mineral resources of statewide or regional importance according to the CGS. Under the SMARA, MRZs are identified by the State Geologist based on CGS data.

The MRZ classification areas in the City of Yucaipa are shown to be MRZ-3 in the CGS mineral resources map, "Mineral Land Classification of a Part of Southwestern San Bernardino County: The San Bernardino Valley Area, California (East)," according to the California Department of Conservation SMARA Mineral Land Classification Maps (accessed August 2015). Due to the size of the Project and proximity to residential uses, this area is unlikely considered a viable site for mineral extraction. Based on this information, the Project is expected to have no impact on the availability of known mineral resources.

Will the Project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

As previously indicated, the entire City is within an MRZ-3 classification, in which the significance of mineral deposit cannot be evaluated. This means there are no identified local or regionally important mineral resources within the City. Development in accordance with the current General Plan or the proposed General Plan Update would not impact any areas of known mineral resources. A less than significant impact from the Project is anticipated.

3.11.5 Mitigation Measures

No Project-related impacts were identified regarding mineral resources and, as such, mitigation would not be needed.

3.12 NOISE

This section discusses the fundamentals of sound and vibration; examines federal, state, and local noise guidelines, policies, and standards; reviews existing noise levels; and evaluates potential noise impacts associated with the Project. The Noise and Vibration Impact Analysis technical report is included as Appendix I of this EIR.

3.12.1 Setting

Noise is most often defined as unwanted sound. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness."

The project site is composed of approximately 236 acres situated in the northeast area of the City of Yucaipa in San Bernardino County. The property is located in what is known as the North Bench area of Yucaipa at the base of the San Bernardino Mountains. Oak Glen Road, approximately one mile east of Bryant Street, establishes the southern boundary of the Project as it traverses eastward to the unincorporated mountain community of Oak Glen.

3.12.1.1 Terminology and Noise Descriptors

The following are brief definitions of terminology used in this section:

Sound. A vibratory disturbance, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.

Noise. Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

Decibel (dB). A unit of measure for sound on a logarithmic scale.

A-Weighted Decibel (dBA). An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

Equivalent Continuous Noise Level (L_{eq}). The energy-averaged noise level of varying sound over a measurement period.

Community Noise Equivalent Level (CNEL). The energy average of the A-weighted sound levels occurring during a 24-hour period with five dB added to the sound levels occurring during the period from 7 p.m. to 10 p.m. and 10 dB added to the sound levels occurring during the period from 10 p.m. to 7 a.m.

Acoustic Fundamentals

Noise is generally defined as loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity and that interferes with or disrupts normal activities. Although exposure to high noise levels has been demonstrated to cause hearing loss, the principal human response to environmental noise is annoyance. The response of individuals to similar noise events is diverse and influenced by the type of noise, the perceived importance of the noise and its appropriateness in the given environmental setting, the time of day and the type of activity during which the noise occurs, and the sensitivity of the individual.

Sound is a physical phenomenon consisting of minute vibrations that travel through a fluid medium, such as air, and are sensed by the human ear. Sound is generally characterized by several variables, including frequency and intensity. Frequency describes the pitch of the sound and is measured in hertz (Hz), while intensity describes the sound's loudness and is measured in decibels (dB). Decibels are measured using a logarithmic scale. A sound level of 0 dB is approximately the threshold of human hearing and is barely audible under extremely quiet listening conditions—it is not the complete absence of sound but the lowest level that can be heard by an average healthy human ear. Normal speech has a sound level of approximately 60 dB. Sound levels above approximately 110 dB begin to be felt inside the human ear as discomfort and eventually pain at 120 dB and higher levels. The minimum change in the sound level of individual events that an average human ear can detect is about one to two dB. A three to five dB change is readily perceived. A change in sound level of about 10 dB is usually perceived by the average person as a doubling (or if -10 dB, halving) of the sound's loudness.

3.12.2 Regulatory Framework

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise.

Federal Regulations

In the absence of applicable laws, ordinances, regulations, and standards (LORS) for defining an absolute or relative threshold for acceptable noise from the Project, an exterior day-night noise level (L_{dn}) of 55 dBA is a federal guideline for exterior areas of frequent human use that could be considered for the purposes of making a conservative environmental impact assessment. This guideline, from EPA, specifically addresses issues of community noise (EPA 1974) and is commonly referred to as the "levels document," which contains goals for noise levels affecting residential land use of $L_{dn} < 55$ dBA for exterior levels and $L_{dn} < 45$ dBA for interior levels. The U.S. Department of Housing and Urban Development (HUD) Noise Guidebook Chapter 2 (24 CFR Section 51.101(a)(8)) also recommends that exterior areas of frequent human use follow the EPA guideline of 55 dBA L_{dn}.

State Regulations

California does not promulgate statewide standards for environmental noise, but Government Code Section 65302 (f) of the State of California mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. As typified in Figure 3.12-1, the guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

CEQA is the foundation of California environmental law and policy. CEQA's main objectives are to disclose to decision makers and the public the significant environmental effects of proposed activities and to identify ways to avoid or reduce those effects by requiring implementation of feasible alternatives or abatement measures. Under CEQA, a substantial noise increase may result in a significant adverse environmental effect and, if so, must be abated or identified as a noise impact for which it is likely that only partial or no abatement measures are available. Specific economic, social, environmental, legal, and technological conditions may make noise abatement measures not feasible.

City of Yucaipa General Plan

The Noise Element of the City of Yucaipa General Plan sets noise control goals and policies that include the following noise standards shown in Table 3.12-1.

Table 3.12-1 City of Yucaipa Noise Standards

Land Uses		Ldn (or CNEL) dB	
Categories	Uses	Interior[1]	Exterior[2]
Residential	Single-Family, Duplex Units	45	60[3]
	Mobile Home	45	60[3]
Commercial	Hotel, Motel, Transient Lodging	45	60[3]
	Commercial Retail, Bank and Restaurants	50	n/a
	Office Building, R&D, Offices	45	65
	Amphitheater, Hall, Auditorium, Theater	45	n/a
Institutional	Hospital, School, Church, Library	45	65
Open Space	Park	n/a	65

n/a = not applicable

1. Interior living environment excluding bathrooms, kitchens, toilets, closets, and corridors.
2. Outdoor environment limited to private yards of single-family dwellings, multi-family private patios or balconies, mobile home parks, hospital/office building patios, park picnic areas, school playgrounds, and hotel and motel recreation areas.
3. An exterior noise level of up to 65 dB Ldn (or CNEL) will be allowed, provided exterior noise levels have been substantially mitigated through a reasonable application of the best available noise reduction technology, and interior noise exposures does not exceed 45 dB Ldn (or CNEL) with windows and doors closed. Requiring that windows and doors remain closed will necessitate the use of air conditioning or mechanical ventilation.

Source: Yucaipa General Plan Noise Element, 2004

City of Yucaipa Noise Ordinance

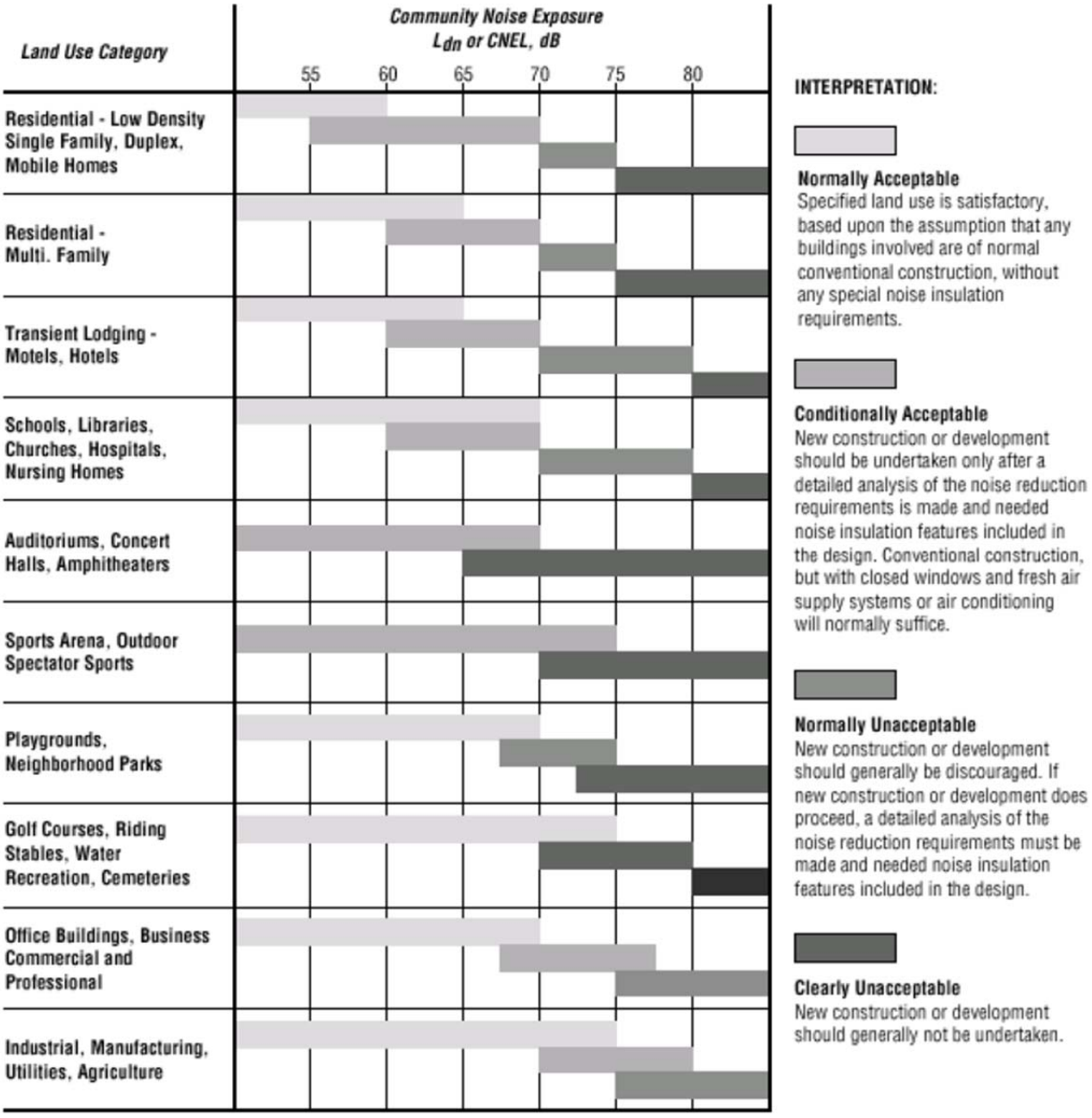
Section 87.0905 (b)(1) of the City of Yucaipa noise ordinance applies the following limits—categorized by receiving land use—to noise emission "from any source as it affects adjacent properties":

- Residential, Professional Services – 55 dBA L_{dn} (anytime)
- Other Commercial – 60 dBA L_{dn} (anytime)
- Industrial – 70 dBA L_{dn} (anytime)

Additionally, section 87.0905 (b)(2) of the noise ordinance applies the following quantities to any hour:

- the noise standard for that receiving land use as specified in 87.0905 (b)(1) for a cumulative period of more than 30 minutes in any hour;
- the noise standard plus 5 dBA for a cumulative period of more than fifteen minutes in any hour;
- the noise standard plus 10 dBA for a cumulative period of more than five minutes in any hour;
- the noise standard plus 15 dBA for a cumulative period of more than one minute in any hour; and,
- the noise standard plus 20 dBA for any period of time.

Figure 3.12-1 State of California Land Use Compatibility Guidelines



Source: State of California (2003)

Part (c) of section 87.0905 from City's noise ordinance considers the existing ambient outdoor sound environment as follows:

"If the measured ambient level exceeds any of the first four noise limit categories above, the allowable noise exposure standard shall be increased to reflect said ambient noise level. If the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under this category shall be increased to reflect the maximum ambient noise level."

When allegedly offending noise is impact or tonal in nature, part (d) of section 87.0905 from City's noise ordinance prescribes that the applicable noise threshold be reduced by 5 dBA.

Of the allowable exemptions to the City's noise ordinance, section 87.0905 (e)(1)(C) permits temporary construction activities between 7 a.m. and 7 p.m. on weekdays and Saturdays.

3.12.3 Thresholds of Significance

The City utilizes Section 16.20.125 of the Development Code and CEQA Guidelines Appendix G for impact criteria for determining significant impacts related to noise and vibration. The Project would result in a significant or potentially significant impact if it would:

- Cause exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies; or
- Cause exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels; or
- Cause a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project; or
- Cause a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project; or
- Expose people residing or working in the project area to excessive noise levels (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); or
- Expose people residing or working in the project area to excessive noise levels (for a Project within the vicinity of a private airstrip).

3.12.4 Impacts

Will the Project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The General Plan Noise Element and Municipal Code identify noise levels for various types of land uses, certain activities, and how noise levels are to be measured. The operation of the proposed Project would be similar to other types of single-family housing within the City limits. Constructed homes would feature individual HVAC, pool pumps and other electromechanical

equipment that would produce noise (when operating) but at levels that would be expected to be compliant with local regulations where received by existing residential land uses.

Aside from such localized noise generators (e.g., HVAC) associated with newly-constructed residences, Project operational noise is largely considered the post-construction noise that results from the changes in local roadway traffic flows—i.e., likely increases in local traffic due to the Project's introduction of new residential land uses and related activities. Table 5-5 from Appendix I indicates that for 2015 or 2040, addition of the Project would cause resultant traffic noise levels, expressed as L_{dn} values, to be less than 60 dBA at a distance of 50 feet from the roadway centerline and thus comply with the City of Yucaipa exterior noise level standard for likely affected nearby roadway segments that are presented in Figure 5-2 of Appendix I.

For future residential land uses within the Project site and essentially abut Oak Glen Rd., Table 5-5 from Appendix I indicates that such uses approximately fifty feet from the road are expected to experience traffic noise levels between 60 dBA and 65 dBA L_{dn}. These exterior noise levels are compliant with the City of Yucaipa General Plan Noise Element standard, so long as the newly constructed residences feature building sound insulation that permit interior noise levels to remain at or below 45 dBA L_{dn}. Per the City's Noise Element, this provision also means that the residential structure would feature air-conditioning so that closed windows and doors could enable this needed exterior-to-interior noise control. Future residential land uses elsewhere within the Project site, such as those along Jefferson Street, are not expected to experience traffic noise levels above 60 dBA L_{dn}. Therefore, persons occupying new residences within the Project boundary would be expected to experience a less than significant noise impact with respect to operations noise.

With regards to Project construction activity, as presented in Table 5-1 of Section 5.2.2 from Appendix I, predicted noise from three considered sequential phases of Project construction are expected to be less than 65 dBA L_{dn} as expected by the City of Yucaipa General Plan Noise Element. While the L_{dn} values are generally higher than the City's noise ordinance limit for residential land uses (55 dBA L_{dn}), these noise levels would be exempt from meeting this threshold so long as construction activities took place during the allowable exemption period (7 a.m. to 7 p.m. on weekdays and Saturdays).

Will the Project expose persons to or generate excessive groundborne vibration or groundborne noise levels?

The proposed project site would require grading to modify the site elevation. While it is uncertain if unique construction techniques or pilings would be required as part of construction that might cause excessive ground-borne vibration, an analysis (see Section 5.3.2 of Appendix I) of vibration from conventional construction equipment such as bulldozers, vibratory rollers, and loaded trucks indicates a less than significant impact is anticipated at existing nearby residences with respect to both structural damage risk and human annoyance. While construction of the Project is likely to be phased in a manner that might result in newly-occupied residences adjoining construction activity zones, Section 5.3.1 of Appendix I indicates that vibration would be potentially annoying if the source was less than 75 feet from the receiver. Although detailed lot layouts are not known at this time, the expected one-acre minimum size lots of the Project suggest that receivers (occupying a residential structure, within which vibration has an

opportunity to be perceived) will be further than this distance from the major producers of construction vibration.

Will the Project cause a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

The project area is currently affected by vehicle noise from Oak Glen Road. The proposed single-family land uses would generate additional vehicle trips to and from the property, and would only cause a potentially significant impact at existing residential land uses along Jefferson Street north of Oak Glen Road, since the predicted increase in ambient noise level is over 9 dBA (i.e., 4.1 dBA above the 5 dBA significance criterion). At other existing residential land uses, the increase in ambient noise level due to Project-induced changes in roadway traffic volumes would be no greater than 5 dBA and thus considered a less than significant impact. For instance, as shown on Table 5-5 from Appendix I, the increase in ambient noise level at fifty feet from Jefferson Street (the segment south of Carter St.) is anticipated to be 5 dBA for the 2015 year and thus not a significant impact. In 2040, the predicted increase in ambient noise due to the Project at that time is only 3.9 dBA (i.e., the difference between 5.7 dBA and 1.8 dBA, since these two values are ambient noise increases with respect to the 2015 year without the Project) and thus also not a significant impact.

Analysis of the Project's influence on local roadway traffic noise in Section 5.5 of Appendix I identified only one potential significant impact with respect to a substantial predicted permanent increase in outdoor ambient sound level: existing noise-sensitive receivers within 50 feet of the centerline of Jefferson Street north of Oak Glen Road. The rise in outdoor ambient noise level, due to traffic noise increase, is anticipated due to what the analysis assumes will be the upgrade of Jefferson Street from its current status (a dirt road) into something that can handle considerably more regular roadway traffic directly attributed to introduction of the Project. The amount of needed mitigation is approximately four dBA (in order to reduce the ambient noise increment to a less than significant level) and could thus be realized by ensuring linear occlusion (i.e., block line-of-sight) between the primary roadway traffic noise sources of Jefferson Street and the potentially impacted receiver (e.g., 11114 Cherry Croft Drive) with measures such as an earthen berm or wall of sufficient height and extent—if natural terrain, which was conservatively neglected in the noise analysis, does not already provide some or all of this direct sound path occlusion.

Will the Project cause a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

The proposed Project would result in a temporary increase in ambient noise levels during construction activities. Table 5-2 from Appendix I illustrates that at one of the nearby representative residential land uses where baseline ambient noise levels are already quite low ("R-W," representing 11114 Cherry Croft Drive), the temporary increase in ambient noise would be considered significant without mitigation as the increases are greater than 10 dBA. The magnitude of the impact, ranging from 8 to 14 dBA, represents the difference between the predicted increase and this allowable 10 dBA increase.

For a Project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?

The 2004 General Plan identifies the closest airport to the Project is Redlands Municipal, located approximately 10 miles to the northwest. No excessive noise levels related to airports is anticipated for the Project.

For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?

The 2004 General Plan identifies the closest airport to the Project is Redlands Municipal, located approximately 10 miles to the northwest. No excessive noise levels related to airports is anticipated for the Project.

3.12.5 Mitigation Measures

Construction Noise

Per Section 5.3 of Appendix I, expected noise from daytime Project construction activities should be compliant with jurisdictional requirements and not cause significant temporary increases in the outdoor ambient sound level. However, due to its currently quiet surroundings, the residential NSR represented by 11114 Cherry Croft Drive could experience substantial increases in ambient noise level. To mitigate this rise, the Project Applicant or its contractors shall implement the following measures:

NOISE-1: Engineering noise controls – to the extent practical, locate stationary and/or continuous major noise producers (e.g., air compressors, generators) as far as possible from the potentially impacted residential receiver. In other words, gain more naturally-occurring noise attenuation via increasing distance between source and receiver.

NOISE-2: Equipment noise controls – there are a number of practices that could be employed as follows:

- Ensure that all engine-driven vehicles and stationary equipment feature factory-approved exhaust silencers/mufflers that are in proper working order.
- Minimize idling time for engine-driven operating vehicles that have the engine running between periods of mobility and/or work-intensive activity. For instance, with respect to its influence on an hourly L_{eq} value, reducing the time that a vehicle or piece of equipment operates by half (e.g., 10 minutes instead of 20 during a given hour) generally enables a 3 dB reduction of noise emission associated with that source (since it is contributing half as much acoustical energy), which can help lower the overall hourly L_{eq} value representing the sound environment at a studied location. As certain equipment may have a "louder" side or facing (e.g., an air intake that produces the most noise), position the equipment onsite so that said louder facings are directed away from the noise-sensitive receiver.

NOISE-3: Beyond noise mitigation measures NOISE-1 and NOISE-2, proper design and installation of temporary construction noise barriers may need to be implemented to reduce construction noise. The following are recommended:

- Use of quiet construction equipment when possible.
- Operational limitations within the noise ordinance day time hours.
- Use of temporary sound barriers.
- When loud equipment is required for construction, noise baffles should be used to reduce impacts.

When the construction activity of concern has concluded and moved to sufficiently more distant Project locations, thus increasing the distance between it and the NSR, the need for temporary noise barriers would correspondingly diminish or be eliminated altogether.

Operation Noise

With mitigation implemented, the impact due to operational traffic noise on existing noise-sensitive receivers along Jefferson Street would be considered less than significant.

NOISE-4: Developer shall consider options for and implement measure(s) such as an earthen berm or wall of sufficient height and extent between 11114 Cherry Croft Drive and the primary roadway traffic noise sources (e.g., engine exhaust and tire/pavement contact) on Jefferson Street so that 4 dBA of Jefferson Street traffic noise reduction as quantified at 11114 Cherry Croft Drive can be achieved. Noise reduction benefit could be estimated prior to mitigation measure design and installation as part of Jefferson Street roadway upgrading, and field-verified with pre-construction and post-construction outdoor noise level measurements similar to those performed for the baseline sound environment data collection described in Section 3.2.2 of Appendix I.

3.13 POPULATION AND HOUSING

3.13.1 Setting

As stated in the City of Yucaipa General Plan, the City's character changed from being a community of small ranches and limited agricultural holdings to that of a suburban residential community after World War II. According to the 2014 Housing Element, the City of Yucaipa is the 16th most populous city in San Bernardino County, with a population of 51,376 as of the 2010 Census. Development has significantly slowed in the last few years, largely in part due to the national recession and downturn of the housing market. The recession is expected to have a slowing effect on growth over the next few years. Yucaipa is projected to grow in population by 9 percent between 2010 and 2020. Buildout of the community is anticipated to be about 75,000 residents.

The 2014 Housing Element further indicates that Yucaipa has an older population than San Bernardino County as a whole, with a higher percentage of middle-aged and senior adults. Over the past decade, the largest increase in Yucaipa residents was among middle-aged adults, ages 45 to 64 years, who are presumably attracted to Yucaipa's single-family detached housing with large homes and yards. Seniors did not notably increase, and actually declined as a share of

residents. However, seniors still compose a much larger share of Yucaipa's population than seniors living in San Bernardino County as a whole.

In 2010, married family households with children composed 25 percent of Yucaipa's households, lower than in San Bernardino County. Yucaipa also has a larger share of seniors. As a result, Yucaipa has a smaller average household size (2.8 versus 3.3) than San Bernardino County. Married households with no children composed 29 percent of Yucaipa's households, with the "All Other Families" category being 18 percent. Nonfamily households with Single Persons comprised 23 percent of the total, while nonfamily households with Unrelated Persons composed 5 percent. Looking forward to the future, the 2015 Housing Element predicts the household composition of Yucaipa should trend toward younger and middle-aged adults and families. Although the Southern California region as a whole is trending toward older adults, the vast majority of land in Yucaipa is slated for lower density residential development. The larger housing types suitable for these residential sites, similar to the proposed Project, will tend to attract middle-aged adults and larger families to the community.

The Department of Finance estimates that the City's 2015 population is 52,942, which is an increase from the 2014 estimate of 52,598 (0.7 percent). Due to the economic downturn since 2005, development activity has slowed considerably. The City's housing stock has a large number of new homes built during the last several decades. Relatively few of the single-family residences in the City, except in the city center, were built prior to 1940.

3.13.2 Regulatory Framework

3.13.2.1 Local

City of Yucaipa General Plan Housing Element

Pursuant to Government Code Section 65580 et seq., the City of Yucaipa is required to develop a housing program every five years. The housing element is subject to detailed statutory requirements and mandatory review by the State Department of Housing and Community Development. Housing element law requires that local governments adequately plan to meet their existing and projected housing needs, including their share of the regional housing need. The City of Yucaipa has a certified Housing Element, which was prepared in March 2013. The Housing Element covers the planning period of 2014 through 2021, and identifies strategies and programs in support of housing for persons of all income levels. These strategies and programs include the following:

- Conserving and improving existing affordable housing;
- Providing adequate housing sites;
- Assisting in the development of affordable housing;
- Removing governmental and other constraints to housing development; and
- Promoting equal housing opportunities.

Goal HE-1: Quality neighborhoods evidenced by well-maintained housing, ample public services, open space, and infrastructure that provide a quality place to live.

Policy HE-1.1 . Code Enforcement. Maintain and improve the quality of single and multiple family housing and mobile homes through the adoption and enforcement of housing and property maintenance standards and public education.

Policy HE-1.2 . Housing Quality. Promote the repair, improvement, and rehabilitation of single-family housing, multiple-family housing, and mobile home parks to enhance quality of life and improve and maintain property values.

Policy HE-1.3 . Public Services and Infrastructure. Provide quality community facilities, infrastructure, traffic management, public safety, and other services to maintain the livability, safety, and vitality of residential neighborhoods.

Policy HE-1.4 . Mobile Home Preservation. Conserve mobile home parks that are physically and economically sound through regulatory tools, acquisition by non-profit organizations, and rent stabilization.

Goal HE-2: Adequate residential sites through land use, zoning, and specific plan designations that allow a diversity of housing types for the City's varied needs for housing.

Policy HE-2.1 Focus Areas. Direct the development of multiple-family housing to major transportation corridors, in uptown, and other appropriate locations consistent with specific plans and land use designations.

Policy HE-2.2 Housing Design. Require quality housing through the use of materials and colors, building treatments, landscaping, open space, parking, sustainable concepts, and environmentally sustainable design practices.

Policy HE-2.3 Entitlement Process. Provide flexible entitlement processes that facilitate innovative and imaginative housing solutions, yet balance the need for developer certainty in the approval process, governmental regulation, and oversight.

Policy HE-2.4 Housing Incentives. Facilitate the development of market rate and affordable housing for different income and housing types through flexible regulations and financial incentives, where feasible and appropriate.

Policy HE-2.5 Natural Environment. Incorporate appropriate measures to protect and preserve the hillsides, viewsheds, sensitive habitat, and other environmental resources in Yucaipa from degradation due to the development of housing.

3.13.3 Thresholds of Significance

The City utilizes CEQA Guidelines Appendix G for determining significant impacts to population and housing resources. The Project would result in a significant or potentially significant impact if it would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- Displace a substantial number of people, necessitating the construction of replacement housing elsewhere.

3.13.4 Impacts

Will the Project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Substantial population growth occurs directly when new homes are constructed resulting in additional residents moving to the area, or when new businesses are constructed in areas that lack an existing workforce to fill the jobs created by new businesses. Growth in population is controlled by land use regulations, which dictate the type and density of development that may occur. The proposed Project is designated as RL in the General Plan, which seeks to encourage appropriate rural development where single-family residential is the primary use, along with conservation of open space, watershed, and wildlife habitat areas. As identified in Section 3.10 Land Use/Planning of this EIR, the Project is consistent with applicable use regulations and the type and intensity of the Project are not considered to result in a significant impact to applicable land use criteria.

The Project would not result in a significant increase in population, demand for housing, or expansion of public or private services. The Project would result in the construction of 184 new residential lots and, based on the average of 2.9 persons per household in Yucaipa City (2015 Census Bureau), it is estimated that the Project would result in approximately 534 additional residents. This increase in population is consistent with the Yucaipa General Plan Update, which anticipates a 62 percent population increase to 77,328. However, the approximate 1 percent increase in population from this Project is not a significant increase, and the area proposed for development is identified for residential development in the General Plan. As such, the proposed Project would have a less than significant impact on population and housing.

Indirect population growth occurs when infrastructure is expanded or constructed in areas with no infrastructure, resulting in an increase in the capacity that can be served in the area. The proposed Project will be served by existing infrastructure and any extension or expansion of infrastructure is only intended to serve the Project's needs. Approval of the Project would not significantly increase the capacity of infrastructure in the area, and subsequently would not result in indirect population growth. Therefore, the Project would not directly or indirectly result in any substantial population growth. A less than significant impact will occur.

Will the Project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The proposed Project would develop new housing units on a predominantly vacant site. The Project does not involve displacement of any housing units. The Project is consistent with the existing General Plan land use of RL-1 and will add additional single-family residential units on minimum one-acre gross lots. The Project would have no impact on household displacement.

Will the Project displace a substantial number of people, necessitating the construction of replacement housing elsewhere?

The proposed Project would develop new housing units on a predominantly vacant site. The Project does not involve displacement of any housing units. The Project is consistent with the existing General Plan land use of RL-1 and will add additional single-family residential units on minimum one-acre gross lots. The Project would have no impact on household displacement.

3.13.5 Mitigation Measures

No Project-related significant impacts were identified regarding population and housing. As such, mitigation would not be needed.

3.14 PUBLIC SERVICES

3.14.1 Setting

3.14.1.1 Fire Protection

Yucaipa's unique location, varied topography, open space areas, and dry weather make the community especially vulnerable to fire. The community is surrounded by High and Very High Fire Severity Zones as mapped by the California Department of Fire and Fire Protection.

Fire protection and paramedic services are provided to the City through a contractual agreement with the California Department of Forestry and Fire Protection (CAL FIRE). Yucaipa also maintains automatic aid agreements with CAL FIRE, Redlands Fire Department, CAL FIRE/Riverside County Fire Department, San Bernardino County Fire Department, the U.S. Forest Service, and CAL FIRE/Highland Fire Department. The department also utilizes mutual aid on a regional basis.

The City is served by three fire stations: Bryant Street Fire Station (11416 Bryant Street), Crafton Hills Fire Station (32664 Yucaipa Boulevard), and Wildwood Fire Station (34259 Wildwood Canyon Road). The Bryant Street Fire Station (CAL FIRE Station 551) is the closest Fire Station to the project site.

3.14.1.2 Police Protection

Law enforcement services are provided to the City of Yucaipa by the San Bernardino County Sheriff's Department through contractual agreement. The Yucaipa Police Department's paid staff is supplemented by 240 citizen volunteers who annually donate over 30,000 hours of services. These dedicated professionals provide the staffing for Citizens on Patrol, Line Reserves, Posse, Search & Rescue, Explorers, and the Chaplain Corp.

3.14.1.3 Schools

The proposed Project is located within the boundaries of the Yucaipa-Calimesa Joint Unified School District. The district presently comprises six elementary schools, two middle schools (grades 7–8); one high school campus (grades 9–12), one dependent charter school (grades K–8), a continuation high school (grades 9–12), a special education success program (grades K–12), and an adult continuing education program. The City is also home to several charter schools, including the Inland Leaders Charter School and Competitive Edge Charter School.

3.14.1.4 Parks

According to the General Plan, Yucaipa has 14 public parks, including an equestrian arena, a municipal pool, and other special use facilities. In addition to City parks, Yucaipa is home to an 885-acre state park and a 200-acre regional park with campgrounds and three lakes for swimming, boating, and fishing. Yucaipa's parks are supplemented by school play areas and athletic fields. Crafton Hills College allows public use of recreational facilities, an Olympic-sized pool, gymnasium, track, basketball courts, tennis courts, and hiking trails. Joint use agreements with the Yucaipa-Calimesa Joint Unified School District allow limited public access to select facilities on weekends and after school hours.

3.14.1.5 Other Government Services/Service Organizations

Table 3.14-1 shows a list of Government Services/Service Organizations available within the City limits. These facilities include City Hall, Chamber of Commerce, and various government facilities.

Table 3.14-1 Government Services/Service Organizations

Facility	Address
Yucaipa City Hall	34272 Yucaipa Boulevard Yucaipa, CA 92399
Chamber of Commerce	35139 Yucaipa Boulevard Yucaipa, CA 92399
US Post Office	12460 California Street Yucaipa, CA 92399
Senior Services Center	12202 1st Street Yucaipa, CA 92399

3.14.2 Regulatory Framework

City of Yucaipa General Plan

The City of Yucaipa General Plan Infrastructure and Public Facilities Element cites policies to provide decision makers with long-range guidance affecting the infrastructure of the City. Applicable public services goals and policies relative to the proposed project site are identified below.

Goal SC-1: In cooperation with the school district, work to assure adequate school sites and facilities for the existing and future residents of Yucaipa.

Policy A. Because educational facilities and programs provide current and future generations with skills needed in our complex society, the City shall encourage the development of such facilities and programs.

1. The City shall continue to require the payment of CFD school taxes or other school fees for new development in order to maintain the current level of educational services.

2. The City shall encourage educational and cultural exchanges and activities and shall cooperate with the school district in the use of City-owned facilities for such activities.

3. The City shall continue to support existing programs for adult education, vocational training and literacy.

4. The City will restrict incompatible land uses adjacent to school sites.

Goal PR-2: Develop and maintain a well-balanced local park system that will provide for the full spectrum of recreational needs of the residents.

Policy A. As development occurs in hillside areas, open space will be needed both for aesthetic and practical reasons, such as the reduction of grading impacts and watershed protection.

1. Through the City's Hillside Development Ordinance, a minimum of 40% of each hillside development shall be required to be set aside as open space. A homeowners association or City Maintenance District shall be created to provide maintenance for these open space areas.

2. During the land development process, the City shall work with the Regional Parks Department to identify future sites suitable for new regional parkland as a part of the ongoing Capital Improvement Program and shall amend the General Plan accordingly once specific sites have been chosen.

3. The City shall assure that the variety of recreational experiences at park sites within the City meets the needs of the residents.

4. The City shall seek the conjunctive use of public lands, such as flood control lands or lands that have been deemed unsuitable for habitable structures, for recreational experiences.

5. The City shall utilize public funding mechanisms wherever possible to protect and acquire park lands.

6. The City shall cooperate with the County Regional Parks Department in establishing a viable regional trail system within the City.

7. The City shall minimize the disposal of City lands until it is assured that these lands would not serve to enhance the goals for park and trail systems. The City shall also utilize small parcels adjacent to flood control facilities for equestrian, pedestrian and biking staging areas.

8. The City shall coordinate with federal and state agencies regarding opportunities for leasing public lands for regional park purposes.

9. Protect and development scenic, cultural resources and historic sites of value for public enjoyment.

10. Provide day-use and overnight camping and picnic facilities for residents and visitors.

3.14.3 Thresholds of Significance

The City utilizes CEQA Guidelines Appendix G to identify potentially significant impacts on such public services.

The Project would result in a significant or potentially significant impact on public services if it would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- Fire protection
- Police protection
- Schools
- Parks
- Other public facilities

3.14.4 Impacts

The proposed Project will result in an increased need for public services. Development fees will be assessed at the time that building permits are issued for construction of the proposed Project. These fees are designed to ensure that the appropriate levels of capital resources necessary to serve the Project and future development are maintained.

Fire Protection

The City of Yucaipa is currently served by the California Department of Forestry (CAL FIRE). The proposed Project would not require unique or altered fire protection services, due to the type of uses proposed and the existence of a fire station about one mile west on Bryant Street just south of Oak Glen Road. The addition of the proposed 184 residences would not affect fire department service ratios or response times, nor would any new fire protection facilities need to be provided.

As a standard condition of approval, developers are required to pay development impact fees for fire facilities, based the details of proposed Project. The proposed Project would have a less than significant impact on fire protection services, and would not affect fire department service ratios or response times, nor would it require the construction of any new fire facilities.

Police Protection

The San Bernardino County Sheriff's Department currently serves the project site and surrounding area under an agreement with the City of Yucaipa. The proposed Project would not require unique police protection services, since the site has been and will continue to be accessible from surrounding streets. Further, the payment of development impact fees would offset potential demands for increased facilities.

No new or altered police facilities are required to maintain orderly conduct within the community as a result of development at the Project. As a standard condition of approval, developers are required to pay development impact fees for public facilities based upon the details of the Project. Given the addition of such a small number of residences, the Project would not affect police department service ratios or response times, nor would any new police facilities need to be provided. The impact to police protection resources would be less than significant.

Schools

The Yucaipa-Calimesa School District serves the City of Yucaipa and will continue to serve the project area. With the addition of 534 additional residents, 140 or fewer are anticipated to be under 18 years old based on the current population distribution in the City (Census Bureau 2015).

As a standard condition of approval, developers are required to pay development impact fees to the School District for school facilities prior to issuance of building permits, and a less than significant impact to schools is anticipated. Under state law, impacts to school facilities are addressed through specific procedures such as development impact fees and issuance of bonds.

Parks

The proposed minimum lot size is one acre, which provides substantial area for private on-site activities. The proposed Project may generate the need for additional parkland or recreational uses, although not to the level of typical residential subdivisions that has more limited private open space. Local parks and open space areas are available in proximity to the project site, including Yucaipa Regional Park, Wildwood Canyon State Park, Flag Hill Park, Eldorado Ranch Park, and San Bernardino National Forest.

The City of Yucaipa has adopted development impact fees, including those associated with the Quimby Act for the development of park facilities, to offset the potential impact of new users caused by the demand from new development. The 1975 Quimby Act authorizes jurisdictions to require developers to set aside land for open space or pay in-lieu fees for park improvements. The goal of the Quimby Act is to require developers to help mitigate the impacts of property improvements. The proposed Project would not require new or altered park and recreation facilities or services and the foreseen impact is less than significant.

Other Public Facilities

The City's General Plan Map of Multi Use Trails and Bike Paths identifies a multi-purpose trail is necessary within the proposed Project. The TTM includes right-of-way dedication for public streets within the development, which will include areas to accommodate the required multi-purpose trail. Since the proposed Project will not cause a substantial increase in the City's population or a significant increase in the need for parks and open space, the Project will have a less than significant impact upon recreational facilities.

Since the proposed Project will not cause a substantial increase in the City's population, will be subject to payment of the public services impact fee, and right-of-way dedication for a future trail, a less than significant impact will occur as a result of Project implementation.

3.14.5 Mitigation Measures

No significant Project-related impacts were identified with regard to public services. Consequently, mitigation would not be needed.

3.15 RECREATION

3.15.1 Setting

The City of Yucaipa contains approximately 198 acres of park and open space facilities throughout the City. According to the 2004 General Plan Infrastructure and Public Facilities Element, approximately 4.1 acres of open space exist for every 1,000 residents. In addition to City parks, the Yucaipa Regional Park provides another 835 acres of recreational amenities to the City of Yucaipa.

3.15.2 Regulatory Framework

3.15.2.1 Federal

National Recreation and Parks Association Standards

The National Recreation and Parks Association has published the following guidelines for communities to consider when planning various types of parks (e.g., regional, community, neighborhood, etc.).

- Community parks shall be provided at a ratio of 2 to 3 acres per 1,000 residents.
- Neighborhood parks shall be provided at a ratio of 1 to 2 acres per 1,000 residents.
- Mini-parks shall be provided at a ratio of 0.25 to 0.50 per 1,000 residents.

3.15.2.2 State

Quimby Act

California Government Code Sections 6675-6678, known as the Quimby Act, enacted in 1975 and amended in 1982, authorizes cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. The Quimby

Act set the standard of three to five acres per 1,000 residents as "adequate" open space acreage in jurisdictions.

Public Park Preservation Act

The Public Park Preservation Act of 1971 includes applicable land use policies and regulations regarding parks and recreation that must be considered. Applicable sections of the Public Park Preservation Act include:

5401(a). "No city, city and county, public district, or agency of the state, including any division, department or agency of the state government, or public utility, shall acquire (by purchase, exchange, condemnation, or otherwise) any real property, which property is in use as a public park at the time of such acquisition, for the purpose of utilizing such property for any non-park purpose, unless the acquiring entity pays or transfers to the legislative body of the entity operating the park sufficient compensation or land, or both, as required by the provisions of this chapter to enable the operating entity to replace the park land and the facilities thereon."

5404. "In the event that the park land and facilities are acquired, the operating entity shall acquire substitute park land and facilities. If, however, less than 10 percent of the park land, but not more than one acre, is acquired, the operating entity may, instead of acquiring substitute park land and facilities, improve the portion of the park land and facilities that remain, using the funds received for this purpose, after holding a public hearing on the matter and upon a majority vote of its legislative body."

3.15.2.3 Local

City of Yucaipa General Plan

Goal PR-1: Provide and preserve large open space areas for both active and passive resource values.

Policy A. When additional engineering studies for storm drain improvements are undertaken, the feasibility of incorporating open space such as equestrian trails and wildlife corridors shall be determined.

Policy B. Implement the City's Hillside Ordinance.

Policy C. In coordination with the counties of San Bernardino and Riverside, protect and manage areas having natural values of regional significance within regional parks and throughout the City.

Policy D. Establish and implement policies and management strategies that will effectively conserve and utilize park resources.

Goal PR-2: Develop and maintain a well-balanced local park system that will provide for the full spectrum of recreational needs of the residents.

Policy A. As development occurs in hillside areas, open space will be needed both for aesthetic and practical reasons, such as the reduction of grading impacts and watershed protection.

1. Through the City's Hillside Development Ordinance, a minimum of 40% of each hillside development shall be required to be set aside as open space. A homeowners association or City Maintenance District shall be created to provide maintenance for these open space areas.

2. During the land development process, the City shall work with the Regional Parks Department to identify future sites suitable for new regional parkland as a part of the ongoing Capital Improvement Program and shall amend the General Plan accordingly once specific sites have been chosen.

3. The City shall assure that the variety of recreational experiences at park sites within the City meets the needs of the residents.

4. The City shall seek the conjunctive use of public lands, such as flood control lands or lands that have been deemed unsuitable for habitable structures, for recreational experiences.

5. The City shall utilize public funding mechanisms wherever possible to protect and acquire park lands.

6. The City shall cooperate with the County Regional Parks Department in establishing a viable regional trail system within the City.

7. The City shall minimize the disposal of City lands until it is assured that these lands would not serve to enhance the goals for park and trail systems. The City shall also utilize small parcels adjacent to flood control facilities for equestrian, pedestrian and biking staging areas.

8. The City shall coordinate with federal and state agencies regarding opportunities for leasing public lands for regional park purposes.

9. Protect and development scenic, cultural resources and historic sites of value for public enjoyment.

10. Provide day-use and overnight camping and picnic facilities for residents and visitors.

Goal PR-3: Establish a standard per capita acreage of local park land of 3.5 acres per thousand residents.

Policy A. Because the provision of park facilities directly contributes to the overall balance of land uses and quality of life and because the amount of parkland and facilities available ca be directly correlated to new development, the City shall assure that these open space and recreation areas are preserved.

3.15.3 Thresholds of Significance

The City utilizes CEQA Guidelines Appendix G for determining significant impacts to recreation resources. The Project would result in a significant or potentially significant impact if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated; or
- Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

3.15.4 Impacts

Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility(ies) would occur or be accelerated?

As discussed in Section 3.13.4, Population and Housing, the Project is estimated to increase the City's population by approximately 534 additional residents. This increase in population is consistent with the Yucaipa General Plan Update, which anticipates a 62% population increase at buildout from the existing population of 47,835 people to a total of 77,328 over the next 20+ years. However, the approximate 1% increase in population from this Project is not a significant increase, and the area proposed for development is identified for residential development in the General Plan.

The City of Yucaipa has adopted development impact fees to offset the potential impact of new users caused by the demand from new development. Given the size of the proposed development and projected number of additional people anticipated, the proposed Project would not cause substantial deterioration of existing park facilities and the foreseen impact is less than significant

Does the Project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

The TTM includes right-of-way dedication for public streets within the development, which will include area to accommodate a multi-purpose trail system within the subdivision consistent with the City's General Plan Map of Multi Use Trails and Bike Paths. The Project does not propose any other recreational facilities and does not require the construction or expansion of recreational facilities with the exception of the new multi-purpose trail.

The City of Yucaipa has adopted development impact fees to offset the potential impact of new users caused by the demand from new development. Given the size of the proposed development and projected number of additional people anticipated, the proposed Project would not cause substantial deterioration of existing park facilities and the foreseen impact is less than significant.

3.15.5 Mitigation Measures

The Project will not cause a significant impact upon recreational resources. Consequently, mitigation would not be needed.

3.16 TRANSPORTATION/TRAFFIC

Section 3.16 provides a summary of the findings and conclusions of the Traffic Impact Analysis (TIA) prepared by AECOM (January 2016). The TIA is included as Appendix J of this EIR.

3.16.1 Setting

The proposed Project is located north of Oak Glen Road and east of Jefferson Street, near the intersection of Oak Glen Road and Pendleton Road in the City of Yucaipa, California. The surrounding area is mostly open with the exception of few existing single-family/farm houses that are located on the south and southwest corner of the site. Access to the site is proposed from Jefferson Street and Oak Glen Road, including four access points from Jefferson Street and two access points from Oak Glen Road.

Several roadway improvements are planned to facilitate overall traffic circulation within the project study area. These improvements are listed below and are expected to take place during the construction of the proposed Project:

- Extend Jefferson Street farther south to connect with Oak Glen Road.
- Realign Pendleton Road to align with Jefferson Street on the south. This will create a new four-leg intersection at Oak Glen Road.
- Extend Fir Avenue farther east to connect with Jefferson Street.
- Construct Jefferson Street/Cherry Croft Drive intersection as a new four-leg intersection. Site Access Street B will form the fourth leg on the east.

3.16.1.1 Existing Roadways

Several regionally and locally significant roadways traverse the study area. Key characteristics of the roadway circulation system within the project study area are discussed below.

Bryant Street – Bryant Street is a major north/south highway located approximately 1.0 mile west of the project site. Within the project study area, Bryant Street has two through lanes in each direction, and dedicated left-turn bays at major intersections. A section of Bryant Street between Date Street and Fir Avenue also contains a two-way center-turn lane. The current Average Daily Traffic (ADT) on Bryant Street just north of Oak Glen Road is 12,964 vehicles per day and just south of Oak Glen Road is 12,529 vehicles per day. The currently posted speed limit on Bryant Street is 50 miles per hour north of Oak Glen Road and 45 miles per hour south of Oak Glen Road

Oak Glen Road – Oak Glen Road is an east/west-oriented roadway located just south of the project site. Within the project study area, Oak Glen Road has one travel lane in each direction, and dedicated left-turn bays at major intersections. Oak Glen Road is currently posted at 50 miles per hour in the vicinity of the site. The current ADT on Oak Glen Road just east of Bryant St is 4,302 vehicles per day and just west of Bryant St is 12,512 vehicles per day. In the vicinity of the project site, Oak Glen Road currently carries about 2,572 vehicles per day west of Casa Blanca Avenue and 1,907 vehicles per day east of Casa Blanca Avenue.

Fir Avenue – Fir Avenue is an east/west-oriented roadway located west of the project site. Within the project study area, Fir Avenue has one travel lane in each direction. The intersection of Fir Avenue/Bryant Street is currently signalized. Fir Avenue is planned to be extended to the east in the future to connect with the Jefferson Street. Fir Avenue, east of Freemont Street, currently carries about 336 vehicles per day.

Jefferson Street – Jefferson Street is a north/south-oriented roadway and forms the western boundary of the project site. Currently, Jefferson Street south of Carter Street is closed for general public use. A section of Jefferson Street, in the vicinity of the project site, comprises dart surface and is only used by few residents and owners of the adjoining open parcels. The intersection of Carter Street/Jefferson Street is currently unsignalized and controlled by stop signs on Jefferson Street.

Carter Street – Carter Street is an east/west-oriented roadway located approximately 0.5 mile north of the project site. Within the project study area, Carter Street has one travel lane in each direction with a posted speed limit of 35 miles per hour.

Pendleton Road – Pendleton Road is a north/south-oriented roadway located south of the project site. Pendleton Road has one travel lane in each direction and a posted speed limit of 25 miles per hour. The intersection of Pendleton Road and Oak Glen Road is currently unsignalized and controlled by a stop sign on Pendleton Road. The current ADT on Pendleton Road just south of Oak Glen Road is 452 vehicles per day.

Casa Blanca Avenue – Casa Blanca Avenue is a north/south-oriented roadway located south of the project site. Casa Blanca Avenue has one travel lane in each direction and forms a T-intersection with Oak Glen Road. The intersection of Casa Blanca Avenue and Oak Glen Road is currently unsignalized and controlled by a stop sign on Casa Blanca Avenue.

Cherry Croft Drive – Cherry Croft Drive is a north/south-oriented roadway located west of the project site. Cherry Croft Drive has one travel lane in each direction and forms a T-intersection with Oak Glen Road. The intersection of Cherry Croft Drive and Oak Glen Road is currently unsignalized and controlled by a stop sign on Cherry Croft Drive. The current ADT on Cherry Croft Drive just north of Oak Glen Road is 41 vehicles per day.

Date Street – Date Street is an east/west-oriented roadway located south of the project site. Date Street has one travel lane in each direction and a posted speed limit of 25 miles per hour. It forms a T-intersection with Pendleton Road. The intersection of Date Street and Pendleton Road is currently unsignalized and controlled by a stop sign on Date Street. The current ADT on Date Street just east of Bryant Street is 3,255 vehicles per day.

3.16.1.2 Study Intersections

Review of project application materials and plans by the City's Engineering Department, including review of the TIA, identified that the following eight existing intersections within the study would be impacted by the Project:

- Bryant Street/Oak Glen Road
- Bryant Street/Fir Avenue

- Bryant Street/Carter Street
- Jefferson Street/Carter Street
- Oak Glen Road/Pendleton Road
- Oak Glen Road/Casa Blanca Avenue
- Oak Glen Road/Cherry Croft Drive
- Pendleton Road/Date Street

The Bryant Street/Oak Glen Road intersection is a SANBAG Congestion Management Program (CMP) monitored intersection. Under existing conditions, all signalized intersections operate at a good level of service (LOS), LOS C or better, during both morning and evening peak hours. All unsignalized study intersections operate at a very good LOS, LOS B or better, during both morning and evening peak hours under existing conditions.

3.16.1.3 Study Roadway Segments

Thirteen roadway segments within the study area may potentially be impacted by the Project as follows:

- Bryant Street – between Oak Glen Road and Fir Avenue
- Bryant Street – between Oak Glen Road and Date Street
- Oak Glen Road – between 2nd Street and Bryant Street
- Oak Glen Road – between Bryant Street and Fremont Avenue
- Oak Glen Road – between Fremont Avenue and Jefferson Street
- Oak Glen Road – between Jefferson Street and Casa Blanca Avenue
- Oak Glen Road – east of Casa Blanca Avenue
- Fir Avenue – east of Fremont Street
- Pendleton Road – South of Oak Glen Road
- Pendleton Road – north of Date Street
- Cherry Croft Drive – north of Oak Glen Road
- Date Street – east of Bryant Street
- Jefferson Street – south of Carter Street

The roadway segments along Bryant Street between Oak Glen Road and Fir Avenue, and between Oak Glen Road and Date Street, as well as the segment along Oak Glen Road between 2nd Street and Bryant Street, are SANBAG CMP monitored segments. All study roadway segments are operating at LOS A under the existing traffic conditions.

3.16.1.4 Existing Traffic Volumes

The traffic data collected for the traffic analysis included 7 to 9 a.m. and 4 to 6 p.m. peak hour turning movement counts and 24-hour ADT counts conducted in October 2015. Existing AM/PM peak hour traffic volumes for the existing study intersections and existing count data are provided in the TIA (Appendix J).

3.16.2 Regulatory Framework

Roadway segment analysis was performed using the roadway classifications and daily volume capacity table obtained from the City of Yucaipa General Plan and Circulation Element. Segment

level of service (LOS) standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment LOS is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecasted ADT volumes. The City of Yucaipa follows the guidelines set forth under the SANBAG CMP. Tables 3.16-1 and 3.16-2 show LOS definitions and maximum daily volume thresholds, respectively, for the main roadway classifications contained in the current City of Yucaipa General Plan.

Table 3.16-1 Level of Service for Roadway Segments

Level of Service	Description of Operation	Volume to Capacity Ratio (v/c)
A	Excellent. Free flow, light volumes.	0.00 – 0.60
B	Very good. Free to stable flow, light to moderate volumes.	0.61 – 0.70
C	Good. Stable flow, moderate volumes, freedom to maneuver noticeably restricted.	0.71 – 0.80
D	Fair. Approaches unstable flow, moderate to high volumes, limited freedom to maneuver.	0.81 – 0.90
E	Poor. Extremely unstable flow, heavy volumes, maneuverability and psychological comfort extremely poor.	0.91 – 0.99
F	Fail. A condition of excessively high delay, considered unacceptable to most drivers.	>1.0

Table 3.16-2 Daily Roadway Capacities

Facility Type	Number of Lanes	LOS and Volume Thresholds				
		A	B	C	D	E
Major Highway	6 lanes, divided	35,400	41,300	47,200	53,100	59,000
Major Highway	4 lanes, divided	22,800	26,600	30,400	34,200	38,000
Secondary Highway	4 lanes, undivided	18,000	21,000	24,000	27,000	30,000
Controlled/Limited Access Collector Street	2 lanes, undivided	9,600	11,000	12,800	14,400	16,000
Mountain Major	2 lanes, undivided	9,600	11,000	12,800	14,400	16,000
Local Street	2 lanes, undivided	9,600	11,000	12,800	14,400	16,000

Source: City of Yucaipa General Plan, Mountain Major capacities assumed to be the same as local street

Based on the City of Yucaipa's General Plan and Circulation Element, "The City will strive to meet LOS "C" as the standard of operation for the intersections and road segments that fall under its jurisdiction." As part of the general plan update, the City proposes that LOS "D" is allowed at intersections that present special conditions, such as right of way constraints, grades, roundabouts, etc.

The SANBAG CMP includes guidelines for analyzing CMP monitored intersections and arterials. The minimum acceptable LOS for CMP designated intersection or roadway segment is LOS "E", as defined in the SANBAG CMP.

3.16.3 Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, the Project would result in a significant or potentially significant impact upon transportation and traffic if it would:

- Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit); or
- Conflict with an applicable congestion management program, including, but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways; or
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; or
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access; or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

3.16.4 Impacts

Will the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

The proposed Project is estimated to generate additional vehicle trips per day based upon the addition of 184 residential units to the area. As presented in Table 3.16-3, the Project is expected to generate 1,752 trips (876 entering and 876 exiting the site) on an average weekday. During the morning (7 to 9 a.m.) peak hour, there will be a total of 138 trips, of which 35 trips will enter the site and 104 trips will exit the site. During the evening (4 to 6 p.m.) peak hour, there will be a total of 184 trips, of which 116 trips will enter the site and 69 trips will exit the site. The trip generation estimate was prepared using the Institute of Transportation Engineers (ITE) Trip Generation Handbook, 9th Edition.

Table 3.16-3 Project Trip Generation

Trip Generation Estimate													
		Trip Generation Rate (Total)			Total Trips Generated								
					Daily			A.M. Peak Hour			P.M. Peak Hour		
Land Use	QTY	Daily	AM	PM	In	Out	Total	In	Out	Total	In	Out	Total
Single-Family (Land Use Code #210)	184	9.52	0.75	1.00	876	876	1752	35	104	138	116	69	184

Source: Institute of Transportation Engineers', Trip Generation Manual, 9th Edition

The Project trip distribution percentages were estimated considering the location of the project site, major employment centers, existing traffic counts, and existing travel pattern along

surrounding roadway network. The trip distribution assumptions were finalized through discussion with the City of Yucaipa staff. The TIA-identified trip assignments are reasonable and reflect logical trip patterns in context to the project site and the surrounding trip attraction areas. Trip distribution percentages assumed for the proposed Project are described below.

- Oak Glen Road west of Bryant Street (45 percent)
- Bryant Street south of Oak Glen Road (50 percent)
- Bryant Street north of Carter Street (5 percent)

All study intersections are expected to operate at the acceptable LOS C or better with Project implementation, with the exception of the Bryant Street/Carter Street intersection, which is projected to operate at LOS E during the morning peak hour and LOS D during the evening peak hour under 2040 traffic conditions. The proposed Project will not add any delay to this intersection. However, this intersection should be considered for signalization in the future when the Manual on Uniform Traffic Control Devices (MUTCD) peak hour signal warrants are met.

All study roadway segments are expected to operate at LOS C or better under all scenarios analyzed in this study. In addition, all transportation facilities constructed as part of the Project, including streets, sidewalks and trails, will be designed to meet City of Yucaipa standards, which allow for the accommodation of all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system. Therefore, a less than significant impact is anticipated as a result of Project implementation.

Will the Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Based on the City of Yucaipa's General Plan, the City will strive to meet LOS C as the standard of operation for the intersections and road segments that fall under its jurisdiction. As part of the general plan update, the City proposes that LOS D is allowed at intersections that present special conditions, such as right of way constraints, grades, roundabouts, etc. The SANBAG CMP includes guidelines for analyzing CMP monitored intersections and arterials. The minimum acceptable LOS for CMP designated intersection or roadway segment is LOS E, as defined in the SANBAG CMP.

Table 3.16-4 displays the intersection LOS and delay results under existing with Project traffic conditions. As presented, all signalized intersections analyzed in this study are expected to operate at a good LOS, LOS C or better, during both morning and evening peak hours. All unsignalized study intersections/stop-controlled approaches are expected to operate at a very good LOS, LOS B or better, during the peak hours under this condition.

The proposed Project will not create any significant impact to the surrounding street network and intersections analyzed in this study. All study intersections are expected to operate at the acceptable LOS C or better with Project implementation. Therefore, the Project will not conflict with an applicable congestion management program.

Table 3.16-4 Peak Hour Intersection Analysis
2015 Existing Plus Project

Intersection		Intersection Control	Movement	A.M. Peak		P.M. Peak	
				Delay (1)	LOS (2)	Delay (1)	LOS (2)
1	Bryant Street/Oak Glen Road *	Signalized	Overall Int	32.4	C	18.3	B
2	Bryant Street/Fir Avenue	Signalized	Overall Int	12.0	B	3.3	A
3	Bryant Street/Carter Street	Unsignalized	EB App	13.4	B	11.6	B
			WB app	19.0	C	16.5	C
4	Jefferson Street/Carter Street	Unsignalized	NB App	9.2	A	9.0	A
			SB App	9.0	A	9.1	A
5	Oak Glen Road/Pendleton Road	Unsignalized	NB App	11.3	B	11.4	B
			SB App	9.6	A	9.3	A
6	Oak Glen Road/Casa Blanca Avenue	Unsignalized	NB App	10.0	B	10.1	B
			SB App	8.9	A	8.7	A
7	Oak Glen Road/Cherry Croft Drive	Unsignalized	SB App	9.8	A	9.6	A
8	Pendleton Road/Date Street	Unsignalized	EB App	8.4	A	8.7	A
			WB app	0.0	A	9.2	A
9	Jefferson Street & Fir Avenue	Unsignalized	EB App	8.3	A	8.4	A
10	Jefferson Street & Cherry Croft Drive (B St)	Unsignalized	EB App	9.3	A	9.7	A
			WB app	8.9	A	9.1	A
11	Oak Glen Road & O Street	Unsignalized	SB App	8.7	A	8.6	A

Source: AECOM
(1) Delay – In seconds
(2) LOS – Level of Service
* Indicates San Bernardino Association of Governments (SANBAG) Congestion Management Program (CMP) Monitored Intersection

Will the Project result in a change in air traffic patterns, including either an increase in traffic levels or change in location that results in substantial safety risks?

The 2004 General Plan identifies the closest airport to the Project is Redlands Municipal, located approximately 10 miles to the northwest. The maximum allowed building height of approximately 35 feet for structures in the RL-1 District would not affect or change air traffic patterns that would result in a safety risk. Therefore, a less than significant impact is anticipated and no mitigations are required.

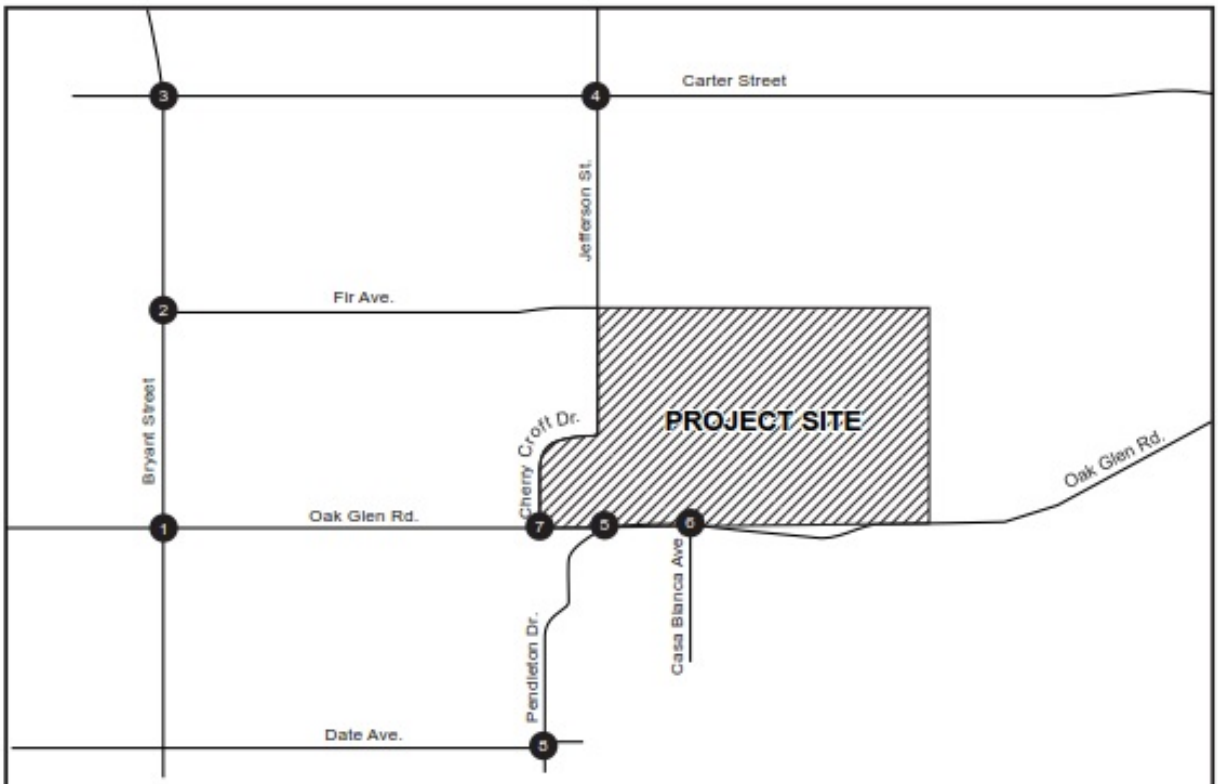
Will the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

New public streets are proposed to provide access to the new residential units of the Project. Street designs will be reviewed and approved by the City's Engineering Department for Project roadway designations prior to recordation of the final map. A less than significant impact is anticipated and no mitigation measures are required.

Will the Project result in inadequate emergency access?

New public streets are proposed to provide access to the new residential units of the Project. Street designs will be reviewed and approved by the City's Engineering Department for Project roadway designations, which account for emergency access needs and requirements. A less than significant impact is anticipated and no mitigation measures are required.

Figure 3.16-1 Intersection Location Map



ID	Intersection
1	Bryant Street/Oak Glen Road *
2	Bryant Street/Fir Avenue
3	Bryant Street/Carter Street
4	Jefferson Street/Carter Street
5	Oak Glen Road/Pendleton Road
6	Oak Glen Road/Casa Blanca Avenue
7	Oak Glen Road/Cherry Croft Drive
8	Pendleton Road/Date Street

* Indicates San Bernardino Association of Governments (SANBAG) Congestion Management Program (CMP) Monitored Intersection

0 1000 2000
Scale in Feet

Study Intersections

AECOM | WILSON CREEK ESTATES PROJECT | FIGURE NO. 3.16-1

Will the Project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Public transportation is provided to the City of Yucaipa by Omnitrans, the local public service provider. Based on review of available bus routes for Omnitrans, bus service is not currently provided to the project area. Bicycle racks and other similar facilities are not typical facilities installed in single-family residential areas, since the residents can store bicycles on their property. No impact is anticipated and no mitigation measures are required.

3.16.5 Mitigation Measures

Based on the results of the traffic study, there are no anticipated AM and PM peak hour Project added trips at the Bryant Street/Carter Street intersection. The development of the Project will not impact nor deteriorate the forecast intersection delay of the Bryant Street/Carter Street intersection, which is projected to operate at LOS E during the morning peak hour and LOS D during the evening peak hour under 2040 traffic conditions with and without the Project. The Project may elect to proactively contribute to the implementation of the following mitigation measure to improve the forecast future LOS E/D operation of this intersection:

> TR-1: Signalization of the Bryant Street/Carter Street intersection will be required when the MUTCD peak hour signal warrants are met. Based on the prevailing growth in the area, the anticipated year of implementation of the signal will be by Year 2025 contingent upon meeting traffic signal warrants. The Project may proactively contribute in a fair-share program (based on and not to exceed 50 daily or five peak hour Project added trips) toward the costs of the signalization of this intersection.

3.16.6 Significant Effects after Mitigation

With application of mitigation measure TR-1, the future LOS of the Bryant Street/Carter Street intersection will improve to acceptable LOS A and the Project will continue to have a less than significant impact on transportation and traffic resources.

3.17 UTILITIES / SERVICE SYSTEMS / ENERGY

3.17.1 Setting

3.17.1.1 Water

The YVWD is the purveyor (retailer) providing water to the City and the project site. YVWD is located in the upper portion of the Santa Ana Watershed approximately 40 miles west of Palm Springs, 70 miles east of Los Angeles, and 120 miles north of San Diego.

YVWD relies on four primary water resources to meet annual water demands: groundwater resources, local surface water resources; imported water resources; and recycled water resources. Local water is supplied from groundwater through local wells, and surface water collected from Birch Creek, Oak Glen Creek, Adams Tunnel, and Clark Tunnel. Additionally, the District purchases imported water from the State Water Project through the San Bernardino Valley

Municipal Water District and the San Gorgonio Pass Water Agency for direct filtration and for recharge of the groundwater basin.

3.17.1.2 Wastewater/Sewer

YVWD also provides sewer collection and sewer treatment services. Sewer treatment takes place at the Wochholz Regional Water Recycling Facility that provides advanced treatment, including the capability to demineralize the recycled water. The demineralization process involves a reverse osmosis system that separates small molecules from the recycled water supply.

3.17.1.3 Electricity

Electrical power in the City is provided by Southern California Edison.

3.17.1.4 Natural Gas

Natural gas is administered by Southern California Gas Company.

3.17.1.5 Solid Waste

Solid waste collection services in the City of Yucaipa are provided by Burrtec. Burrtec provides service to residential and commercial customers for solid waste, recyclables, construction debris, and green waste pick-up. Landfills in San Bernardino County are managed by the County's Solid Waste Management Division (SWMD). SWMD's waste disposal system consists of five regional landfills and nine transfer stations. Solid waste from the City is disposed primarily at the San Timoteo Sanitary Landfill in the City of Redlands. The San Timoteo Sanitary Landfill has a maximum permitted throughput of 2,000 tons per day and a remaining capacity of 13,605,488 cubic yards. It is estimated to close in 2043. The other landfill used in the region is the Mid-Valley Sanitary Landfill in the City of Rialto, San Bernardino County. Mid-Valley Sanitary Landfill has a maximum permitted throughput of 7,500 tons per day and a remaining capacity of 67,520,000 cubic yards. It is estimated to close in 2033 (CalRecycle 2013).

3.17.1.6 Energy

Energy consumption is analyzed in an EIR because of the environmental impacts associated with its production and usage. Such impacts include the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.) and emission of pollutants during both the production and consumption phases. In 2013, total energy usage of the State of California was 7,684 trillion British thermal units (BTUs). This energy use can be broken down by sector with the largest user being transportation at 37.8 percent, followed by Industrial at 23.6 percent, and both Residential and Commercial sectors at 19.3 percent (DOE 2014a). Energy consumption is addressed below, and also in Section 3.7, Greenhouse Gas Emissions.

Electricity

Electricity generation is typically measured in gigawatt-hours (GWh), megawatt-hours (MWh), or kilowatt-hours (kWh). In 2013, total electricity retail sales in California was **261,524,911** MWh, with a ranking of '2' in the U.S. and a direct use of 12,077,629 MWh (DOE 2014b). Nuclear power typically provided 20 percent of the state's total electricity generation. California's electrical system has also become more reliant on renewable energy sources, including cogeneration, wind energy, solar energy, geothermal energy, and hydroelectric plants. However,

the recent drought has led to less hydropower (reduced from 20 percent to 10 percent of California's total electricity generation) and increased natural gas generation.

Natural Gas

In 2013, California consumed 2,414,518 million cubic feet of natural gas and produced 252,310 million cubic feet.

Transportation Fuels

Although gasoline consumption has been declining since 2008, it is still the dominant fuel used in transportation (CEC 2014). In 2012, total gasoline consumed in the state was 14.6 billion gallons (BOE 2014a). Diesel fuel is the second most used transportation fuel in California behind gasoline. In 2012, more than 2.6 billion gallons of diesel were sold in California (BOE 2014b).

3.17.2 Regulatory Framework

3.17.2.1 Federal

National Energy Act

The National Energy Act was approved by the U.S. Congress in 1978. The Act included the Public Utility Regulatory Policies Act (Public Law 95-617), Energy Tax Act (Public Law 95-318), National Energy Conservation Policy Act (NECPA) (Public Law 95-619), Power Plant and Industrial Fuel Use Act (Public Law 95-620), and the Natural Gas Policy Act (Public Law 95-621). The intent of the National Energy Act was to promote greater use of renewable energy, provide residential consumers with energy conservation audits to encourage slower growth of electricity demand, and promote fuel efficiency.

Energy Policy Act

Adopted in 2005, the Energy Policy Act included a comprehensive set of provisions to address energy issues. The Energy Policy Act included tax incentives for the following: energy conservation improvements in commercial and residential buildings; fossil fuel production and clean coal facilities; and construction and operation of nuclear power plants. Subsidies were also included for geothermal, wind energy, and other alternative energy producers.

Energy Independence and Security Act

Signed into law in December 2007, the Energy Independence and Security Act included an increase in auto mileage standards and addressed conservation measures and building efficiency. The Energy Independence and Security Act also included a new energy grant program for use by local governments in implementing energy-efficiency initiatives, as well as a variety of green building incentives and programs.

3.17.2.2 State

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned electric, natural gas, telecommunication, water, railroad, rail transit, and passenger transportation companies. The California Energy Commission (CEC) is California's energy policy and planning agency. It was

established by the Warren-Alquist Act in 1974, in response to the energy crisis of the early 1970s and the state's unsustainable growing demand for energy resources. CEC is committed to reducing energy costs and environmental impacts of energy use, such as greenhouse gas (GHG) emissions, while ensuring a safe, resilient, and reliable supply of energy (CEC 2015).

California Energy Code

The California Energy Code (California Code of Regulations [CCR] Title 24) provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. These energy efficiency building standards are updated approximately every three years. On July 1, 2014, the California Building Standards Commission adopted the current 2013 California Green Building Standards Code for all new construction statewide. The code sets targets for energy efficiency, water consumption, diversion of construction waste from landfills, and use of environmentally sensitive materials in construction and design.

California Senate Bill 1078

California Senate Bill (SB) 1078 established California's Renewable Portfolio Standard (RPS) in 2002. SB 1078 required retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 changed the target date to 2010. EO S-14-08 expanded the state's Renewable Energy Standard to 33 percent renewable power by 2020. This new goal was codified in 2011 with the passage of SB X1-2.

Executive Order B-16-12

Executive Order B-16-12 orders State entities under the direction of the Governor including ARB, CEC, and CPUC to support the rapid commercialization of zero emission vehicles (ZEV). The Executive Order calls for infrastructure to support up to one million zero emission vehicles by 2020, over 1.5 million zero emission vehicles on California roads by 2025, and annual displacement of at least 1.5 billion gallons of petroleum fuels by 2025 (CA 2015d).

3.17.3 Thresholds of Significance

The City utilizes CEQA Guidelines Appendix G for determining significant impacts upon utilities/service systems. The NOP and Appendix G suggest that a Project-related significant impact would occur if the Project would:

- Exceed wastewater treatment requirements of the applicable RWQCB; or
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- Have sufficient water supplies available to serve the Project from existing entitlements and resources or are new or expanded; or

- Result in a determination by the wastewater treatment provider, which serves or may serve the Project, that it has demand in addition to the provider's existing commitments; or
- Be served by a landfill(s) without sufficient permitted capacity to accommodate the Project's solid waste disposal needs; or
- Comply with federal, state, and local statutes and regulations related to solid waste

Appendix F of the State CEQA Guidelines provides guidance for evaluation of environmental impacts related to energy. Impacts on energy conservation are considered significant if implementation of the project would:

- Increase overall per capita energy consumption; or
- Increase reliance on fossil fuels such as coal, natural gas, and oil, and decrease reliance on renewable energy sources.

3.17.4 Impacts

Will the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The proposed Project would be served by the YVWD. According to YVWD's 2010 Urban Water Management Plan (UWMP), their wastewater treatment facility has a capacity of 6.67 million gallons per day. Waste discharge from the plant is regulated by the RWQCB in compliance with the NPDES. YVWD requires each applicant for service to meet with them and obtain a Preliminary Project Service Evaluation. This Evaluation would specify the types of improvements required for a project. YVWD has indicated they currently have the ability to serve the proposed Project.

Will the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Water service would be provided by YVWD, which operates the Yucaipa Valley Regional Filtration facility that filters water obtained from the State Water Project. According to YVWD's 2010 UWMP, adequate water can be supplied, even during multiple dry year conditions between 2015 and 2035. No expansion of the existing treatment plant is currently required. The project proponent will pay applicable fees to connect to the existing sewer system; these fees contribute to system maintenance and capacity improvements. As a result, the impact would be less than significant.

Will the Project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The proposed development will require new storm water drainage facilities as well as connection to existing facilities. As a condition of Project approval and prior to this issuance of grading

permits, developers are required to submit a Storm Water Quality Management Plan (SWQMP) that describes BMPs and site design measures that will be implemented to minimize site runoff. It is created to define and control the handling of stormwater runoff from the completed project site permanently. Funding for drainage facilities would come from the City's Street Maintenance Division funds and development impact fees collected during the time of Project development. Therefore, the impact would be less than significant.

Will the Project have sufficient water supplies available to serve the Project from existing entitlements and resources or are new or expanded needed?

The project site is within the service area boundaries of YVWD. According to YVWD's UWMP, they have adequate water resources to meet projected demand, even during multiple dry year conditions between 2015 and 2035. The project proponent will pay applicable fees to connect to the existing water system; these fees contribute to system maintenance and capacity improvements Based upon adopted plans and ability to serve projected development, no new resources or entitlements would be necessary to meet projected Project demands.

Will the Project result in a determination by the wastewater treatment provider, which serves or may serve the Project, that it has demand in addition to the provider's existing commitments?

Sufficient capacity is available by YVWD to serve the wastewater needs of the Project. According to current development plans, approximately 10 percent of the lots within the Project may not be able to connect to the existing sewer system, due to the potential depth of the sewer line and, thus access to the facility for maintenance. Lots with this situation are located along the easterly half of the northerly boundary, with the balance in the north-central portion of the property. YVWD has a requirement for new projects to connect to sewer. If this cannot or does not occur, YVWD has an off-set process whereby a developer can pay for existing non-sewered lots to connect to the sewer system. As such, the number of non-sewered lots within YVWD would not increase. This process is to be used for those lots placed on septic systems. With sufficient sewer capacity available, and with implementation of YVWD's off-set process for lots that may require septic systems, impacts will be less than significant.

Will the Project be served by a landfill(s) without sufficient permitted capacity to accommodate the Project's solid waste disposal needs?

Solid waste services in the City of Yucaipa are provided by Burrtec, and disposed of within the San Timoteo Sanitary Landfill. According to information from the CalRecycle website, operated by the State of California, this landfill has an average annual capacity of 500,000 to 749,999 tons per year, and has a remaining capacity of over 13 million cubic yards. Information on the CalRecycle website provides solid waste characterization databases by types of use, referenced from various environmental documents. Although the State does not officially endorse this information, it does provide some point of reference. The latest study on the list identified a generation rate of almost 10 pounds per dwelling per day for single-family homes. This would result in approximately 304 tons of solid waste per year. Since the daily landfill capacity is 2,000 tons per day, the landfill has the capacity to meet projected demand and impacts would be less than significant.

Will the Project comply with federal, state, and local statutes and regulations related to solid waste?

The project area would be served by a City-approved waste disposal service that complies with the applicable regulations, including recycling in conformance with California PRC Sections 42900 et seq., City Ordinance No. 119, and City of Yucaipa Municipal Code Chapter 8.28. Impacts would be less than significant.

Will the project increase overall per capita energy consumption, or increase reliance on fossil fuels such as coal, natural gas, and oil, and decrease reliance on renewable energy sources?

The construction of the proposed Project would include the use of energy consuming construction equipment. The proposed Project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment. In addition, electricity would be used for construction associated buildings, lighting, and electrically driven equipment such as pumps and other tools. While construction activities would require the use of electrical power and other energy resources, this use would be temporary, and would not be excessive, wasteful, or require the unnecessary consumption of resources. Energy consumption in the construction phase would not be great enough to cause the need for new electrical systems, or require substantial alterations to existing energy systems.

Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California regulations (CCR Title 13, Sections 2449(d)(3) and 2485) limit idling from both on-road and off-road diesel-powered equipment and are enforced by ARB. Also, given the high cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. Therefore, it is anticipated that the construction phase would not result in wasteful, inefficient, and unnecessary consumption of energy.

Operation of the proposed Project would require electrical power to at individual home sites. The usage of electrical power would be greater than that of existing conditions, however, it would not be wasteful or require unnecessary consumption of resources. The operation of the proposed Project would also consume energy, specifically fuel, as car trips are added to and from the proposed Project. Fuel consumption would be primarily related to vehicle use associated with the project, which is discussed in Section 3.16, Transportation and Traffic.

Operation of the proposed Project would increase fuel consumption and the demand for energy resources; however, growth associated with the proposed Project is limited, under 500 new residents in a total of 184 new housing units, and all new utilities required would be within the proposed Project site, and would not significantly increase per capita energy consumption or significantly increase reliance on fossil fuels. Despite the small increase in fuel consumption, adherence to Federal and State regulations would minimize wasteful, inefficient, energy consumption, and impacts would be less than significant.

3.17.5 Mitigation Measures

No Project-related impacts were identified with regard to utilities and, as such, mitigation measures are not required.

4.0 CUMULATIVE IMPACTS

CEQA Guidelines require a discussion of cumulative impacts of a project "when the project's incremental effect is cumulatively considerable" (2011 CEQA Guidelines Section 15130). As defined by Section 15065 (a)(3), "cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (2011 CEQA Guidelines Section 15065 (a)(3)). These cumulative impacts are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355).

The discussion of cumulative impacts is further guided by CEQA Guidelines Section 15130(a) and (b), as summarized below:

- An EIR should not discuss impacts that do not result in part from the project evaluated in the EIR.
- When the cumulative effect of the project's incremental contribution and the effect of the other projects are not significant, the EIR shall briefly indicate why and not discuss it further.
- An EIR may identify a significant cumulative effect, but determine that a project's contribution is less than significant. That conclusion could result if the project is required to implement or fund its fair share of a mitigation measure designed to alleviate the cumulative impact.
- The discussion of cumulative impacts shall reflect the possibility of occurrence and severity of the impacts and focus on cumulative impact to which the identified other projects could contribute.

In general, effects of a particular action or a group of actions would be considered cumulative impacts under the following conditions:

- effects of several actions in a common location,
- effects are not localized (i.e., can contribute to effects of an action in a different location),
- effects on a particular resource are similar in nature (i.e., they affect the same specific element of a resource)

4.1 AFFECTED ENVIRONMENT

Information on past, present, and reasonably foreseeable future projects, as well as identified Project impacts, were gathered through online review of available environmental documentation (conducted following publication of the Project NOP in September 2015). The initial radius used for conducting cumulative project research was approximately three miles surrounding the project site, which included only projects within the City of Yucaipa.

4.2 PRESENT AND REASONABLY FORESEEABLE PROJECTS

Table 4-1 shows the cumulative projects considered in this analysis. The discussion of present and reasonably foreseeable probable projects focuses on sizable (50 or more homes) development projects that are currently entitled and that could occur concurrently with the proposed Project. Construction on the proposed project site would be phased and intermittent, as the Project is anticipated to be developed as individual lot sales. Precise construction timelines are not known for either the Project or the cumulative projects considered in this section, and it is highly unlikely that all of the projects would occur simultaneously. However, in the interest of a conservative analysis, the potential for simultaneous construction on all projects was considered. Further, for comparison purposes only although, as this is custom home lots, the buildout of the site will likely occur well past the horizon year of any analysis and therefore have less impact than that in this assessment.

Table 4-1 Cumulative Project List

Project	General Location	Approximate Distance from Project Site	Total Units/Site Size
Tract 18593	north of Oak Glen Road, east of Casa Blanca Ave.	0.1 mile (abutting)	58 SF detached homes on 78.8 acres
Tract 17725	west of 3rd Street, east of 4th Street, and south of Avenue H	5.6 miles	108 SF condo units on 14.9 acres
Tract 18948	NEC Chapman Heights Rd. and Oak Glen Rd.	3.0 miles	143 SF detached homes on 20.3 acres
Tract 17229	SE corner of Jefferson and Carter Street	0.1 mile (abutting)	229 lot subdivision on 318 acres

4.3 CUMULATIVE IMPACT ANALYSIS

As required by CEQA, the discussion below identifies the potential for cumulative impacts and discusses the project's contribution on these impacts. In the discussion, "proposed Project" is used to refer to the Project analyzed in this EIR, to differentiate from cumulative projects.

4.3.1 Aesthetics

Primary aesthetic features in the vicinity of the proposed Project include the San Bernardino Mountains, Crafton Hills, and other undeveloped hilly areas to the north and the northeast. The proposed Project is located in the rural northern outskirts of Yucaipa and is surrounded by hillsides. The projects listed in Table 4-1 are scattered throughout developed and undeveloped portions of the City. The nearest project to the project site is Tract 17229, which is located to the north of the proposed Project along Jefferson Street. Although both projects would develop adjacent, relatively undisturbed land, both areas share the RL-1 land use designation, which mandates a minimum lot size of one acre per lot and a maximum building height of 35 feet. Due to these restrictions, the relatively flat nature of the City itself and the large natural features that dominate area topography, no vistas affected by the proposed Project would be substantially affected by any other project under consideration in this section.

Additionally, all projects would be required to adhere to all applicable aesthetic regulations, as detailed in Section 3.1. These regulations include Goal OS-9 of the Open Space and Conservation Element of the City of Yucaipa's General Plan, which requires the undergrounding

of utilities, providing a minimum of 10 percent landscaping for new development, addressing development on prominent ridgelines and preventing obstruction of scenic views. Project compliance with these criteria would be ensured through implementation of Mitigation Measure AES-1, which would require submittal of a Building Pad Constraints Exhibit for City review and approval prior to the issuance of a grading permit. **With implementation of this mitigation measure, the proposed Project's contribution to cumulative aesthetic impacts would not be cumulatively considerable, and thus less than significant.**

4.3.2 Agricultural and Forestry Resources

As described in Section 3.2, a California Department of Conservation LESA was prepared for the proposed Project site. The score assigned to the proposed Project, 91.65 out of 100, indicates a significant impact to agricultural resources. Figure 3.2-1 shows that important farmland is present both within and adjacent to the Project boundary. Therefore, the nearby development of 318 acres from construction of Tract 17229 would impact the same currently undeveloped agricultural area as the proposed Project.

The North Bench area is designated RL in the General Plan. RL allows for agricultural and residential uses: "It also includes areas where animal uses, agriculture, and compatible uses may coexist or be permitted." The loss of solely agricultural activity cumulatively is not considered significant with implementation of mitigation measure AG-1. **Therefore, implementation of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact to agricultural resources.** The Project would not result in any impacts to forest land.

4.3.3 Air Quality

Due to the inherently cumulative nature of regional air quality impact analysis, cumulative impacts from the proposed Project are addressed in Section 3.3, Air Quality. A significant air quality impact would occur if implementation of the Project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.

Because the proposed Project would be less than significant with implementation of mitigation measure AQ-1, and would not exceed the project-level air quality significance thresholds for VOC emissions, the proposed Project's construction emissions would not have a cumulatively considerable contribution to the region's air quality. **Therefore, implementation of the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact to air quality.**

4.3.4 Biological Resources

A white-tailed kite, a CDFW fully protected species, was detected on the project site and suitable habitat for burrowing owl was also observed. Additionally, Plummer's mariposa lily and Parry's spineflower, both special-status species, were found to have a high potential to occur. Implementation of Mitigation Measures BIO-1 and BIO-2, as described in Section 3.4, would reduce project-level impacts to candidate, sensitive, or special-status species to less than significant. Even with implementation of both the proposed Project and the cumulative projects, the relatively undeveloped nature of the area surrounding the proposed Project would support

individuals displaced by construction. Consultation with CDFW as a part of Mitigation Measure BIO-2 would further ensure cumulative impacts to species are minimized to the extent possible.

With the implementation of Mitigation Measures BIO-1 and BIO-3, impacts to riparian habitats would be reduced to less than significant. Implementation of the proposed Project would not result in substantial alterations to downstream riparian habitats. Developers of both the proposed Project and any cumulative project that would impact waters of the U.S. or state would be required to obtain necessary CWA permits from USACE and CDFW (Mitigation Measure BIO-4). Acquisition of these permits and the conditions of approval imposed thereon would ensure that the combined effect of the projects on protected wetlands would not be substantially adverse.

Currently, the project area is largely undeveloped land that supports relatively free wildlife movement. The native habitats within Wilson Creek are also currently connected to large tracts of open land to the north and east. The development of Tract 17229 to the immediate north of the proposed Project would reduce the extent of this open land, but would occur adjacent to already-developed residential areas and would not significantly impede the movement of wildlife between viable open space areas. The County of San Bernardino General Plan Open Space Element (Open Space Overlay Map) identifies the Live Oak Canyon Wildlife Corridor as located approximately three miles west of the project site, west of Yucaipa Regional Park. Implementation of the cumulative projects would not interfere with the function of this corridor, which takes into account the development present in that area. Implementation of Mitigation Measure BIO-5, which would require pre-construction nesting surveys and precautions regarding nest removal, would ensure that Project contributions to cumulative impacts to native and migratory species are less than significant. All cumulative projects would be subject to Division 9, Chapter 5 of the Municipal Code (Oak Tree Conservation). Conformance to this ordinance would result in less than significant cumulative impacts related to conflicts with local biological resource policies or ordinances. According to the 2004 General Plan, the City of Yucaipa is not a part of any HCP or NCCP. There would be no cumulative impact related to these plans.

With implementation of the mitigation measures described in Section 3.4, the proposed Project's contribution to cumulative biological resource impacts would not be cumulatively considerable, and thus are less than significant.

4.3.5 Cultural Resources

The main Casa Blanca residence located in the Project APE fits the criteria for listing in the NRHP and the CRHR and is thus considered a historic resource. As described in Section 3.5, the Project has been designed to prevent and minimize impacts to this resource. Security measures would be include installation of an alarm system to the main residence, and installation of a locked gate at the lower end of the driveway by Oak Glen Road (Mitigation Measure CR-1) and a landscaping plan would be submitted to show how the landscaping and plantings in the area immediately surrounding the house would be preserved for the Casa Blanca residence's integrity of setting (Mitigation Measure CR-2). Preserving this cultural resource provides a focal point for the area's rural character, as well as a link to its history.

Additionally, Mitigation Measures CR-3 and CR-4 would minimize impacts to previously undiscovered cultural resources during Project construction, as required by law. Cumulative

projects must also comply with CEQA and all other cultural federal, state, and local regulations, which require adequate analysis and appropriate mitigation of cultural resource impacts. Therefore, cumulative impacts to cultural resources, (archaeological, native American, and paleontological resources) would be expected to be fully avoided, minimized, or mitigated.

With implementation of the mitigation measures described in Section 3.5, the proposed Project's contribution to cumulative cultural resource impacts would not be cumulatively considerable, and thus are less than significant.

4.3.6 Geology/Soils

The project site is not located within an area that is susceptible to liquefaction or soil expansion. As described in Section 3.6, several of the steeper canyon slopes within the project area have the potential for small landslides, but the impacts of these small events would be contained within the project site. Both the proposed Project and cumulative projects would be required to comply with all applicable federal, state, and local regulations pertaining to earthquakes hazards, erosion and pollutant discharge, septic system design, and other topics related to geology and soils. Any geologic or soils-related impacts associated with implementation of the Project—including lack of stability or increased risk of liquefaction—would not worsen those from another project, nor would they be worsened by any other project. **The proposed Project's contribution to cumulative impacts to geology and soils would be less than significant.**

4.3.7 Greenhouse Gas Emissions

Because no single project is large enough to result in a measurable increase in global concentrations of GHG emissions, climate change impacts of a project are considered on a cumulative basis. The analysis presented in Section 3.7 of this EIR is also applicable to the cumulative analysis. As discussed in Section 3.7, the Project could exceed the 3,000 MT CO_2e threshold established in the City of Yucaipa's CAP. Therefore, consistency with the CAP would be based on whether the Project implements the measures in the CAP's Screening Tables.

Since each lot would be constructed individually, the details of development are not available at the time of this analysis. It is unknown if each project would be consistent with the goals and strategies of the CAP. Therefore, the Project would conflict with any applicable plan, policy, or regulation for the purpose of reducing GHG emissions. Mitigation Measure AQ-1, however, mandates that each development proposal associated with the proposed Project demonstrate that the unit would comply with the CAP. **With the implementation of Mitigation Measure AQ-1, the proposed Project's contribution to cumulative impacts related to greenhouse gas emissions would be less than significant.**

4.3.8 Hazards/Hazardous Materials

Public safety hazards related to construction zones are generally limited to the immediate area of activity and have minimal potential to combine with other projects in a cumulative manner. Although cumulative projects are occurring in the vicinity of the proposed Project, access, staging, and construction for the projects would be conducted separately. The proposed Project would maintain accessibility of all public streets and would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

Hazardous materials impacts are typically very limited in their geographic scope as the effect is generally contained within a specific location or site, with some exceptions such as spreading through groundwater. Most construction projects in the area would require the use of standard hazardous materials typical of construction operations such as solvents, fuels, and lubricants. Similar to the proposed Project, any projects involving hazardous materials would be required to comply with all local, state, and federal health and safety requirements. With adherence to regulatory requirements, the potential for cumulative public safety impacts due to hazardous material would be minimized.

The proposed Project is located within a very high fire hazard severity zone, and other cumulative projects also located in high risk areas for wildfires could be a source of potential fire due to construction activities. Similar to requirements for the proposed Project, cumulative projects in high fire zones would be required to comply with the City Fire Code. With adherence to regulatory requirements regarding hazardous materials and fire hazards, the potential for cumulative public safety impacts from construction activities would be minimized.

The cumulative projects, in addition to the project, collectively would not impair implementation of, or physically interfere with, an adopted emergency response plan and/or evacuation plan. The projects on the cumulative project list (58 homes on 78.8 acres 3 miles away, 108 condo units on 14.9 acres 3 miles away, 143 homes on 20.3 acres 3 miles away, and a 229 lot subdivision on 318 acres 0.5 mile away.) would not impact emergency response and evacuation service. **The proposed Project's contribution to cumulative impacts related to hazards and hazardous materials would be less than significant.**

4.3.9 Hydrology/Water Quality

Prior to the issuance of building permits, all cumulative projects would be required to comply with applicable NPDES requirements through adoption and implementation of a SWPPP and WQMP for construction and operational phases, including for any septic tank development that may occur. Compliance with these requirements would ensure that cumulative impacts related to water quality, including waste discharge requirements and polluted runoff, are less than significant.

Water in the proposed Project vicinity comes from the YVWD, which collects water from local wells and surface water as well as imports water from the State Water Project for direct filtration and groundwater recharge. YVWD's basins are in a controlled overdraft condition in which adequate water can be extracted to meet future demand without adversely affecting aquifer volume or lowering the groundwater table. It is assumed that all residential projects considered for cumulative impacts would receive water from YVWD. Therefore, the projects would not result in a cumulative depletion of groundwater supplies.

Several lots of the proposed Project have been identified as part of state or federal jurisdictional area. Because each lot would be developed separately, verification of delineation and acquisition of USACE and CDFW permits as necessary (Mitigation Measure BIO-3) would be the responsibility of the property owner or Project contractor. Any cumulative projects found to impact state or federal waters would be similarly responsible for obtaining all necessary permits prior to the issuance of grading permits. Compliance with these requirements would minimize impacts related to erosion, siltation, and flooding both on- and off-site.

As described in Section 3.9, a number of lots within the proposed subdivision are located within a 100-year floodplain. Mitigation Measures WQHYDRO-4 and WQHYDRO-5 would require building and grading plans to be submitted to the Engineering Department for approval. This would ensure that infrastructure and grading associated with the proposed Project are situated outside jurisdictional areas of streams and drainages. With implementation of these mitigation measures, housing will not be placed within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map. Therefore, implementation of the proposed Project would not contribute to a cumulative impact related to flood hazards. Due to distance from the proposed Project and existing topography, the proposed Project would not expose people or structures to flooding, seiche, tsunami or mudflow. Thus, the proposed Project would not contribute to cumulative impacts related to these issues.

With implementation of the mitigation measures described in Section 3.9 (WQHYDRO 1 through WQHYDRO-14), the proposed Project's contribution to cumulative impacts related to hydrology and water quality would be less than significant.

4.3.10 Land Use/Planning

As described in Section 3.10, the proposed Project would not divide an established community; conflict with an applicable land use plan, policy, or regulation; or conflict with an applicable HCP or NCCP. The City of Yucaipa is not part of an established HCP or NCCP, so these regulations are not applicable to a consideration of cumulative impacts. The proposed land use is rural living on one-acre lots (RL-1), which is consistent with the current land use designation and zoning category for the area. Both the proposed Project and cumulative projects in the immediate vicinity would be constructed in a manner consistent with adopted development standards and good planning practices, including those required by the City's Development Code. Therefore, **the proposed Project's contribution to cumulative impacts related to land use and planning would be less than significant.**

4.3.11 Mineral Resources

The City of Yucaipa is not known to contain any mineral resources of statewide or regional importance, according to the CGS. Due to the size and nature of the cumulative projects, as well as the proximity of the projects to residential uses, none would be considered a viable site for mineral extraction. Furthermore, development of these projects would not impact any areas of known mineral resources as delineated on a local general plan, specific plan, or other land use plan. **The proposed Project would not contribute to cumulative mineral resource impacts.**

4.3.12 Noise

Due to the distribution of the cumulative projects throughout the City, noise receptors from the majority of the projects would be different from those of the proposed Project. Due to the proximity of Tract 17229 to the proposed Project, however, receptors could be subject to construction noise from both projects if construction were to occur simultaneously. This impact would be reduced due to the anticipated phased construction of lots within the proposed Project; however, the specific timing of each construction phase is unknown. Implementation of Mitigation Measure Noise-1, as described in Section 3.12, would either reduce the temporary increase in ambient noise level from the Project to 10 dBA or less, or circumvent the need for

noise reduction via agreement with or temporary relocation of the owner/occupant. Section 87.0905 (b)(1) of the City of Yucaipa noise ordinance sets residential noise limits at a minimum of 55 dBA L_{dn}; therefore, a reduction of Project-related noise emissions to 10 dBA would ensure that the proposed Project would not make a significant contribution to cumulative noise impacts.

All future residents within the Project site would experience noise exposure similar to that of other single-family housing within the City limits. As long as occupied structures feature air-conditioning and sound insulation (with closed windows and doors) that enable compliant interior noise levels, all residences would experience roadway traffic noise exposure compliant with the City's Noise Element standard. The addition of single-family residences would generate additional vehicle trips to and from the property. While roadway traffic volumes could experience a cumulative increase from the proposed Project and cumulative projects, increases in traffic from the proposed Project would be divided between several street outlets from the development, as shown on the Proposed Subdivision Map, Figure 2-5, and described in Section 3.16. Therefore, the Project would not have a substantial contribution to a cumulative increase in noise for any group of receptors.

With implementation of the mitigation measures described in Section 3.12, the proposed Project's contribution to cumulative noise impacts would be less than significant.

4.3.13 Population and Housing

The construction of new housing leads to population growth when additional residents move to the area. However, this population growth is controlled by land use regulations that dictate the type and density of development. The proposed Project would construct 184 new residential lots with less than 500 anticipated residents, all of which are on land identified for development designated as RL in the City's General Plan. As described in Section 3.13, the resultant increase in population would be estimated at 1 percent of the City's population. The cumulative projects would also be required to conform to the land use regulations provided by the General Plan, and would result in, while losing only 2 units, the following increases in housing capacity:

- Tract 18593, 58 homes on 78.8 acres
- Tract 17725, 108 condo units on 14.9 acres
- Tract 18948, 143 homes on 20.3 acres
- Tract 17229, 229 lot subdivision on 318 acres

These projects would not displace substantial numbers of existing houses or people. **Therefore, the proposed Project's contribution to cumulative impacts related to land use and planning would be less than significant.**

4.3.14 Public Services

The cumulative projects would not require unique or altered fire protection or police services. As a standard condition of approval, developers are required to pay development impact fees for public facilities. These fees, when considered together with the relatively small number of residences that could be created by the cumulative projects, would offset impacts to fire departments, police departments and other public facilities that could result from an increase in

population. **The proposed Project's contribution to cumulative public service impacts would be less than significant.**

4.3.15 Recreation

As described in Section 3.13, the projected population increase from implementation of the proposed Project would be approximately 1 percent. The other developments analyzed in this section would contribute similar increases to population size, all of which are consistent with the Yucaipa General Plan Update, which anticipates a 62 percent population increase over the next 20+ years. Development impact fees would offset the potential impact of new users caused by the demand from new development. Two of the cumulative projects are abutting the project site and their residents are anticipated to utilize the same facilities and parks as the project residents. El Dorado Ranch Park is the closest park to the project and the two cumulative projects but is of sufficient size and capacity to absorb the cumulative increase in use anticipated with the projects. **The proposed Project's contribution to recreation impacts would be less than significant.**

4.3.16 Transportation/Traffic

All study roadway segments are expected to operate at LOS C or better under all scenarios analyzed for the proposed Project. All study intersections are expected to operate at the acceptable LOS C or better with Project implementation, with the exception of the Bryant Street/Carter Street intersection, which is projected to operate at LOS E during the morning peak hour and LOS D during the evening peak hour under 2040 traffic conditions. As detailed in Section 3.16, the proposed Project would not add any delay to this intersection, and would not conflict with any applicable congestion management program. **The proposed Project's contribution to transportation/traffic impacts would be less than significant.**

4.3.17 Utilities/Service Systems

All cumulative projects requiring wastewater service are anticipated to receive service from the YVWD. A small number of lots within the Project may not be able to connect to the sewer system, but these lots would implement the YVWD's offset process, as described in Section 3.17. The WD permit process ensures there will not be a cumulative impact created by septic systems in the vicinity. This Evaluation would specify the types of improvements required for each project. Each project proponent will pay applicable fees to connect to the existing sewer system; these fees contribute to system maintenance and capacity improvements. Participation in this process would ensure cumulative wastewater impacts would remain less than significant. Preparation of an Water Quality Management Plan S(WQMP) by each developer would ensure cumulative storm water drainage impacts would be less than significant. According to YVMD's UWMP they have adequate water resources to meet projected demand until 2035, including a projected population increase as described in Section 4.3.13. Therefore, cumulative impacts to water use would be less than significant.

Preliminary solid waste calculations, as described in Section 3.17, indicate that the proposed Project would generate approximately 304 tons of solid waste per year. Given that each cumulative project is also a residential development of similar size, the 2,000 tons per day capacity of the applicable landfill indicates that cumulative solid waste impacts would be less than significant. **The proposed Project's contribution to impacts related to utilities and service systems would be less than significant.**

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5.0 GROWTH-INDUCING, UNAVOIDABLE, AND IRREVERSIBLE IMPACTS

5.1 SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires an EIR to describe significant environmental impacts that cannot be avoided and impacts that can be mitigated but not reduced to a level of insignificance. There are no impacts associated with the Wilson Creek Estates Project that were concluded to be significant and unavoidable.

5.2 REASONS WHY THE PROJECT IS BEING PROPOSED, NOTWITHSTANDING SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2(b) also requires a description of the reasons why the Project is being proposed, notwithstanding significant unavoidable impacts associated with the Project. The reasons why this Project has been proposed are grounded in a comprehensive listing of Project objectives included in Section 2.0, Project Description, of this Draft EIR. The underlying purpose of the proposed Project is to develop a residential community consistent with the City's General Plan Land Use Designation for the project site. Furthermore, the Project will create a livable community that enhances a rural lifestyle with interconnected sidewalks, pedestrian and bicycle trails, and a diverse mix of architectural styles.

While land use planning and real estate development must always contemplate the implications of adverse change, their fundamental purposes are to beneficially supply an array of needed land use products in a manner that optimizes environmental as well as economic realities.

For projects that result in any unmitigated or under-mitigated significant environmental effects, the City may, after making a series of findings to approve the project, while it certifies the adequacy of the Draft EIR upon adoption of a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093.

Alternatives to the proposed Project are considered in Section 6.0, Alternatives, of this Draft EIR.

5.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

According to Section 15126.2(c) of the CEQA Guidelines, an EIR is required to evaluate significant irreversible environmental changes that would be caused by implementation of a proposed Project. As stated in CEQA Guidelines Section 15126.2(c):

"Uses of nonrenewable resources during the initial and continued phases of a project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with a project. Irretrievable commitments of resources should be evaluated to ensure that such current consumption is justified."

The proposed Project would consume limited, slowly renewable, and non-renewable resources. This consumption would occur during the construction phase and continue throughout the Project's operational lifetime. Project development would require a commitment of resources that would include (1) building materials, (2) fuel for construction activities, and (3) the transportation of goods and people to and from the project site. Construction would require the use and consumption of non-replenish able or non-renewable metals such as copper, aggregate materials such as sand and stone used in concrete and asphalt, petrochemical construction materials such as plastics, and water.

Construction vehicles and equipment, and the transportation of goods and people to and from the site would also consume non-renewable fossil fuels such as gasoline and oil. Project operation would continue to expend similar non-renewable resources that are currently consumed within the City of Yucaipa and on-site. These include energy resources such as electricity, petroleum-based fuels, fossil fuels, and water. Energy resources would be used for heating and cooling buildings, transportation within the project site, and building lighting. Fossil fuels are the primary energy source for Project construction and operation. This existing, finite energy source would thus be incrementally reduced. Under Title 24, Part 6, from the California Code of Regulation, conservation practices limiting the amount of energy consumed by the Project are required during operation.

Limited use of potentially hazardous materials such as typical cleaning agents and pesticides for landscaping would be used and contained on-site. These hazardous materials would be used, handled, stored, and disposed of in accordance with manufacturer's instructions and applicable government regulations and standards. Compliance with these regulations and standards would serve to protect against significant and irreversible environmental change resulting from the accidental release of hazardous materials. In addition, demolition activities such as clearing and grubbing, rough grading for roads and parcels, would comply with regulatory requirements to ensure that there are no unidentified releases of hazardous materials into the environment. During construction, all activity would comply with regulatory requirements for the characterization and proper handling of any potential hazardous materials found on-site.

Project construction and operation would be committed to the use of slowly renewable and nonrenewable resources and would limit the availability of these resources and the Project's residential lots for future generations or for other uses during the life of the Project. However, the continued use of such resources would be on a relatively small scale and consistent with regional and local urban design and development goals for the area. As such, although irreversible environmental changes would result from Project implementation, such changes would not be considered significant.

5.4 GROWTH-INDUCING IMPACTS

According to Section 15126.2(d) of the CEQA Guidelines, an EIR is required to discuss the ways a project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth-inducing impacts include the removal of obstacles to population growth (e.g., the expansion of wastewater treatment plants allowing more development in a service area) and the development and construction of new service facilities that could significantly affect the environment individually

or cumulatively. In addition, growth must not be assumed as beneficial, detrimental, or of little significance to the environment.

The development of the project site and the construction of new residential units would not be considered growth inducing because it is potentially developing concurrent with adjacent similar land development projects. As the Project is located in a primarily a rural area within City limits, new infrastructure, improvement of abutting infrastructure (e.g., roads and utilities), would be expanded to suit the needs of the Project. The Project would include residential development consisting of 184 dwelling units. This new population would be expected to generate some demand for publicly provided services, including police and fire protection, library, school, and recreation facilities though of not sufficient scale to mandate the expansion of those facilities and services. Off-site expansion to accommodate Project service demand would be considered indirectly growth inducing.

The additional roads that are being constructed within the project, and the upgrades to existing abutting roads, do not have the potential to foster economic or population growth outside of the project, nor facilitate the construction of additional housing in the surrounding environment. The new roads to be built will be contained within the project site as is the new water, wastewater, utilities infrastructure, connecting to existing infrastructure without having to further upgrade the capacities of that other infrastructure.

Project populations would also generate new demand for secondary services such as regional or specialty retail, restaurant or food delivery, and recreation and entertainment, as well as services and suppliers to support the new residents. Therefore, the increase in demand of secondary services, in combination with any existing unmet demand, may induce new sources of supply if collective demand would warrant. However, the proposed Project's contribution to growth inducement is expected to be limited due to the small number of people being added, under 500 new residents, and because these existing programs have the capacity to service this new population.

On-site improvements to the existing water and wastewater distribution system would be constructed to serve the proposed development and would be sized according to projected demands, including maximum day demands. Project infrastructure improvements are required to meet flow and distribution needs. Therefore, these improvements are not considered growth-inducing.

5.5 POTENTIAL SECONDARY EFFECTS

Section 15126.4(a)(1)(D) of the CEQA Guidelines requires mitigation measures to be discussed in less detail than the significant effects of the proposed Project if the mitigation measure(s) cause one or more significant effect(s) in addition to those that would be caused by the proposed Project. In accordance with the CEQA Guidelines, proposed Project mitigation measures that could cause potential impacts were evaluated and there are no potential secondary effects that could occur as a result of implementing Project mitigation measures.

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6.0 ALTERNATIVES

PRC Section 21061 and the CEQA Guidelines (Section 15126.6) obligate the City to consider a "range of reasonable alternatives" that, should they be implemented, could reduce or avoid the environmental impacts of the proposed Project. In formulating a range of reasonable alternatives, the City sought to identify and consider those development options that have the potential to reduce or eliminate any or all of the Project-related significant or potentially significant environmental effects.

6.1 INTRODUCTION

CEQA and the Guidelines state that the purpose of an EIR is to:

"… provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project." (PRC Section 21061)

"Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment, the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or be more costly." (CEQA Guidelines Section 15126.6)

In identifying and assessing alternatives, however, the CEQA Guidelines further indicate that an EIR need not consider alternatives that are infeasible. The alternatives discussed in the EIR should be ones that provide substantial environmental benefits over the Project as proposed (Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553, 566). While there is no "ironclad rule" governing the nature or scope of the alternatives to be discussed other than the rule of reason, the City must describe the rationale for selecting the alternatives that are presented in the EIR. It must also disclose any alternatives that were considered but subsequently eliminated from further analysis (CEQA Guidelines Section 15126.6).

6.2 ALTERNATIVES CONSIDERED BUT REJECTED

In accordance with CEQA Guidelines Section 15126.6(c), an EIR should identify alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for their rejection. According to the CEQA Guidelines, the following factors may be used to eliminate alternatives from detailed consideration: the alternative's failure to meet most of the basic Project objectives, the alternative's infeasibility, or the alternative's inability to avoid significant environmental impacts. Alternatives that have been considered and rejected as infeasible include:

Alternative Site: Alternative locations also within the Rural Living 1, Improvement Level 3 (RL-1) Zoning and General Plan designations.

The Wilson Creek Estates site is proposed for development of single-family residential uses consistent with the Yucaipa General Plan. Development of the proposed Project on another site would not be feasible for the following reasons.

Planned development in the area is predominantly for rural living, with ½- to one-acre lots, limited agriculture, and equestrian uses. The project applicant is already in possession of the project site, the investment in which precludes the purchase of another site of comparable size and physical characteristics on which the proposed uses could be constructed. Given the existing and future development pattern in the project area (and the proposed Project's contribution to that pattern) and the project applicant's ownership of a substantial portion of the property, development of the proposed uses on another site was determined infeasible. Further, the developer does not own or be able to control other property in the vicinity on which a project of this nature could be proposed.

6.3 ALTERNATIVES CARRIED FORWARD FOR DETAILED ANALYSIS

Based on the Project objectives established for the Project (refer to Section 1.2, Proposed Project Actions and Project Objectives), the Environmental Impact Analysis (refer to Section 3.0), consideration of the Yucaipa General Plan and Development Code, and consultation with Yucaipa planning staff, the following three alternatives were selected for evaluation:

- Alternative 1 – No Project
- Alternative 2 – Lower Density
- Alternative 3 – Planned Development (previously submitted application withdrawn by applicant with riparian and biologically sensitive areas protected)

Each of these alternatives is described and evaluated in the sections that follow. Alternative 1 – No Project assumes that the Project is not approved and the project site remains unchanged from existing conditions. A No Project Alternative is required under Section 15126.6(e) of the CEQA Guidelines.

In accordance with CEQA Guidelines Section 15126.6(d), each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less, similar, or greater than the corresponding impacts of the Project. The evaluation of each of the alternatives follows the process described below:

- First, the net environmental impact significance of the alternative after implementation of reasonably anticipated mitigation measures is determined for each environmental issue area analyzed in the EIR.
- Second, where the net impact of the alternative would be clearly less adverse or more beneficial than the impact of the Project, the comparative impact is said to be "less." Where the impacts of the alternative and Project would be roughly equivalent, the comparative impact is said to be "similar." Where the alternative's net impact would clearly be more adverse or less beneficial than the Project, the comparative impact is said to be "greater." These secondary ratings appear in parentheses in the table.

Table 6-1 provides a summary matrix that compares the impacts associated with the proposed Project with the impacts of each of the proposed alternatives. Of course, there are numerous potential combinations between a respective alternative and the proposed Project or between two or more alternatives. No attempt has been made to analyze all of these combinations, though it can be presumed that the impact profile of most such combinations would fall within the overall envelope of identified impacts for all of the evaluated alternatives.

Table 6-1 Comparison of Proposed Project Impacts with Alternatives

Environmental Issue	Proposed Project	Alternative 1 - No Project	Alternative 2 – Lower Density	Alternative 3 – PD with Natural Resources Protected
Aesthetics	Less than significant impact	Less	Similar (LTS Impact)	Similar (LTS Impact)
Agriculture and Forestry	Less than significant impact	Less	Similar (LTS Impact)	Similar (LTS Impact)
Air Quality	Less than significant impact	Less	Less (but still significant)	Similar (Significant Impact)
Biological Resources	Less than significant impact with mitigation	Less	Similar (LTS Impact)	Less (LTS Impact with mitigation)
Cultural Resources	Less than significant impact	Less	Similar (LTS Impact)	Less (LTS Impact)
Geology and Soils	Less than significant impact	Similar	Similar (LTS Impact)	Similar (LTS Impact)
Greenhouse Gas Emissions	Less than significant impact	Similar	Similar (LTS Impact)	Similar (LTS Impact)
Hazards and Hazardous Materials	Less than significant impact	Similar	Similar (LTS Impact)	Similar (LTS Impact)
Hydrology and Water Quality	Less than significant impact	Similar	Similar (LTS Impact)	Similar (LTS Impact)
Land Use and Planning	Less than significant impact	Greater	Similar (LTS Impact)	Similar (LTS Impact)
Noise	Less than significant impact	Less	Similar (LTS Impact)	Similar (LTS Impact)
Population and Housing	Less than significant impact	Less	Less (LTS Impact)	Similar (LTS Impact)
Public Services	Less than significant impact	Less	Similar (LTS Impact)	Similar (LTS Impact)
Transportation and Traffic	Less than significant impact with Mitigation	Less	Similar (LTS Impact with mitigation)	Similar (LTS Impact with mitigation)
Utilities and Services	Less than significant impact	Less	Similar (LTS Impact)	Similar (LTS Impact)

LTS = Less than Significant

6.3.1 Alternative 1 – No Project

In accordance with the CEQA Guidelines, the No Project Alternative for a development project on an identifiable property consists of the circumstance under which the project does not proceed. Section 15126.6(e)(3)(B) of the Guidelines states that, "In certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained." Accordingly, Alternative 1 – No Project provides a comparison between the environmental impacts of the proposed Project in contrast to the environmental impacts that could result from not approving, or denying, the proposed Project. The project site could remain in its current state

and condition for an undetermined period of time and not be the subject of any further development proposals. Evaluation of this alternative will determine if any significant impacts identified with the proposed Project would be eliminated or if any less than significant impacts would be further reduced.

Under this alternative, the site would be retained in its current condition with the potential for agriculture to be re-established, no physical changes would occur on the site, and authorized on-site activities would be confined to routine property maintenance.

6.3.1.1 Environmental Impacts

Aesthetics

Under the No Project Alternative, the visual character and quality of the site would be maintained in its existing condition. No additional structures or landscaping would be introduced on the property beyond the existing agricultural uses and related structures. Selection of the No Project Alternative would avoid the Project's potential impacts to aesthetics.

Agriculture and Forestry Resources

The No Project Alternative would leave the property in its existing condition and the site would continue to be utilized primarily for row crop farming or remain as undeveloped land. Selection of the No Project Alternative would avoid the Project's potential impacts to agricultural resources.

Air Quality

As identified in Subsection 3.3 of the EIR, the proposed Project would result in less than significant air quality impacts, after mitigation.

Under the No Project Alternative, no new development would occur on the project site; therefore, there would be no new potential sources of increased short-term or long-term air pollutant emissions. All of the Project's short- and long-term air quality impacts would be avoided under No Project Alternative.

Biological Resources

The No Project Alternative would leave the property in its existing condition; no grading would occur under this alternative and there would be no potential impacts to sensitive plant species, migratory birds, and raptors that may be present on the project site. Therefore, selection of the No Project Alternative would avoid all site disturbances on the property and the Project's mitigable impacts to biological resources would not occur.

Cultural Resources

The No Project Alternative would leave the property in its existing condition; no grading would occur under this alternative and there would be no potential impacts to subsurface archeological or paleontological resources that may exist beneath the ground surface. Therefore, selection of the No Project Alternative would avoid all site disturbances on the property and potential impacts to cultural resources would not occur.

Geology/Soils

The No Project Alternative would result in no grading of the property; therefore, no impacts to geology or soils would occur. In addition, should agricultural activity be re-established on the property, no impacts to soils are anticipated with sustainable farming practices. Because no new structures would be constructed, there would be no increased risks associated with seismic ground shaking or geologic hazards. Selection of the No Project Alternative would avoid impacts to geology and soils.

Greenhouse Gas Emissions

The analysis in Subsection 3.7 of the EIR identifies that Project-related emissions of GHGs would generate emissions that exceed the SCAQMD and City of Yucaipa threshold of 3,000 MT CO_2e per year.

GHGs would be emitted during operation of the existing dry land field crop farming uses under the No Project Alternative. Therefore, GHG emissions generated by the No Project Alternative would be slightly less than the amount quantified for the proposed Project. Neither the Project nor the not project alternative would have significant GHG impacts.

Hazards/Hazardous Materials

Because no development would occur under the No Project Alternative, no impacts related to hazards or hazardous materials would occur. The dry land crop farming uses on the property would remain in place on-site, and any use of hazardous materials associated with this use would continue to comply with applicable requirements and regulations. Impacts would be considered similar to the Project.

Hydrology/Water Quality

No changes to existing hydrology and drainage conditions would occur under the No Project Alternative. No storm water improvements would be constructed and surface flow would be discharged from the site either via existing detention basins and storm drain facilities or as sheet flow, as occurs under existing conditions.

No substantial alterations to the drainage pattern of the site would occur under the No Project Alternative, which would result in less impacts to existing drainage patterns compared to the Project.

Because residential structures and roadways would not be developed on-site under the No Project Alternative, an increase of impervious surfaces and urban pollutants would not occur. However, under this alternative, much of the storm water leaving the site would not be filtered and would continue to contain sediment and other potential pollutants associated with farming uses, as occurs under existing conditions. Selection of the No Project Alternative would reduce impacts to hydrology and water quality as compared to the proposed Project with the exception of long-term sedimentation impacts, which would continue to occur and would be greater than those impacts that would occur under the proposed Project.

Land Use/Planning

No grading or development of the property would occur under the No Project Alternative; therefore, the project site would remain as undisturbed natural land or occupied with farming uses as currently existing. In that respect, this alternative would result in an inconsistency with Yucaipa General Plan, which designates the project area for Residential and agricultural uses. These uses are intended to complete the land use fabric envisioned in General Plan for the area, and would serve to provide consistency with, and complement, the development pursuant to the General Plan designations of the surrounding area. As such, the No Project Alternative would create an inconsistency with housing aspect but not the agricultural aspect of the General Plan. Therefore, the impact would be considered similar under this alternative compared with the proposed Project.

Noise

The No Project Alternative would not result in construction on-site and, therefore, would not generate any near-term noise associated with construction. The construction noise impacts of the No Project Alternative would be less than the proposed Project. Mobile-source and stationary noise impacts would be similar under this alternative compared to the proposed Project, comparing the use of agricultural equipment versus low-density residential development associated with vehicular traffic and other noise sources. Overall, impacts would be less than significant, and less than the impacts associated with the proposed Project.

Population and Housing

Under the No Project Alternative, the project site would remain as undisturbed natural land or occupied with field crop farming uses. There are no existing housing units on-site; therefore, housing and population would not be impacted. The No Project Alternative would have less impact than the proposed Project.

Public Services

Fire Protection

Under the No Project Alternative, there would be no increased demand for fire protection services. Furthermore, the No Project Alternative would not impede the fire protection services that might occur from impacts on area traffic flow as a result of short-term construction activities on Oak Glen Road or development-related traffic. Levels of fire service would remain unchanged and not impacted by the No Project Alternative. Therefore, impacts of the No Project Alternative relative to fire services would be less than significant but similar to those associated with the proposed Project in the built condition.

Police Protection

The No Project Alternative would not affect existing uses or develop new uses at the project site. As no increased demand for police protection services would occur under this Alternative, the level of service would be the same as existing conditions. The No Project Alternative would have no impact on the response time of emergency vehicles that might occur from nominal increased traffic flow in the area due to the proposed Project. No construction activities would occur under this alternative that could impact emergency vehicle response to the project site and its

surrounding area. As the No Project Alternative involves no increased demand for police protection services or increase in emergency response times, impacts relative to police protection services would be less than significant and less than those associated with the proposed Project.

Transportation/Traffic

Under the No Project Alternative, existing uses would generate no additional vehicle trips than currently occur on-site. Given the slight reduction in traffic under this alternative, impacts to intersections and roadway segments would be less than significant and no mitigation would be required, as under the proposed Project. Likewise, impacts to CMP facilities would be less than significant, given the lack of development and associated traffic generation. Therefore, traffic impacts under the No Project Alternative would be less than significant and slightly less than those associated with the proposed Project.

Utilities/Service Systems

Water Supply

The No Project Alternative would not result in an increase of facilities or population to the project site. Hence, water demand for this alternative would be consistent with existing conditions. As such, impacts would be less than significant and less than those associated with the proposed Project.

Wastewater

Under the No Project Alternative, the existing uses on the project site would generate the same amount of wastewater currently generated. Hence, no additional wastewater would be generated, and there would be no need for additional wastewater infrastructure or treatment. While impacts to wastewater generation, infrastructure, and treatment would be less than significant under the proposed Project, the No Project Alternative would result in less than significant impacts to the project site. Therefore, the impact of this alternative would be less than those associated with the proposed Project.

Solid Waste

Under the No Project Alternative, no new construction would occur and no additional solid waste would be generated. Although solid waste generation would be less than significant under the proposed Project, the No Project Alternative would not result in any additional solid waste generation. Therefore, the impact of this alternative relative to solid waste generation would be less than significant and less than impacts associated with the proposed Project.

6.3.2 Alternative 2 – Lower Density

Alternative 2 – Lower Density is intended to evaluate the potential for reduced environmental impacts associated with a reduction in the total number of residential lots proposed on the site. The proposed Project includes 184 homes on 236 acres, consistent with Yucaipa General Plan. Under this alternative, the residential land use designation on the site would remain, but the number of lots would be reduced and the size of individual lots would be larger than the one-acre minimum. For purposes of the alternatives analysis, it is assumed the lower-density Project has 130 units on 236 acres on 1.5-acre minimum lots. Larger lots can be created, specifically within

areas that are subject to environmental restrictions related to the FEMA 100-year floodplain zones and where substantial protected oak trees exist, which would allow future structures to meet necessary setback requirements or avoid the need to remove protected oak trees.

6.3.2.1 Environmental Impacts

Aesthetics

Under Alternative 2, the number of developable parcels would be reduced, thereby reducing the amount of light and glare that would be associated with the Project as currently proposed. Under Alternative 2, the Project would still be subject to all applicable Development Code requirements, including those associated with the Custom Home Overlay District, ensuring that the Project would not substantially contribute to cumulative light pollution in the area. Therefore, impacts to aesthetics would be less than significant, similar to those associated with the proposed Project.

Agriculture and Forestry Resources

Under Alternative 2, while the number of developable parcels would be reduced and impacts to Prime Farmland would occur similar to those associate with the proposed Project. Impacts would be less than significant.

Air Quality

Under Alternative 2, the number of developable parcels would be reduced and it is anticipated that traffic-related air pollutant emissions would therefore be incrementally reduced, given the reduction in overall vehicle trips associated with the reduction of residential units. It is anticipated that short-term construction air quality impacts would similarly be potentially significant and would require mitigation measures to address such impacts. However, with implementation of feasible mitigation measures, it is expected that construction-related impacts and operational impacts for air quality would be less than significant, and Alternative 2 would result in air quality impacts similar to but somewhat less intense than those associated with the proposed Project.

Biological Resources

Alternative 2, even at a lower density, proposes development that would cause disturbance on the project site. Any on-site biological resources, including habitat, special-status species, and jurisdictional waters would be reduced from existing conditions although some riparian/flood areas would remain undevelopable, and mitigation measures would be implemented to address any significant impacts to such resources. As such, impacts would be similar to those associated with the proposed Project.

Cultural Resources

Alternative 2 would have a similar potential to adversely affect any undiscovered cultural resources or potential historic resources on the project site, despite the reduction in density. However, like the proposed Project, mitigation measures would still be required to reduce potential impacts to less than significant. Given the similarity in development area under Alternative 2, impacts would be similar to those associated with the proposed Project.

Geology/Soils

Grading of the property would still occur under Alternative 2; therefore, impacts to geology and soils would occur similar to those related to the proposed Project. Proposed new structures, even with the reduction in overall density, would still be subject to risks associated with seismic ground shaking and geologic hazards. Under Alternative 2, the Project would still be subject to regulatory requirements and standard conditions of approval; therefore, impacts to geology and soils would be less than significant, similar to those associated with the proposed Project.

Greenhouse Gas Emissions

Similar to the proposed Project, GHG emissions associated with Alternative 2 would be generated during the construction phase but would cease upon completion of the Project and would therefore be a small fraction of total Project-related emissions when considering the longevity of operation emissions. During the operations phase of Alternative 2, the Project would generate fewer trips and area emissions due to lower development.

Hazards/Hazardous Materials

Under Alternative 2, the use of hazardous materials typically associated with construction of the site and subsequent residential uses would still occur, despite the reduction in the number of proposed units. Similarly, generation and use of hazardous materials associated with Alternative 2 would require mandatory compliance with the City's Environmental Performance Standards Generation. Impact is anticipated to be similar to the proposed Project.

Hydrology/Water Quality

The total area of impervious surfaces associated with Alternative 2 would be reduced, and on-site grading would be less than the proposed Project. Alternative 2 would still require compliance with applicable regulations and requirements of affected public agencies, as well as require the implementation of mitigation measures similar to those identified for the proposed Project; therefore, hydrology and water quality impacts would be similar to the proposed Project.

Land Use/Planning

Alternative 2 would be required to follow the same review and approval process as the proposed Project, which must demonstrate consistency with the Yucaipa General Plan. No conflicts with other land uses would be expected to occur, and this alternative would not result in the division of an established community and impacts would be less than significant. Given the similarity in overall necessary approvals and entitlements under this alternative, impacts would be less than significant and similar to those of the proposed Project.

Noise

Under Alternative 2, overall development intensity would be reduced; therefore, associated vehicular traffic levels would also be reduced. Given the reduction in overall development intensity on-site, short-term construction impacts would also be incrementally reduced, and would be less than significant with mitigation. Overall, with the reduction in development intensity and reduction in associated traffic generation, impacts under Alternative 2 would be less than significant and, considered less than the proposed Project.

Population and Housing

Similar to the proposed Project, Alternative 2 would generate additional population and housing to the area; however the increase is would have fewer anticipated residents than the proposed project and therefore impacts would be considered less than the project and less than significant.

Public Services

Under Alternative 2, the applicant would be required to pay developer fees for fire services and facilities similar to what would be required for the proposed Project. As such, impacts associated with fire services and facilities for Alternative 2 would be similar to those of the proposed Project and less than significant.

Transportation/Traffic

A decreased number of average daily trips would occur under Alternative 2 due to the decrease in density. As a result, Alternative 2 would experience fewer traffic system impacts but would still require mitigation measures to reduce impacts to less than significant. Impacts related to CMP facilities and on-site circulation would also be less than significant and less than those of the proposed Project. Overall, traffic impacts under Alternative 2 would be less compared to the proposed project and less than significant with mitigation.

Utilities/Service Systems

Water Supply

Under Alternative 2, it is expected that the water demand would be less than that of the proposed Project. Hence, the water demand would still be within the projected potable water demand for the Project, resulting in less than significant impacts. Since the water demand would not be more than the proposed Project under Alternative 2, impacts would be less than the proposed Project.

Wastewater

Under Alternative 2, it is estimated that less wastewater will be generated. The development would still be served by YVWD and applicable sewer service charges would be required. Funds collected from service charges would be used as permitted by the California Health and Safety Code Section 5471, including repairs, replacements, operation, maintenance, construction, and reconstruction of the sewerage system. Therefore, impacts would be less than significant and less than the proposed Project.

Solid Waste

Under Alternative 2, less solid waste will be generated by the Project. This alternative must still be consistent with applicable regulations including the State of California Waste Management and the Yucaipa Municipal Code. Alternative 2 would result in less than significant impacts, and impacts would be less than those of the proposed Project.

6.3.3 Alternative 3 – Planned Development with Open Space Linkages and Riparian Preservation

Alternative 3 – Planned Development would develop the site consistent with the Planned Development (PD) District as specified by the Yucaipa General Plan and Development Code and

initially submitted for this site. For this EIR, Alternative 3 is assumed to consist of the development of 240 acres directly north of Oak Glen Road and east of Jefferson Street with 225 single-family residences on only 180 acres along with the preservation of 50 acres of natural open space, and 10 acres of olive grove.

6.3.3.1 Environmental Impacts

Aesthetics

Under Alternative 3, the project site would be developed with a planned residential development, which would have concentrated land development along with common areas of open space, natural preservation, and limited agriculture. The number of developable parcels would be increased and clustered with some anticipated increase in light and glare in the developed areas. Under Alternative 3, the Project would still be subject to all applicable Development Code requirements, ensuring that the Project would not substantially contribute to cumulative light pollution in the area; therefore, although less than the aesthetic impacts that would be associated with the proposed Project due to the increased open areas of the property, impacts to aesthetics would be considered less than significant.

Agriculture and Forestry Resources

Under Alternative 3, development within the areas with designated Prime Agricultural Land would be avoided at the olive grove area only with overall loss to agricultural resources. This alternative would be similar to the proposed Project and there would be no significant impact.

Air Quality

Under Alternative 3, it is anticipated that traffic-related air pollutant emissions would be incrementally increased, given the increase in overall vehicle trips associated with the increase in proposed residential units from 184 to 225. It is anticipated that under Alternative 3, short-term construction impacts would be similar and would require mitigation measures to address such impacts. With implementation of mitigation measures, it is expected that construction-period impacts and vehicular emissions impacts would be reduced to a level less than significant. Alternative 3 would result in air quality impacts that are similar to those associated with the proposed Project, less than significant after mitigation.

Biological Resources

Under Alternative 3, the areas with higher concentrations of on-site biological resources, such as habitat, special-status species, and jurisdictional waters, would be avoided. Mitigation measures would be implemented to address any significant impacts to such resources, if necessary. As such, impacts would be less than those associated with the proposed Project and less than significant with mitigation.

Cultural Resources

Alternative 3 would have a similar potential to adversely impact any undiscovered cultural resources or potential historic resources, but over a reduced area with the retention of sensitive land areas preserved as open space. Like the proposed Project, mitigation measures would still be required to reduce potential impacts to less than significant. Impacts to cultural resources under

the Planned Development Alternative, with less disturbed area, would be less than those associated with the proposed Project, and considered less than significant.

Geology/Soils

Under Alternative 3, the retention of sensitive land areas preserved as open space would occur; however, on-site seismic conditions and potential hazards would not change relative to the proposed Project. Implementation of regulatory requirements and standard conditions of approval would still be required to reduce impacts to less than significant, but, overall, impacts under Alternative 3 would be similar to those associated with the proposed Project.

Greenhouse Gas Emissions

It is anticipated that under Alternative 3, short-term construction impacts may be potentially significant and would require mitigation measures to address such impacts. The development of this alternative would occur at one time having greater construction impacts, rather than individual parcels developing out over time with the project. At build out, although there are more units in Alternative 3 compared to the project, the project will have larger unit sizes, so the overall square footage of development on the overall project would be similar and therefore operational impacts similar. However, even with implementation of feasible mitigation measures, it is expected that construction-period impacts s would be slightly above the project-level impacts; however, Alternative 3 would, overall, result in operational impacts similar to those associated with the proposed Project.

Hazards/Hazardous Materials

For Alternative 3, any existing known or unknown hazardous materials contamination from agricultural activities would be required to be remediated to the satisfaction of affected regulatory agencies. Planned uses under Alternative 3 would not be expected to handle, use, store, or dispose of hazardous materials in notable quantities, similar to the proposed Project. Compliance with federal, state, and local regulations regarding the handling, transport, and disposal of hazardous materials and wastes would reduce impacts to less than significant levels.

Based on known RECs within the project area, there is the potential for the discovery of previously unknown contamination. Implementation of mitigation measures, regulatory requirements, and standard conditions of approval would still be required to reduce impacts to less than significant, but, overall, impacts under Alternative 3 would be similar to those associated with the proposed Project.

Hydrology/Water Quality

Under Alternative 3, the site would be required to implement the conditions of the NPDES permit for construction activities, as would be the case for the proposed Project. Tract map drainage improvements would still be required to accommodate development under Alternative 3, and storm water flows leaving the site would be incrementally reduced with retention basins. The existing storm water contaminants related to the developed area would continue to have the potential to affect off-site storm water flows and adversely affect receiving water bodies. Impacts however, would be similar to those associated with the proposed Project.

Land Use/Planning

Under Alternative 3, a planned development would be required to follow the same review and approval process as the proposed Project, which must demonstrate consistency with the Yucaipa General Plan. This alternative may also achieve other General Plan goals such as protection of habitat and open spaces linkages. No conflicts with other land uses would be expected to occur, and this alternative would not result in the division of an established community. Given the similarity in overall necessary approvals and entitlements under this alternative, impacts would be less than significant and similar to those of the proposed Project.

Noise

Under Alternative 3, overall development intensity would be slightly increased; therefore, associated vehicular traffic levels would also be increase (25 percent). Short-term construction impacts, however, would be considered greater to the Project as it would develop at one time rather than by individual parcel owners over time, but would be less than significant with mitigation. With mitigation, overall impacts under Alternative 3 would be greater than the project however less than significant with mitigation.

Population and Housing

Similar to the proposed Project, Alternative 3 would generate additional population and housing to the area. Alternative 3 includes more units than the project. The Project would result in the construction of 184 new residential lots and, based on the average of 2.9 persons per household in Yucaipa City (2015 Census Bureau), it is estimated that the Project would result in approximately 534 additional residents. This increase in population is consistent with the Yucaipa General Plan Update, which anticipates a 62 percent population increase to 77,328. The increase in population from this Project is not a significant increase, and the area proposed for development is identified for residential development in the General Plan. As such, the proposed Project would have a less than significant impact on population and housing. Alternative 3 will have approximately 55 residents and 40 units more that the proposed project, impacts are greater than the project and they are considered to be less than significant.

Public Services

Fire Protection

Under Alternative 3, the applicant would be required to pay developer fees for fire services and facilities similar to what would be required from the proposed Project. As such, impacts associated with fire services and facilities for Alternative 3 would be similar to those of the proposed Project and less than significant.

Police Protection

Under Alternative 3, policing characteristics are similar to what would be required for the proposed Project. As such, impacts associated with police services and facilities for Alternative 3 would be similar to those of the proposed Project and less than significant.

Transportation/Traffic

An increase in the number of ADT (25 percent) would occur under Alternative 3 due to the increase in overall number of units. As a result, Alternative 3 would experience an increase in traffic system impacts and would still require mitigation measures to reduce impacts to less than significant. Impacts related to area roads and on-site circulation would be less than significant with mitigation although greater than those of the proposed Project. Overall, traffic impacts under Alternative 3 would be less than significant and similar to the proposed Project's impacts.

Utilities/Service Systems

Water Supply

Under Alternative 3, it is expected that the water demand would be similar to that of the proposed Project. Although more units would be using domestic water, much less irrigating would occur of large parcels and more natural open space. Hence, the water demand would result in less than significant impacts. The water demand would be similar to the proposed Project.

Wastewater

Under Alternative 3, it is estimated that there would be an increase in wastewater generation. The development would still be served by YVWD and applicable sewer service charges would be required. Funds collected from service charges would be used as permitted by the California Health and Safety Code Section 5471, including repairs, replacements, operation, maintenance, construction, and reconstruction of the sewerage system. Therefore, Alternative 3 has greater impacts than the proposed project while impacts would be less than significant.

Solid Waste

Under Alternative 3, more solid waste generation can be anticipated. This alternative must still be consistent with applicable regulations including the State of California Waste Management and the Yucaipa Municipal Code. Alternative 3 would result in less than significant impacts, and impacts would be greater than those of the proposed Project.

6.3.4 Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR. The CEQA Guidelines also state that should it be determined that the No Project/No Build Alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives.

Table 6-2 provides a comparison of the alternatives to the proposed Project objectives. A more detailed description of the potential impacts associated with each alternative is provided in the narrative above. Pursuant to Section 15126.6(c) of the CEQA Guidelines, the analysis below addresses the ability of the alternatives to "avoid or substantially lessen one or more of the significant effects" of the Project.

Of the alternatives analyzed in the EIR, Alternative 1 – No Project/No Build is considered the overall environmentally superior alternative as it would reduce several of the impacts occurring under the proposed Project to no impact or levels that are less than significant. However, as

indicated in Table 6-2, this alternative would not meet the identified objectives established for the proposed Project.

In accordance with the CEQA Guidelines requirement to identify an environmentally superior alternative from the remaining alternatives, a comparative evaluation of the remaining alternatives indicates that Alternative 2 – Lower Density would be the environmentally superior alternative. As compared to the proposed Project, this alternative would reduce significant air quality impacts, though not to less than significant levels. It would not fully meet all of the proposed Project objectives.

Table 6-2 Project Objectives – Comparison of Alternatives

Project Objective	Proposed Project	Alternative 1 – No Project/No Build	Alternative 2 – Lower Density	Alternative 3 – PD with Natural Resources Protected
To subdivide the property for single-family homes consistent with the density requirements and provisions of the Yucaipa General Plan	Fully Met	Not Met	Fully Met	Fully Met
The project design specifically avoids mass grading	Fully Met	Fully Met	Fully Met	Fully Met
Existing slopes and vegetation will be avoided wherever possible	Partially Met	Fully Met	Partially Met	Fully Met
Street grades will follow the existing topography to the extent and wherever possible;	Fully Met	Not Met	Fully Met	Partially Met
Rural street designs will maintain a 30-foot paved profile within a 60-foot right-of-way;	Fully Met	Not Met	Fully Met	Partially Met
Street grading will not alter or impact Wilson Creek drainage;	Fully Met	Not Met	Fully Met	Partially Met
Minor drainage courses feeding into Wilson Creek will be left natural wherever possible.	Fully Met	Not Met	Fully Met	Partially Met

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7.0 SUMMARY OF MITIGATION

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
AESTHETICS		
Scenic Vistas	• AES-1. Prior to the issuance of a building permit for each lot to be constructed by an individual homeowner, the project proponent shall submit a Building Pad Constraints Exhibit for City review and approval. The Building Pad Exhibit shall identify the building pads and access driveways for each lot that avoids areas with one or more of the following attributes: o Moderate to steep sloping land (15 percent slope or greater). o Applicable drainage courses per the City Engineer, including but not limited to the FEMA-designated 100-year floodplain. o Within identified riparian areas. o Within identified areas of important biological resources.	Less Than Significant Impact.
AGRICULTURE AND FORESTRY RESOURCES		
Prime and Unique Farmland. The portion of land along the north side of Oak Glen Road, designated unique farmland, is located on the southern portion of nine proposed lots of the subdivision (lots 171 through 175 and lots 178 through 181).	• AG-1: The Olive Grove shall be maintained to the extent possible. Prior to recording the final tract map, developer shall submit an Olive Tree preservation plan for review and approval by the Planning Division for common/street areas and for individual parcels, to be used prior to removal of any olive trees as part of the tract map development, or the development of any parcel. The preparation of the document which shall include the following attributes: - Delineation of grove boundaries - Maintenance responsibilities (who is responsible for trees in the future) - Method of tree preservation (easement, HOA, LLMD, CC&R's, etc.) - Ratio of acceptable take (i.e., retain at least 75% of the olive grove)	Less Than Significant Impact
AIR QUALITY		
The operational phase of the Project would generate VOC emissions that exceed the SCAQMD threshold of significance. These emissions are primarily related to hearth emissions.	• AQ-1: The Project shall comply with the requirements of SCAQMD Rule 445 with regard to the installation of permanent indoor wood-burning devices (such as fireplaces and stoves). The exemption for residential properties above 3,000 or more feet above msl shall not apply to the Project.	Less Than Significant Impact
BIOLOGICAL RESOURCES		
Sensitive and Special Status Species. The presence of white-tailed kite and Cooper's hawk, as well as habitat suitable for the burrowing owl, was observed on the project site. Additionally,	• BIO-1: The property owner or Project contractor will be responsible to schedule vegetation clearing and grading activities outside of the typical avian nesting season (February 15 through August 31) to the maximum extent practical in order to comply with the MBTA and relevant sections of the California FGC. If active nests are observed, a minimum buffer zone from occupied nests is recommended to the maximum extent practicable. Once nesting has ended, the buffer may be removed. In addition, a pre-construction survey for burrowing owls shall be conducted by a City approved, licensed biologist, no more than 30 days prior to	Less Than Significant Impact.

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
Parry's spineflower and Plummer's mariposa lily, both identified as sensitive species, was listed as having a high potential for occurrence within the project site.	commencement of grading, and submitted to and approved by the Planning Division prior to issuance of a grading permit. The survey shall be conducted according to the recommended guidelines of the California Burrowing Owl Consortium (1993) and in consultation with CDFW. • BIO-2: Due to their potential for occurrence on the site, additional surveys for Parry's spineflower and Plummer's mariposa lily shall be completed during the spring blooming period prior to final map recordation and prior to construction of common areas and streets, or of individual lots. The blooming period for Parry's spineflower is April through June, and Plummer's mariposa lily is May through July. Surveys during May would encompass both species; however, known reference populations should be visited to determine if April/May for Parry's spineflower would be better and another survey in June should occur to locate Plummer's mariposa lily. Should surveys indicate of the presence of these species, the project proponent shall contact CDFW to determine appropriate strategies, which may include in-lieu payment, avoidance, or replacement of plants.	Less Than Significant Impact.
A total of 0.64 acres of potential waters of the U.S. were recorded on the property. This acreage represents a calculated estimation of the jurisdictional area within the Project boundaries, and is subject to modification following the USACE verification process. A total of 1.202 acres of CDFG Habitat Area were recorded on the property, and this finding is to be verified by the CDFW.	• BIO-3: During Project grading activities, the limits of grading and construction activities within the Project footprint should be clearly delineated with temporary staking, flagging, or similar materials by the property owner or Project contractor. Grading of the Project footprint should be minimized to the greatest extent feasible and access to it should be via preexisting/maintained access routes to the greatest extent possible. • BIO-4: Prior to the issuance of grading permits on those lots within the subdivision that contain jurisdictional features, including FEMA 100-year flood zone facilities, the property owner or Project contractor shall obtain the applicable CWA Section 401 and 404 permits from USACE and CDFW as required. • BIO-5: Prior to the issuance of grading permits, nesting surveys shall be conducted within 72 hours of construction. Preemptive vegetation removal outside of the raptor breeding season of January 1 through July 15 may occur, where feasible, to avoid take of the fully protected nesting white-tailed kite, state protected Cooper's hawk, and any additional protected nesting birds under the MBTA. o To comply with Section 10 of the MBTA and relevant sections of the California FGC (e.g., Sections 3503, 3503.4, 3504, 3505, et seq.), any vegetation clearing within the Project footprint shall take place during September through December, outside of the raptor breeding season (January 1 through July 15) and outside of the typical avian nesting season (February 15 through September 15). o In the event that vegetation clearing is necessary during the breeding season (i.e., February 1 through September 1), a qualified biologist shall conduct a preconstruction survey no more than 72 hours prior to construction to identify the locations of avian nests. Should occupied nests be found in construction areas, an appropriate buffer area of 200 feet, or 500 feet for raptors and listed species, shall be established around each nest site (typically). No construction shall take place within this buffer until the nest is no longer active. In the event that construction must occur within the buffer, the biological monitor will take steps to ensure that construction activities are not disturbing or disrupting nesting activities. If the biological monitor determines that construction activities are disturbing or disrupting nesting activities, then the biologist shall have the authority, upon	Less Than Significant Impact. Less Than Significant Impact. Less Than Significant Impact.
Protected oak trees subject to the City's Oak Tree Conservation Ordinance were found to exist on the project site.		

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
	consultation and concurrence with CDFW, to halt construction in order to reduce the noise and/or disturbance to the nests, as appropriate. • BIO-6: Prior to the issuance of grading permits for infrastructure facilities (Project roadways) it will be the responsibility of the project proponent (master developer) to obtain the necessary permits for removal of protected oak trees as applicable. Subsequent oak tree removal permits outside of the public right-of-way will be the responsibility of the individual lot owners as applicable. Removal of oak trees will also be subject to nesting surveys prior to the issuance of permits, consistent with the requirements identified under Mitigation Measure BIO-5.	Less Than Significant Impact.
CULTURAL RESOURCES		
The proposed Project includes the construction of new homes immediately adjacent to the Casa Blanca property, which is eligible for listing in both the NRHP under criteria A through C and in the CRHR under criteria 1 through 3.	• CR-1: Prior to recordation of the final map, the following security measures shall be implemented to the existing Casa Blanca residence to prevent arson and further vandalism: c) Installation of an alarm system to the main residence. d) Installation of a locked gate at the lower end of the driveway by Oak Glen Road. • CR-2: Prior to the issuance of building permits to restore the Casa Blanca residence, a landscaping plan shall be submitted to the City for review and approval. The landscaping plan shall show how the landscaping and plantings in the area immediately surrounding the house shall be preserved for the Casa Blanca residence's integrity of setting. This includes the front yard and its border of deodar cedar and olive trees, the deodar cedar trees that line the driveway, the stone retaining wall with rings for tethering horses in the back yard of the house, and the olive trees on the steep hill slope south of the house. Keeping the olive trees on the hill slope would have the added effect of maintaining the historical visual barrier between Oak Glen Road and the house. Retaining the Casa Blanca house and its immediate surroundings would provide an aesthetic focal point for any new residential development, as well as an important link to the history of the region and its pioneers. • CR-3: Although the cultural resources survey was conducted in as thorough a manner as possible, there is the possibility that previously unidentified archaeological and paleontological resources could be discovered during Project construction. Prior to the issuance of grading permits, the property owner or Project proponent will be responsible to retain the services of a qualified archaeologist and/or paleontologist who shall monitor grading activities during Project construction. In the event that any prehistoric or historic-period cultural resources (chipped or ground stone lithics, animal bone, ashy midden soil, structural remains, historic glass or ceramics, etc.) are discovered during the course of construction when a monitor is not present, the Project contractor will be responsible to cease all work in the vicinity and wait until the archaeologist and/or paleontologist has evaluated the significance of the find and has removed the resource as required by law. • CR-4: If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made necessary findings as to origin and disposition of the remains pursuant to PRC Section 5097.98. The following actions must be taken by the property owner or Project contractor or proponent in the event that human remains are discovered on private or State land: o Stop work immediately and contact the County Coroner. The County Coroner must be notified	Less Than Significant Impact. Less Than Significant Impact. Less Than Significant Impact. Less Than Significant Impact.

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
	immediately of the find. o The Coroner has two working days to examine human remains after being notified by the responsible person. If the remains are determined to be prehistoric or Native American the coroner will notify the NAHC within 24 hours. o The NAHC will immediately notify the person it believes to be the most likely descendent (MLD) of the deceased Native American. With the permission of the landowner or agency, or an authorized representative, the MLD may inspect the site of the discovery. o The MLD makes recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods. o If the NAHC is unable to identify a descendent, the descendent identified fails to make a recommendation, or the landowner rejects the recommendations of the descendent and the mediation provided for in subdivision (k) of Section 5097.94 fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with the Native American burial(s) with appropriate dignity on the property in a location not subject to further subsurface disturbance.	
GEOLOGY/SOILS		
None identified.	None required.	N/A
GREENHOUSE GAS EMISSIONS		
• The Project would generate GHG emissions that exceed the SCAQMD and City of Yucaipa threshold of 3,000 MT CO2e per year.	• GHG-1: As a condition of approval prior to issuing building permits, development proposals associated with the Project shall be required to demonstrate that the residential unit(s) would obtain at least 100 points from the Screening Tables for residential projects in the City of Yucaipa CAP.	Less Than Significant Impact.
HAZARDS/HAZARDOUS MATERIALS		
None identified.	None required.	N/A
HYDROLOGY/WATER QUALITY		
• The Wilson creek and the tributary streams run through several lots of the proposed Project grading may potentially impact the tributary streams. • The proposed Project has been identified as being potentially impacted by jurisdictional area,	• WQHYDRO-1: The property owner or the project applicant for future development projects shall prepare additional project drainage studies and submit for approval by the City Engineer when future development plans are available. Such studies will need to identify any increase in developed condition peak flows, measures to manage any incremental increase in storm flows (e.g. detention/retention basins, other storm water BMPs), measure impacts to adjacent properties, and the timing of additional improvements needed to serve the subdivision at buildout. • WQHYDRO-2: Local storm drain facilities shall be sized to convey the 10- and/or 100-year storm event per a final drainage plan reviewed and approved by the City Engineer, or per the requirements of other	Less Than Significant Impact Less Than Significant

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
and based on materials submitted with the project application, the following lots within the proposed subdivision are located within a 100-year floodplain: 4, 8-20, 24, 28, 29, 39-47, 49, 50, 52, 53, 58-65, 71-74, 81, 82, 84-86, 89-92, 102, 111, 118, 119, 122-138, 140, 141, 145, 151, 154, 158, 159, 171, 173-180, 182,184.	responsible agencies. • WQHYDRO-3: Prior to the issuance of grading permits on those lots within the subdivision that contain jurisdictional features, including 100-year FEMA flood zone facilities, the property owner or Project contractor shall obtain the applicable CWA Section 401 and 404 permits from USACE and CDFW as required. • WQHYDRO-4: Building plans submitted to and approvable by the Engineering Department shall be designed so that infrastructure associated with the proposed Project is situated outside jurisdictional areas of streams and drainages (e.g., channels and banks). A drainage easement will be recorded as approved by the City Engineer, aligned consistent with the centerline of the wash. A conservation easement exceeding the limits of the 100-year flood shall be recorded. No buildings or structures will be permitted within the easement, which shall be maintained as close to its natural state as possible. • WQHYDRO-5: Grading plans submitted to and approvable by the Engineering Department shall delineate the limits of grading and construction activities and should clearly outline the limits of the drainage easements and the 100-year flood limits. • WQHYDRO-6: Building plans submitted to and approvable by the Engineering Department shall be designed so that new construction and substantial improvement of any residential structure shall have the lowest floor, elevated to one foot above base flood elevation. Upon the completion of the structure, the elevation of the lowest floor, including the basement, shall be certified by a registered professional engineer or licensed land surveyor, and verified by the City Building Official to be properly elevated above the floodplain elevation at the time of certification. • WQHYDRO-7: The property owner or the project applicant for future development projects shall prepare additional project drainage studies and submit for approval by the City Engineer when future development plans are available. Such studies will need to identify any increase in developed condition peak flows, measures to manage any incremental increase in storm flows (e.g. detention/retention basins, other storm water BMPs), measure impacts to adjacent properties, and identify and quantify whether diversion of flow will occur. • WQHYDRO-8: The property owner or the project applicant for future development projects shall ensure that fill materials placed adjacent to streambeds are compacted according to the City's development standards. It must be demonstrated that fill will not settle and is protected from erosion, scour, or differential settlement. • WQHYDRO-9: Storm water drainage inside the proposed Project boundaries will be designed to minimize soil erosion and provide for sediment control. Drainage control measures will be installed so that surface runoff will not be increased as it exits the site and does not increase velocity, to prevent erosion of downslope properties. Final design of the site drainage shall be subject to all requirements of the grading permit. • WQHYDRO-10: The property owner or the project applicant for future development projects shall provide	Impact Less Than Significant Impact Less Than Significant Impact Less Than Significant Impact Less Than Significant Impact Less Than Significant Impact Less Than Significant Impact Less Than Significant

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
	employee training concerning water quality and site management (as is required in the WQMP). The employee training documents shall be submitted to the City Engineering Department prior to the issuance of final occupancy permits.	Impact
	• WQHYDRO-11: The property owner or the project applicant for future development projects shall prepare and submit a Notice of Intent to comply with the Construction General Permit to the California State Water Resources Board.	Less Than Significant Impact
	• WQHYDRO-12: The property owner or the project applicant for future development projects shall prepare a SWPPP per requirements of the Construction General NPDES Permit.	
	• WQHYDRO-13: During Project construction and operation, the property owner or Project contractor will be required to use or store hazardous materials in a safe manner and at an appropriate distance from known or identified natural drainages. Material Safety Data Sheets will be made available to all site workers for cases of emergency.	Less Than Significant Impact
	• WQHYDRO-14: The property owner or the project applicant for future development projects shall prepare a final WQMP for approval by the City Engineer addressing post-construction water quality BMPs.	Less Than Significant Impact
		Less Than Significant Impact
		Less Than Significant Impact
LAND USE/PLANNING		
None identified.	None required.	N/A
MINERAL RESOURCES		
None identified.	None required.	N/A
NOISE		
• The proposed Project would result in a temporary increase in ambient noise levels during construction activities.	Construction Noise:	
	• NOISE-1: Engineering noise controls – to the extent practical, locate stationary and/or continuous major noise producers (e.g., air compressors, generators) as far as possible from the potentially impacted residential receiver. In other words, gain more naturally-occurring noise attenuation via increasing distance between source and receiver.	Less Than Significant Impact
	• NOISE-2: Equipment noise controls – there are a number of practices that could be employed as follows:	Less Than Significant Impact

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
	• Ensure that all engine-driven vehicles and stationary equipment feature factory-approved exhaust silencers/mufflers that are in proper working order. • Minimize idling time for engine-driven operating vehicles that have the engine running between periods of mobility and/or work-intensive activity. For instance, with respect to its influence on an hourly L_{eq} value, reducing the time that a vehicle or piece of equipment operates by half (e.g., 10 minutes instead of 20 during a given hour) generally enables a 3 dB reduction of noise emission associated with that source (since it is contributing half as much acoustical energy), which can help lower the overall hourly L_{eq} value representing the sound environment at a studied location. • As certain equipment may have a "louder" side or facing (e.g., an air intake that produces the most noise), position the equipment onsite so that said louder facings are directed away from the noise-sensitive receiver. • NOISE-3: Beyond noise mitigation measures NOISE-1 and NOISE-2, proper design and installation of temporary construction noise barriers may need to be implemented to reduce construction noise. The following are recommended: • Use of quiet construction equipment when possible. • Operational limitations within the noise ordinance day time hours. • Use of temporary sound barriers. • When loud equipment is required for construction, noise baffles should be used to reduce impacts. When the construction activity of concern has concluded and moved to sufficiently more distant Project locations, thus increasing the distance between it and the NSR, the need for temporary noise barriers would correspondingly diminish or be eliminated altogether. Operational Noise: • NOISE-4: Developer shall consider options for and implement measure(s) such as an earthen berm or wall of sufficient height and extent between 11114 Cherry Croft Drive and the primary roadway traffic noise sources (e.g., engine exhaust and tire/pavement contact) on Jefferson Street so that 4 dBA of Jefferson Street traffic noise reduction as quantified at 11114 Cherry Croft Drive can be achieved. Noise reduction benefit could be estimated prior to mitigation measure design and installation as part of Jefferson Street roadway upgrading, and field-verified with pre-construction and post-construction outdoor noise level measurements similar to those performed for the baseline sound environment data collection described in Section 3.2.2 of Appendix I.	Less Than Significant Impact Less Than Significant Impact Less Than Significant Impact
PUBLIC SERVICES		

Potential Significant Adverse Environmental Impacts	Mitigation Measures	Level of Significance After Mitigation
None identified.	None required.	N/A
RECREATION		
None identified.	None required.	N/A
TRANSPORTATION/TRAFFIC		
Based on the results of the traffic study, there are no anticipated AM and PM peak hour Project added trips at the Bryant Street/Carter Street intersection. The development of the Project will not impact nor deteriorate the forecast intersection delay of the Bryant Street/Carter Street intersection, which is projected to operate at LOS E during the morning peak hour and LOS D during the evening peak hour under 2040 traffic conditions with and without Project.	The Project shall contribute to the implementation of the following mitigation measure to improve the forecast future LOS E/D operation of this intersection: • TR-1: Signalization of the Bryant Street/Carter Street intersection will be required when MUTCD peak hour signal warrants are met. Based on the prevailing growth in the area, the anticipated year of implementation of the signal will be by Year 2025 contingent upon meeting traffic signal warrants. The Project may proactively contribute in a fair-share program (based on and not to exceed 50 daily or five peak hour Project added trips) towards the costs of the signalization of this intersection.	Less Than Significant Impact.
UTILITIES/SERVICE SYSTEMS/ENERGY		
None identified.	None required.	N/A

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9.0 ORGANIZATIONS AND PERSONS CONSULTED

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