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AGUA MANSA COMMERCE PARK SPECIFIC PLAN

City of Jurupa Valley

Prepared for:

City of Jurupa Valley
Contact: Annette Tam, Senior Planner
8930 Limonite Avenue
Jurupa Valley, California 92509
951.332.6464

Prepared by:

PlaceWorks
Contact: JoAnn Hadfield, Principal, Environmental Services
3 MacArthur Place, Suite 1100
Santa Ana, California 92707
714.966.9220
info@placeworks.com
www.placeworks.com

PLACEWORKS

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Abbreviations and Acronyms

ABBREVIATIONS AND ACRONYMS

AAQS	ambient air quality standards
AB	Assembly Bill
ACM	asbestos-containing materials
ADT	average daily traffic
afy	acre-feet per year
AMICSP	Agua Mansa Industrial Corridor Specific Plan
amsl	above mean sea level
AOI	areas of interest
APN	Assessor's parcel number
AR4	*Fourth Assessment Report: Climate Change 2007* (Intergovernmental Panel on Climate Change)
AQMP	air quality management plan
AST	aboveground storage tank
BAU	business as usual
bgs	below ground surface
BMP	best management practices
CAA	Clean Air Act
CalARP	California Accidental Release Prevention Program
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources, Recycling, and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFC	California Fire Code
CGP	Construction General Permit
CGS	California Geologic Survey

CIWMP	countywide integrated waste management plan
CKD	cement kiln dust
CLRRA	California Land Reuse and Revitalization Act
CMP	congestion management program
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
Corps	US Army Corps of Engineers
CPHI	California Points of Historical Interest
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DBESP	determination of biologically equivalent or superior preservation
DCV	design capture volume
DEIR	draft environmental impact report
DPM	diesel particulate matter
DSFLF	Delhi sands flower-loving fly
DTSC	Department of Toxic Substances Control
EIC	Eastern Information Center
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ESL	environmental screening levels
FESA	(Federal) Endangered Species Act
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	greenhouse gas
gpd	gallons per day
GWh	gigawatt hour
GWMP	groundwater management plan
GWP	global warming potential

Abbreviations and Acronyms

HANS	habitat acquisition and negotiation strategy
HCD	Housing and Community Development Department (CA)
HCM	Highway Capacity Manual
HCP	habitat conservation plan
HRA	health risk assessment
HSC	California Health & Safety Code
HVAC	heating, ventilating, and air conditioning system
ITE	Institute of Transportation Engineers
kBTU	thousand British thermal units
kWh	kilowatt hour
JARPD	Jurupa Area Recreation and Park District
L_{dn}	day-night noise level
L_{eq}	equivalent continuous noise level
LAFCO	local agency formation commission
LBP	lead-based paint
LCFS	low-carbon fuel standard
LID	low impact development
LOS	level of service
LSAA	lake and streambed alteration agreement
LST	localized significance thresholds
LUST	leaking underground storage tank
MATES	Multiple Air Toxics Exposure Study
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant level
mgd	million gallons per day
MLO	Mira Loma warehouse and distribution center overlay
MMCF	million cubic feet
MMT	million metric tons
MPO	metropolitan planning organization
MRF	materials recovery facility
MRZ	mineral recovery zone
MS4	municipal separate storm sewer system
MSHCP	multiple species habitat conservation plan

MSW	municipal solid waste
MT	metric ton
MUW	miscellaneous universal waste
MW	megawatts
NAHC	Native American Heritage Commission
NHMLAC	National History Museum of Los Angeles County
NHPA	National Historic Preservation Act
NO_X	nitrogen oxides
NOP	notice of preparation (of an EIR)
NPDES	National Pollution Discharge Elimination System
O_3	ozone
O&M	operations and maintenance
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
OHWM	ordinary high water mark
OSHA	Occupational Safety and Health Administration (US)
PCE	passenger car equivalent
PID	photoionization detector
PM	particulate matter
POTW	publicly owned treatment works
ppb	parts per billion
ppd	pounds per day
ppm	parts per million
PPV	peak particle velocity
RCA	Western Riverside County Regional Conservation Authority
RCDEH	Riverside County Department of Environmental Health
RCFC	Riverside County Flood Control and Water Conservation District
RCFD	Riverside County Fire Department
RCP	Riverside Cement Plant
RCSD	Riverside County Sheriff's Department
RCSD	Riverside County Sanitation District
RCTC	Riverside County Transportation Commission
REC	recognized environmental condition

Abbreviations and Acronyms

RPS	renewable portfolio standard
RSL	regional screening level
RTA	Riverside Transit Agency
RTP/SCS	regional transportation plan / sustainable communities strategy
RWQCB	Regional Water Quality Control Board
SAR	Second Assessment Report (see AR4)
SAWP	site assessment work plan
SB	Senate Bill
SBCTA	San Bernardino County Transportation Authority
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCGC	Southern California Gas Company
SIP	state implementation plan
SL	screening level
SMARA	Surface Mining and Reclamation Act
SMP	soil management plan
SoCAB	South Coast Air Basin
SO_X	sulfur oxides
STC	sound transmission class
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TAZ	traffic analysis zone
TCR	tribal cultural resource
tpd	tons per day
TPH	total petroleum hydrocarbons
tpy	tons per year
TRI	toxic release inventory
TUMF	transportation uniform mitigation fee
UPRR	Union Pacific Railroad
USFWS	United States Fish and Wildlife Service
UST	underground storage tank

Abbreviations and Acronyms

UWMP	urban water management plan
V/C	volume-to-capacity ratio
VCP	Voluntary Cleanup Program
VdB	velocity decibels
VMT	vehicle miles traveled
VOC	volatile organic compound
WQCP	water quality control plant
WQMP	water quality management plan
WRCOG	Western Riverside Council of Governments
ybp	years before present

Abbreviations and Acronyms

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1. Executive Summary

1.1 INTRODUCTION

This draft environmental impact report (DEIR) addresses the environmental effects associated with the implementation of the proposed Agua Mansa Commerce Park Specific Plan. The California Environmental Quality Act (CEQA) requires that local government agencies consider the environmental consequences before taking action on projects over which they have discretionary approval authority. An environmental impact report (EIR) analyzes potential environmental consequences in order to inform the public and support informed decisions by local and state governmental agency decision makers.

This DEIR has been prepared pursuant to the requirements of CEQA and the City of Jurupa Valley's CEQA procedures. The City of Jurupa Valley, as the lead agency, has reviewed and revised all submitted drafts, technical studies, and reports as necessary to reflect its own independent judgment, including reliance on City technical personnel and review of all technical subconsultant reports.

Data for this DEIR derive from onsite field observations, discussions with affected agencies, analysis of adopted plans and policies, review of available studies, reports, data and similar literature, and specialized environmental assessments (aesthetics, agricultural resources, air quality, biological resources, cultural resources, geological resources, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, tribal cultural resources, and utilities and service systems).

1.2 ENVIRONMENTAL PROCEDURES

This DEIR has been prepared pursuant to CEQA to assess the environmental effects associated with implementation of the proposed project, as well as anticipated future discretionary actions and approvals. CEQA established six main objectives for an EIR:

1. Disclose to decision makers and the public the significant environmental effects of proposed activities.
2. Identify ways to avoid or reduce environmental damage.
3. Prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.
4. Disclose to the public reasons for agency approval of projects with significant environmental effects.
5. Foster interagency coordination in the review of projects.
6. Enhance public participation in the planning process.

1. Executive Summary

An EIR is the most comprehensive form of environmental documentation in CEQA and the CEQA Guidelines; it is intended to provide an objective, factually supported analysis and full disclosure of the environmental consequences of a proposed project with the potential to result in significant, adverse environmental impacts.

An EIR is one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Before approving a proposed project, the lead agency must consider the information in the EIR; determine whether the EIR was prepared in accordance with CEQA and the CEQA Guidelines; determine that it reflects the independent judgment of the lead agency; adopt findings concerning the project's significant environmental impacts and alternatives; and adopt a statement of overriding considerations if significant impacts cannot be avoided.

1.2.1 DEIR Format

Chapter 1. Executive Summary: Summarizes the background and description of the proposed project, the format of this DEIR, project alternatives, any critical issues remaining to be resolved, and the potential environmental impacts and mitigation measures identified for the project.

Chapter 2. Introduction: Describes the purpose of this DEIR, background on the project, the notice of preparation, the use of incorporation by reference, and Final EIR certification.

Chapter 3. Project Description: A detailed description of the project, including its objectives, its area and location, approvals anticipated to be required as part of the project, necessary environmental clearances, and the intended uses of this DEIR.

Chapter 4. Environmental Setting: A description of the physical environmental conditions in the vicinity of the project as they existed at the time the notice of preparation was published, from local and regional perspectives. These provide the baseline physical conditions from which the lead agency determines the significance of the project's environmental impacts.

Chapter 5. Environmental Analysis: Each environmental topic is analyzed in a separate section that discusses: the thresholds used to determine if a significant impact would occur; the methodology to identify and evaluate the potential impacts of the project; the existing environmental setting; the potential adverse and beneficial effects of the project; the level of impact significance before mitigation; the mitigation measures for the proposed project; the level of significance after mitigation is incorporated; and the potential cumulative impacts of the proposed project and other existing, approved, and proposed development in the area.

Chapter 6. Significant Unavoidable Adverse Impacts: Describes the significant unavoidable adverse impacts of the proposed project.

Chapter 7. Alternatives to the Proposed Project: Describes the alternatives and compares their impacts to the impacts of the proposed project. Alternatives include the No Project Alternative, Existing General Plan Alternative, Reduced Intensity Alternative, and Alternate Land Use Mix Alternative.

Chapter 8. Impacts Found Not to Be Significant: Briefly describes the potential impacts of the project that were determined to not be significant by the NOP and public and agency comments received during the NOP comment period.

Chapter 9. Other CEQA Considerations: Describes the significant irreversible environmental changes, growth-inducing impacts, and energy impacts associated with the proposed project.

Chapter 10. Organizations and Persons Consulted: Lists the people and organizations that were contacted during the preparation of this DEIR.

Chapter 11. Qualifications of Persons Preparing DEIR: Lists the people who prepared this DEIR for the proposed project.

Chapter 12. Bibliography: The technical reports and other sources used to prepare this DEIR.

Appendices: The appendices for this document consist of these supporting documents:

- Appendix A: Notice of Preparation (NOP), NOP Comments, and Scoping Meeting Sign-in Sheet
- Appendix B: Agua Mansa Commerce Park Specific Plan
- Appendix C1a: Air Quality Study
- Appendix C1b: Supplemental Air Quality Assessment
- Appendix C2: Health Risk Assessment
- Appendix C3 Greenhouse Gas Study
- Appendix D: Biological Resources Assessment and MSHCP Consistency Analysis
- Appendix E: Cultural Resources Study
- Appendix F1: Geotechnical Investigation Report Industrial and Business Parks
- Appendix F2: Geologic Evaluation Report Open Space
- Appendix F3: Mine Deformation Study
- Appendix G: Hazardous Materials Reports
- Appendix H: Hydrology & Preliminary Water Quality Management Reports
- Appendix I: Noise Study
- Appendix J: Service Provider Questionnaire Responses
- Appendix K1: Traffic Study
- Appendix K2: Supplemental Traffic Analysis
- Appendix K3: Transportation Impact Summary
- Appendix L: Utility Report
- Appendix M: Water Supply Assessment
- Appendix N: Transportation Energy Use Calculations

1.2.2 Type and Purpose of This DEIR

This DEIR has been prepared as a "Project EIR," defined by Section 15161 of the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3). This type of EIR examines the environmental impacts of a specific development project and should focus primarily on the changes in the environment that would result from the development project. The EIR examines all phases of the project, including planning, construction, and operation.

1.3 PROJECT LOCATION

The City of Jurupa Valley is in western Riverside County of southern California. Jurupa Valley is bordered by the cities of Eastvale to the west; Norco and Riverside to the south and east; Colton to the northeast; and Ontario, Fontana, and Rialto in San Bernardino County to the north and east (see Figure 3-1, *Regional Location*).

The 302.8-acre Specific Plan area is in the northeastern-most corner of Jurupa Valley and adjacent to the City of Rialto and the unincorporated community of Bloomington in San Bernardino County. The project site is along an existing industrial corridor and on the site of the former Riverside Cement Plant. The site is bounded by El Rivino Road to the north, the North Riverside & Jurupa Company Canal to the south, Rubidoux Boulevard to the west, and a portion of Hall Avenue to the east. A Union Pacific Railroad spur crosses the western project area (see Figures 3-2, *Local Vicinity*, and 3-3, *Aerial Photograph*). Overall, the project site consists of 20 Assessor's Parcel Numbers (APNs): 175-170- 005, portions of 006, 027, 028, 030, 036, 040, 042, 043, 045, and 046; 175-180-001; and 175-200-001 through 005 and 007 through 009. A portion of the canal (APN 175-170-042) is within the Specific Plan boundary near Rubidoux Boulevard. The boundary does not include the private canal (APNs 175-170-007 and 175-180-002) that borders the project site to the south along Agua Mansa Road.

The Specific Plan area is approximately 2.5 miles south of Interstate 10 (I-10), 1.4 miles north of State Route 60 (SR-60), and 2.5 miles west of Interstate 215 (I-215).

1.4 PROJECT SUMMARY

The Agua Mansa Commerce Park Specific Plan is a proposed industrial business park with retail overlay and open space development located on the former Riverside Cement facility. The site was used for mining and cement production until operations ceased in 2014. The brownfield site is being decommissioned and prepared for environmental remediation and successful redevelopment under the requirements of the Specific Plan. The Specific Plan area encompasses approximately 302.8 acres of land in the City of Jurupa Valley. The project would consist of three primary land uses 1) an Industrial Park, 2) a Business Park (with possible retail component) and 3) Open Space.

The Industrial Park district is 189.7 acres and would allow for 4,216,000 square feet of industrial park uses, such as manufacturing; research and development; fulfillment centers; e-commerce centers; high-cube, general warehousing, and distribution; and cross-dock facilities. The Business Park district is 33.8 acres and has two options for development: Alternative 1 would develop 200,000 square feet of business park uses; Alternative 2

would develop up to 25,000 square feet of retail and/or food service uses as well as 150,000 of business park square footage. Additionally, the Business Park district includes an existing 23,000-square-foot research and development building (CalPortland area). The Specific Plan allows for an additional 41,000 square feet of Business Park use in the CalPortland area either through expansion of the existing building or new construction. The Open Space District is 70.9-acres. Remediation will occur within the Open Space District in accordance with a DTSC approved Response Plan. After remediation, the area is proposed to remain undeveloped.

Table 1-1 includes a summary of the proposed development potential within each land use.

Table 1-1 Proposed Land Use Development Potential

Map Area	Specific Plan Land Use Designation	Total Building Area (Square Feet)	Acreage
1	Industrial Park (IP)	4,216,000 sf	189.7
2	Business Park With Retail Overlay (BP)	**Alternative 1:** • 200,000 sf of Business Park with no retail • Existing research and development building approximately 23,000 sf in size; plus 41,000 sf potential expansion for a total of 64,000 sf **Alternative 2:** • Up to 25,000 sf of Retail with 150,000 sf of Business Park • Existing research and development building approximately 23,000 sf in size; plus 41,000 sf potential expansion for a total of 64,000 sf	33.8
3	Open Space District (OS)	N/A	70.9
4	Railroad Right-of-Way and Canal	N/A	8.4
TOTAL		**Alternative 1: 4,480,000 SF** **Alternative 2: 4,455,000 SF**	**302.8 acres**

Additionally, connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted (see Figure 3-5, *Conceptual Site Plan*). If access across the rail line is not permitted, then trip distribution for the project would be altered slightly. Alternative 1 has been analyzed as Alternative 1A and Alternative 2 has been analyzed as Alternative 2A to reflect this altered trip distribution.

1.5 SUMMARY OF PROJECT ALTERNATIVES

1.5.1 Alternatives Evaluated

The California Environmental Quality Act (CEQA) requires that an environmental impact report include a discussion of reasonable project alternatives that would "feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines § 15126.6[a]). As required by CEQA, Chapter 7.0 of this DEIR identifies and evaluates potential alternatives to the proposed project.

1. Executive Summary

Based on the analysis in Chapter 5, *Environmental Analysis*, the proposed project would result in significant and unavoidable impacts in the areas of air quality, greenhouse gases, and transportation and traffic.

Based on the CEQA criteria, the following four alternatives were determined to represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic objectives of the project but which may avoid or substantially lessen any of the environmental effects of the project. These alternatives are analyzed in Chapter 7, *Alternatives to the Proposed Project*.

- **No Project Alternative** (required by CEQA)**.** This alternative assumes that the existing 23,000-square-foot research and development building (CalPortland area) on the site would remain, and leases would be extended/renewed to continue office operations. The existing limestone quarry and cement manufacturing plant structures would remain, and the site would not be remediated.

- **Existing General Plan Alternative.** This alternative is based on a floor to area ratio (FAR) of 0.25 for offices and light industrial across the entire site (294.4 acres (excludes railroad right-of-way)). No heavy industrial or open space uses are allowed under the existing general plan.

- **Reduced Intensity Alternative.** The reduced intensity alternative is based on an FAR for the industrial park of 0.4 instead of the FAR 0.52 associated with the proposed project. The square footage for the business park remains consistent with the development option referred to as "Alternative 1" throughout this DEIR. The expansion of the 23,000 SF research and development building to 64,000 SF is also included in this alternative. This alternative also includes the Park/Open space as with the proposed project. It is assumed that a Specific Plan would be adopted for this alternative.

- **Alternate Land Use Mix.** This alternative assumes an increase in square footage for the business park (500,000-square SF) and a reduction in the industrial park (warehousing) use (2,500,000 SF (FAR of 0.3)) in comparison to the proposed project. Overall building development would be reduced by approximately 1.48M SF. This alternative includes the Park/Open space as with the proposed project. It is assumed that a Specific Plan would be adopted for this alternative.

Table 1-2 provides statistical summary of the project alternatives in comparison to the proposed project.

Table 1-2 Project Alternative Statistical Summary

	Proposed Project	No Project/No Development	Existing General Plan	Reduced Intensity Alternative	Alternative Land Use Plan
Dwelling Units	—	—	—	—	—
Business Park/Office[1]	264,000 SF	23,000 SF	3,206,016	264,000 SF	564,000 SF
Industrial	4,216,000 SF	—	—	3,305,300 SF	2,500,000 SF
Railroad Right-of-Way and Canal	8.4 acres	8.4 acres	8.4 acres	8.4 acres	8.4 acres
Park Space	70.9 acres	—	—	70.9 acres	70.9 acres

Note: SF: square feet
[1] Includes light industrial. Alternative 1 considered.

1.5.2 Alternative Conclusions

An EIR must identify an "environmentally superior" alternative, and where the No Project Alternative is identified as environmentally superior, the EIR is required to identify as environmentally superior an alternative from among the others evaluated. Each alternative's environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior. Each alternative is summarized below. Based on the analysis, the No Project alternative would not be environmentally superior. The Reduced Intensity Alternative was identified as the environmentally superior alternative.

1.5.2.1 NO PROJECT ALTERNATIVE

The No Project alternative would result in similar impacts to 2 impact categories, reduced impacts to 11 environmental impacts, and increased impacts to 5 categories. Impacts would be similar for agricultural resources and population and housing. This alternative would reduce impacts for air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, mineral resources, noise, public services, transportation and traffic, tribal cultural resources, and utilities and service systems. Impacts to aesthetics, hazards and hazardous materials, hydrology and water quality, land use and planning, and recreation would increase. Impacts to air quality, greenhouse gas emissions, and transportation and traffic would be reduced from significant and unavoidable to less than significant. Overall, impacts under this alternative would be decreased in comparison to the proposed project.

Moreover, the No Project alternative would not achieve any of the project objectives. The No Project Alternative would not provide any of the project benefits that would occur with implementation of the proposed project, including promoting remediation and reuse of the contaminated brownfield site, the adoption of a specific plan that allows for high-cube logistics warehouse uses, fulfillment centers, e-commerce centers, research and development uses, and retail uses that would encourage private capital investment in the City, facilitating job growth and capitalizing on predictable and marketable future development opportunities, and locating industrial, warehousing, and service-commercial uses to areas readily accessible from major highways or rail traffic sufficiently separated and buffered to protect residential uses.

1.5.2.2 EXISTING GENERAL PLAN ALTERNATIVE

The Existing General Plan alternative would result in similar impacts to 6 impact categories and increased impacts to 12 categories. It would not reduce any impacts relative to the proposed project. Impacts would be similar for agricultural resources, geology and soils, hydrology and water quality, land use and planning, mineral resources, and population and housing. This alternative would increase impacts to aesthetics, air quality, biological resources, cultural resources, greenhouse gas emissions, hazards and hazardous materials, noise, public services, recreation, transportation and traffic, tribal cultural resources, and utility services. As with the proposed project, impacts to air quality, greenhouse gas emissions, and transportation and traffic would remain significant and unavoidable. Overall, impacts under this alternative would be increased in comparison to the proposed project.

The Existing General Plan alternative meets only one of the project objectives, promoting remediation and reuse of contaminated brownfield sites. The remaining three objectives would not be met: adoption of a

specific plan that allows for high-cube logistics warehouse uses, and e-commerce centers uses that would encourage private capital investment in the City; facilitating job growth and capitalizing on predictable and marketable future development opportunities; and locating warehousing in an area that is readily accessible from major highways or rail traffic, and sufficiently separated and buffered to protect residential uses. While this alternative could generate more jobs than the proposed project, there is a limited market and capital availability for this use, particularly for a site with environmental complexity and scale.

1.5.2.3 REDUCED INTENSITY ALTERNATIVE

The Reduce Intensity Alternative would reduce impacts to 6 environmental impacts and result in similar impacts to 12 categories. It would not increase any impacts. It would reduce impacts to air quality, greenhouse gas emissions, noise (operational), public services, transportation and traffic, and utilities and service systems. Impacts would be very similar for aesthetics, agricultural resources, biological and cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, recreation, and tribal cultural resources. As with the proposed project, impacts to air quality, greenhouse gas emission, and traffic would remain significant and unavoidable. Overall, impacts under this alternative would be reduced in comparison to the proposed project. The Reduced Intensity alternative is identified as "environmentally superior" to the proposed project.

The Reduced Intensity alternative would represent a similar project as the proposed project, but with a substantial reduction in allowable industrial use. This alternative would achieve Objectives No.'s 1 and 4. It would promote site remediation and reuse and would locate new industrial warehousing and service-commercial uses in areas easily accessible to major highways or rail, and sufficiently buffered from residential areas. It is not certain, however, whether this alternative could achieve Objectives No.'s 2 and 3. The extent to which a reduced use could attain these objectives is dependent upon the economic viability of this alternative. With a reduction in almost one million square feet of warehousing uses, this alternative may not be able to absorb the extensive site remediation costs. If this alternative is not economically viable, it would not provide the anticipated job growth, or provide projected economic and infrastructure benefits to the City.

1.5.2.4 ALTERNATE LAND USE MIX

The Alternate Land Use Mix would reduce impacts to 5 environmental impacts and have similar impacts to 13 categories. It would not increase any impacts. It would reduce impacts to air quality, greenhouse gas emissions, noise (operational), public services, and utilities and service systems. Impacts would be very similar for aesthetics, agricultural resources, biological and cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, recreation, transportation and traffic, and tribal cultural resources. As with the proposed project, impacts to air quality, greenhouse gas emission, and traffic would remain significant and unavoidable. Overall, impacts under this alternative would be reduced in comparison to the proposed project.

The Alternate Land Use Mix would more than double business park use (from approximately 264,000 SF to 564,000 SF) and would reduce the allowable industrial use (warehousing) by approximately 40% (from approximately 4.2 million SF to 2.5 million SF). As with the Reduced Intensity alternative, the ability for the alternative to achieve project objectives is dependent upon its economic viability. It is anticipated that this

alternative would achieve Objectives No.'s 1 and 4. It would promote site remediation and reuse and would locate new industrial warehousing and service-commercial uses in areas easily accessible to major highways or rail, and sufficiently buffered from residential areas. It is unknown whether this alternative could achieve Objectives No.'s 2 and 3. It is not known whether the site could support double the business park uses, and if so, how long it would take to absorb that level of development of service and retail uses. Moreover, with a substantial reduction in industrial use, it may not be possible for this alternative to fund the extensive site remediation. Given the uncertainty of this alternative's economic viability, it cannot be assumed that this alternative would facilitate job growth and economic opportunities for the City. Even if viable, it would not achieve this objective at the same level as the proposed project.

1.6 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the proposed project, the major issues to be resolved include decisions by the lead agency as to:

1. Whether this DEIR adequately describes the environmental impacts of the project.
2. Whether the benefits of the project override the environmental impacts which cannot be feasibly avoided or mitigated to a level of insignificance.
3. Whether the proposed land use changes are compatible with the character of the existing area.
4. Whether the identified goals, policies, or mitigation measures should be adopted or modified.
5. Whether there are other mitigation measures that should be applied to the project besides the Mitigation Measures identified in the DEIR.
6. Whether there are any alternatives to the project that would substantially lessen any of the significant impacts of the proposed project and achieve most of the basic project objectives.

1.7 AREAS OF CONTROVERSY

In accordance with Section 15123(b)(2) of the CEQA Guidelines, the EIR summary must identify areas of controversy known to the lead agency, including issues raised by agencies and the public. Prior to preparation of the DEIR, the Notice of Preparation was distributed for comment from July 19 through August 17, 2017. A public scoping meeting was held on July 27, 2017. A summary of the NOP comment letters received are summarized in Chapter 2, *Introduction* (see Table 2-1). No verbal or written comments were received during the scoping meeting. The scoping meeting was held at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509. Comments received were primarily related to the project's potential impacts on land use and planning. There were concerns that the project is inconsistent with the Western Riverside County Multiple Species Habitat Conservation Plan and that potential hazardous materials on-site may pose a threat to air and water quality.

1.8 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE AFTER MITIGATION

Table 1-3 summarizes the conclusions of the environmental analysis contained in this EIR. Impacts are identified as significant or less than significant, and mitigation measures are identified for all significant impacts. The level of significance after imposition of the mitigation measures is also presented.

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.1 AESTHETICS			
AE-1: The proposed project would not have a substantial adverse effect on a scenic vista.	Less Than Significant	No mitigation measures are required.	Less Than Significant
AE-2: The proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	No Impact	No mitigation measures are required.	No Impact
AE-3: The proposed project would not degrade the existing visual character or quality of public views of the site and its surroundings. Furthermore, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality.	Less Than Significant	No mitigation measures are required.	Less Than Significant
AE-4: The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.3 AIR QUALITY			
AQ-1: Operation of the proposed project would conflict with or obstruct implementation of the applicable air quality plan.	Potentially Significant	No mitigation measures are available.	Significant and Unavoidable
AQ-2: Construction activities associated with the proposed project could generate short-term emissions in exceedance of SCAQMD'S regional construction significance thresholds for VOC and NO_X. Operation activities associated with the proposed project could generate long-term emissions in exceedance of SCAQMD'S regional construction significance thresholds for VOC, NO_X, and PM_{10}.	Potentially Significant	MM AQ-1 For construction equipment greater than 150 horsepower (>150 HP), the Construction Contractor shall use off-road diesel construction equipment that complies with EPA/CARB Tier 3 emissions standards during all construction phases and will ensure that all construction equipment is tuned and maintained in accordance with the manufacturer's specifications. MM AQ-2 The project shall utilize "Super-Compliant" low-VOC paints that have been reformulated to exceed the regulatory VOC limits of SCAQMD's Rule 1113 (RR-AQ-4). Super-Compliant low VOC paints shall be no	Significant and Unavoidable

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		more than 10g/L of VOC. Alternatively, the applicant may utilize tilt-up concrete buildings that do not require the use of architectural coatings. MM AQ-3 Prior to the issuance of any grading permits, the applicant and/or building operators shall submit construction plans and a construction vehicle management plan to the City of Jurupa Valley denoting the proposed schedule and projected equipment use. The construction vehicle management plan shall include such things as: idling time requirements; requiring hour meters on equipment; and documenting the serial number, horsepower, age, and fuel of all onsite equipment. The plan shall include that California state law requires equipment fleets to limit idling to no more than 5 minutes. Construction contractors shall provide evidence that low emission mobile construction equipment will be utilized or that their use was investigated and found to be infeasible for the project as determined by the City. MM AQ-4 The project shall place signs that identify CARB anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for trucks drivers to restrict idling to no more than 5 minutes once the vehicle is stopped, the transmission is set to “neutral” or “park”, and the parking brake is engaged; and 3) telephone numbers of the building facilities manager and CARB to report violations. MM AQ-5 The City shall require operators of the proposed facilities to encourage the vendor trucks to incorporate energy efficiency improvement features through the Carl Moyer Program—including truck modernization, retrofits, and/or aerodynamic kits and low rolling resistance tires—to reduce fuel consumption. MM AQ-6 All buildings shall be designed to provide infrastructure to support use of electric-powered forklifts and/or other on-site equipment.	
AQ-3: Operational activities associated with the proposed project would not expose sensitive receptors to substantial pollutant concentrations.	Less Than Significant	No mitigation measures are required.	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
AQ-4: Implementation of the proposed project would not create objectionable odors affecting a substantial number of people.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.4 BIOLOGICAL RESOURCES			
BIO-1: Project development could impact several sensitive animal species	Potentially Significant	MM BIO-1 **Preconstruction burrowing owl survey.** Within 30 calendar days prior to grading, a qualified biologist shall implement focused preconstruction surveys. Surveys shall be conducted by a CDFW-approved biologist prior to the initiation of ground disturbance (including, but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading). In conformance with Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (2006) and California Burrowing Owl Consortium's 1993 protocols (which are recommended by the CDFW), the surveys will consist of a minimum of three site visits. A brief biological technical report will be prepared and submitted to the City and RCA that describes the results of the preconstruction survey. The report shall be reviewed by the City of Jurupa Valley Planning Department prior to the issuance of a grading permit. If the preconstruction survey does not identify burrowing owls in the impact area, a grading permit may be issued without restriction. If it is determined that burrowing owls have colonized the project site prior to the initiation of construction, the project proponent shall immediately inform RCA, USFWS, and CDFW and will be required to prepare a Burrowing Owl Protection and Relocation Plan for approval by RCA USFWS, and CDFW prior to initiating ground disturbance. If burrowing owls are determined to be present in areas proposed for ground disturbance, the following avoidance measures will be implemented: a. Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through noninvasive methods that either the birds have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Owls on-site after February 1 will be assumed to be nesting unless evidence indicates otherwise.	Less Than Significant

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		This nest protection buffer will be maintained until August 31 or, based on monitoring evidence, until the young owls are foraging independently or the nest is no longer active. Unless otherwise authorized by CDFW and/or the RCA, a 250-foot buffer, within which no activity will be permissible, will be maintained between project activities and nesting burrowing owls during the nesting season. This protected area will remain in effect until August 31 or, based upon monitoring evidence, until the young owls are foraging independently. For burrowing owls present during the nonbreeding season (generally September 1 to January 31), a 150-foot buffer zone will be maintained around the occupied burrow(s). b. If there is any possibility that owls will be injured or killed as a result of construction activities, the birds may be passively relocated during the nonbreeding season in coordination with the City, RCA, and CDFW. Relocation of owls will be performed by a qualified biologist using one-way doors, which should be installed in all burrows within the impact area and left in place for at least two nights. Immediately prior to the initiation of grading, these one-way doors will be removed and the burrows backfilled. To avoid the potential for owls evicted from a burrow to occupy other burrows in the impact area, one-way doors will be placed in all potentially suitable burrows in the impact area when eviction occurs. c. Preparation of a Burrowing Owl Protection and Relocation Plan may be required if active and/or passive relocation is necessary. The relocation plan will outline the basic process and provides options for avoidance and mitigation. The relocation plan will be approved by the RCA, USFWS, and CDFW prior to implementation..	
		MM BIO-2 **Least Bell's vireo**. Prior to the issuance of a grading permit, the Planning Department shall verify that construction activities are scheduled (to the extent feasible) to commence outside of the least Bell's vireo nesting season (approximately mid-March until September), depending on when the birds arrive from and depart to wintering areas or whenever nesting birds are present, as determined by a biological monitor with demonstrated LBV experience.	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		a) Any construction activities that commence during the least Bell's vireo nesting season shall require preconstruction surveys for nesting LBV. Such surveys shall be conducted within three business days prior to construction by a qualified biologist that is experienced with accurately identifying LBV and possesses knowledge of the species' biology and life history. The survey area shall consist of the impact area and a 500-foot buffer around Crestmore Lake and the commercial quarry. b) If any active LBV nests are detected within the survey area, a nest protection buffer of 500 feet around the nest shall be delineated, flagged, and avoided until the nesting cycle is complete. The avoidance buffer may be modified and/or other recommendations proposed to minimize impacts, as determined appropriate by a full-time biological monitor. Supporting documentation shall be prepared and submitted to the RCA and wildlife agencies prior to construction to outline any proposed LBV monitoring activities. In addition, the following measures shall be taken to minimize potential indirect impacts to active LBV nests: ▪ Prior to construction, a training program shall be developed and implemented by the project biologist to inform all construction personnel about the federal- and state-listed LBV, the location of suitable habitat in relation to the work area, and the importance of complying with species avoidance and impact minimization measures pursuant to FESA and CESA. ▪ Construction contractors shall stage equipment in areas that will create the greatest distance (minimum of 500 feet) between construction noise sources and LBV-suitable habitat. ▪ All construction work within 500 feet of LBV habitat shall occur during daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours determined by the City. Construction contractors shall install properly operating and maintained mufflers on all construction equipment, fixed or mobile, to reduce construction equipment noise. Mufflers shall be installed consistent with manufacturers' standards.	

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Construction contractors shall orient stationary construction equipment so that emitted noise is directed away from any occupied LBV habitat. ▪ Any construction-related activities that could occur within 500 feet of an active LBV nest will require daily noise monitoring. A qualified biologist who possesses experience monitoring LBV nesting behavior will establish a baseline of hourly ambient noise levels by collecting measurements at several noise monitoring stations using an RCA-approved sound monitoring device (e.g., Mastech MS6700 digital sound level meter or equivalent). Noise monitoring stations will be located 1) adjacent to construction areas within 500 feet of suitable LBV habitat and 2) along the edge of suitable LBV habitat area where access is feasible. The exact location and number of noise monitoring stations will be determined by the qualified biologist. Baseline noise measurements will be collected at the established monitoring stations prior to the nesting season and prior to construction (if feasible). On a daily basis during construction, the qualified biologist shall collect hourly noise measurements at the monitoring stations using the RCA-approved noise monitoring device. If the qualified biologist determines that nesting activities are being disturbed at any time during construction, the noise level that triggered the disturbance to nesting LBV will be recorded and identified as the “disturbance threshold,” and the qualified biologist will issue a stop work order to the contractor immediately. All construction activities within the 500-foot nest protection buffer will cease until the noise levels can be reduced below the disturbance threshold. To do this, the qualified biologist shall direct the contractor to make operational changes, utilize technology to reduce construction noise such as mufflers, and/or install a barrier to alleviate noise levels during the breeding season. Installation of noise barriers and any other corrective actions taken to mitigate noise during the construction period shall be completed prior to the LBV	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		nesting season and would be done in coordination with the RCA, CDFW, and USFWS. ▪ Daily noise monitoring will continue following implementation of the corrective actions to ensure that the disturbance threshold for nesting LBV is not exceeded and that no further disturbance to nesting LBV occurs. The results of daily noise monitoring measurements will be tabulated, and a summary of all monitoring activities and corrective actions will be recorded in daily monitoring reports. These reports will be compiled and submitted to the RCA and wildlife agencies on a monthly basis. ▪ If, after all corrective actions are implemented, the monitoring biologist determines that the normal expected breeding behavior of birds is still being affected, work shall again cease, and the RCA and wildlife agencies shall be contacted to discuss the appropriate course of action. Any activities in the Open Space District—including remediation or if a recreational use is proposed in the future—shall avoid direct and indirect impacts to LBV habitat, and the applicant will be responsible for implementing the following avoidance and minimization measures, which will be included in project plans, to safeguard long-term conservation and sustainability of the species: a) The Open Space District will be fenced and will restrict all access, except for areas that are required to undergo remediation or construction pursuant to approved plans. Prior to any public access into the Open Space District and the City's issuance of a Certificate of Occupancy or equivalent documentation for the completion of recreation facilities in the Open Space District, the applicant shall execute and record a deed restriction, conservation easement, or other instrument in a form acceptable to the Riverside Conservation Authority that provides for the permanent protection of the occupied least Bell's vireo habitat, as depicted on Figure 9, Proposed Fencing and Protection Areas, in the General Biological Resources Assessment in Appendix D of this DEIR. The instrument shall clearly	

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		indicate that the restricted area shall be preserved and no development within the restricted area is allowed other than environmental remediation and routine property maintenance activities, which may occur under the guidance of a qualified biologist. b) A fencing plan that uses both geographic site features and fencing will be implemented to prevent access to the protected least Bell's vireo habitat within the proposed restricted area. A draft fence alignment and proposed feasible buffer are illustrated on Figure 9 of the GBRA, included as Appendix D to this DEIR. The locations of the restricted area, proposed fencing, and any buffer areas are subject to review and approval by the resource agencies party to the MSHCP as well as the DTSC MM BIO-3 **Delhi sands flower-loving fly**. Prior to the issuance of a grading permit for the area impacted by the Delhi sands flower-loving fly, RCA will purchase 50 acres of DSFLF mitigation credits from the existing Colton Dunes Conservation Bank. The applicant entered into the agreement with RCA for funding and acquisition dated September 10, 2018, amended April 1, 2019. The agreement establishes the terms and conditions for the applicant to contribute to the purchase price of the DSFLF mitigation credits. Payment by the applicant to the RCA to acquire the DSFLF mitigation credits would represent the project's compliance and consistency with the MSHCP goals for DSFLF habitat conservation. If the agreement to purchase the Colton Dunes Conservation Bank DSFLF mitigation credits cannot be consummated, the project applicant may acquire 43 acres of DSFLF habitat within Riverside County or San Bernardino County subject to approval by the RCA and the wildlife agencies and provided the property has long-term conservation value for the species and will be managed in perpetuity. MM BIO-4 **Silvery legless lizard.** Within 30 days prior to ground-disturbing activities associated with project construction, the applicant shall retain a qualified biologist to conduct focused silvery legless lizard surveys within areas of suitable habitat, to be determined by the biologist. The qualified biologist will be familiar with legless lizard ecology and survey methods and will	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		have approval from CDFW to relocate this species. The scope of the survey shall be determined by the qualified biologist in consultation with CDFW and shall be sufficient to determine presence or absence in the areas of disturbance. If the focused survey results are negative, a letter report shall be submitted to the City, RCA, and CDFW, and no further action shall be required. If the silvery legless lizard is found during the preconstruction surveys in the proposed work areas during any phase of the project, the following steps shall be taken: • Silvery legless lizards shall be captured by hand by the qualified biologist and relocated to nearby suitable protected habitat at a preapproved location outside of the project site. This may include areas in the proposed Open Space District or on public lands in the vicinity if approved by the landholding agency. • Construction monitoring shall be required for all new ground-breaking activities within silvery legless lizard habitat. Construction monitors shall capture and relocate lizards as specified above. • A letter report shall be submitted to the City, RCA, and CDFW within 30 days of legless lizard relocation, or as directed by CDFW. The report will document trapping and relocation methods and results and identify any mortality that occurred during the relocation event. This report shall be submitted to the City, RCA, and CDFW no more than 14 days following the last day of each phase of project construction.	
		MM BIO-5 **American badger.** No more than 30 days prior to the commencement of industrial business park construction activities, the applicant shall retain a CDFW-approved biologist to conduct preconstruction surveys for American badger within suitable habitat on the project site in brittlebush scrub, eucalyptus grove, and southern willow scrub where friable soils are present. If present, occupied badger dens shall be flagged, and ground-disturbing activities avoided within 50 feet of the occupied den. Maternity dens shall be avoided during pup-rearing season (February 15 through July 1), and a minimum 200-foot protection buffer established. The extent of buffers shall be flagged in the field utilizing a method highly visible by	

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		construction crews. Buffers may be modified with the concurrence of CDFW and/or RCA. Maternity dens shall be flagged for avoidance and identified on construction maps, and a biological monitor shall be present during construction to monitor for adequate protection of all identified dens and to ensure that all flagging is kept in good working order. If avoidance of a nonmaternity den (impacts to maternity dens are not allowed) is not feasible, badgers shall be relocated by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than 4 inches at a time) before or after the rearing season (15 February through 1 July). Any passive relocation of badgers shall occur only after consultation with CDFW and the biological monitor. Prior to the final CDFW or RCA inspection or occupancy, whichever comes first, a written report documenting all badger-related activities (den flagging, monitoring, badger removal, etc.) shall be provided to the City, RCA, and CDFW. MM BIO-6 **Southern grasshopper mouse.** Prior to initiation of ground-disturbing activities (i.e., vegetation removal, grubbing, and grading) during any time of the year, the applicant shall retain a CDFW-approved biologist to conduct preconstruction surveys for southern grasshopper mouse. Surveys shall focus on all areas of suitable burrow habitat within nonnative grassland and brittlebush scrub communities. If this species is observed within the project site during preconstruction surveys, it will be relocated with the approval of the City, RCA, and CDFW, to an approved site with suitable habitat for this species. Surveys and relocation of southern grasshopper mouse may occur prior to construction; however, focused surveys must occur within 30 days prior to construction to ensure that no special-status wildlife is present within the project site during construction. Survey and relocation methods shall be approved by CDFW prior to commencement of grading.	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		MM BIO-7 **Special Status Bat Species** a. Maternity colony surveys for special-status bat species shall be conducted during the maternity season (March 1 to July 31). If no active roosts are found, then no further action is required. If the biologist detects the presence of active maternity roost or hibernacula (i.e., a non-maternity roost), then MM BIO-7b, -7c, and -7d will be implemented, as appropriate. Additionally, no more than 30 days prior to the removal of trees or structures, the applicant shall retain a biologist holding a CDFW collection permit and a Memorandum of Understanding with CDFW allowing the biologist to handle bats, to conduct preconstruction surveys for sensitive bats within 50 feet of project activities. b. If active maternity roosts or hibernacula are found in a structure or tree scheduled for demolition/removal, the biologist shall survey (through the use of radio telemetry or other CDFW-approved methods) for nearby alternative maternity colony sites. If the biologist determines in consultation with the CDFW and/or RCA that there are alternative roost sites used by the maternity colony and young are not present, then bat eviction procedures as outlined in MM BIO-7d would apply. However, if there are no alternative roost sites used by the maternity colony nearby, MM BIO-7c (providing substitute maternity roost nearby) would be required. If active maternity roosts are absent, but a hibernaculum is present, then MM BIO-7c would not be necessary, but MM BIO-7d would be required. c. If a maternity roost will be impacted by the project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony shall be provided on, or in close proximity to, the project site no less than three months prior to the eviction of the colony. Eviction procedures are outlined in MM BIO-7d. Alternative roost sites will be constructed in accordance with the specific bat's requirements in coordination with CDFW. By making the roosting habitat available prior to eviction (MM BIO-7d), the colony will have a better chance of finding and using the roost. Alternative roost sites must be of comparable size and proximal in location to the impacted	

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures		Level of Significance After Mitigation
			colony. The CDFW shall also be notified of any hibernacula or active nurseries within the construction zone d. If nonbreeding bat hibernacula are found in structures or trees scheduled to be removed, the individuals shall be safely evicted under the direction of a qualified biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (e.g., installation of one-way doors). In situations requiring one-way doors, a minimum of one week shall pass after doors are installed and temperatures should be sufficiently warm for bats to exit the roost, because bats do not typically leave their roost daily during winter months in southern coastal California. This action should allow all bats to leave during the course of one week. Roosts that need to be removed in situations where the use of one-way doors is not necessary in the judgment of the qualified biologist shall first be disturbed by various means at the direction of the bat biologist at dusk to allow bats to escape during the darker hours, and the roost tree shall be removed or the grading shall occur the next day (i.e., there shall be no less or more than one night between initial disturbance and the grading or tree removal). If an active maternity roost is in an area that will be impacted by the project and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (i.e., prior to 1 March) or after young are flying (i.e., after July 31) using the exclusion techniques described above.	
BIO-2: Project development would impact 0.332 acre of southern willow scrub that is regulated as a riparian habitat by CDFW	Potentially Significant	MM BIO-8	Prior to remediation of the mining pit and subsequent construction of the industrial business park, the project proponent shall obtain a Lake and Streambed Alteration Agreement (LSAA) from CDFW to authorize permanent impacts to 0.332 acre of riparian habitat (K). The project applicant will be responsible for complying with all permit conditions. Such conditions may include, but are not limited to, implementation of best management practices (i.e., erosion and sediment control measures) and seasonal work restrictions, as appropriate. In addition, CDFW is expected to require compensatory mitigation for impacts to jurisdictional riparian habitat. The amount of required compensatory habitat acreage	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures		Level of Significance After Mitigation
			will be based on the functions and values of impacted features. Habitat compensation will be provided at a ratio of up to 3:1 of created to filled or disturbed in-kind habitat, pending coordination with CDFW. This ratio may be reduced through the permit process if CDFW find that a different ratio is sufficient to mitigate impacts to jurisdictional riparian habitat. Riparian habitat K shall not be removed until the LSAA is received from CDFW or correspondence is received from CDFW indicating no permit is needed..	
BIO-3: Development of the proposed project would impact 0.332 acre of non-wetland riparian habitat regulated as Waters of the State by RWQCB	Potentially Significant	MM BIO-9	The US Army Corps of Engineers considers the project site outside of its regulatory jurisdiction, and no federal permit is required. However, 0.332 acre of state jurisdictional riparian habitat (K) would be removed during implementation of the project. The applicant will be required to submit a Notice of Intent to the Santa Ana Regional Water Quality Control Board (RWQCB) to receive Waste Discharge Requirements (WDRs), and all conditions will be agreed upon prior to project construction. The project applicant will be responsible for complying with all conditions of the WDRs. The applicant may be required to prepare a habitat mitigation monitoring plan to be submitted with the agency permit applications, including an agreed-upon replacement ratio of wetlands with the RWQCB. Compensatory mitigation may include in-kind restoration at a minimum 3:1 ratio of created to filled wetlands. If the ratio is increased by the RWQCB, then the more conservative ratio will be used. The amount of compensatory wetland acreage will be based on the functions and values of impacted features. As an alternative to wetland restoration, equivalent mitigation credits may be purchased at a mitigation bank, or the applicant may enter into an in-lieu fee agreement to offset impacts to jurisdictional features. Purchase of mitigation credits shall be subject to approval and verification by the RWQCB. A qualified biologist shall prepare a mitigation plan that provides detailed information about the bank or in-lieu fee agreement and how this approach will result in no net loss of wetlands. The plan shall be prepared pursuant to and through consultation with the RWQCB. As conditions of permit approval, impact minimization measures may also be required and could include implementation of best	Less Than Significant

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		management practices (e.g., erosion and sediment control measures) and seasonal work restrictions, as appropriate. State jurisdictional features shall not be removed until the permit is received from the RWQCB or correspondence is received indicating that a permit is not required.	
BIO-4: Development of the proposed project would impact vegetation that could be used by nesting birds.	Potentially Significant	MM BIO-10 **Nesting Bird Survey** a. To avoid impacts to nesting birds associated with development of the industrial business park, construction activities and construction noise should occur outside the avian nesting season (prior to February 1 or after September 1). If construction and construction noise occur within the avian nesting season (during the period from February 1 to September 1), all suitable habitats within 100 feet of the project site shall be thoroughly surveyed for the presence of nests by a qualified biologist no more than five days before commencement of any vegetation removal. If it is determined that the project site is occupied by nesting birds, Mitigation Measure BIO-10b shall apply. b. If pre-construction nesting bird surveys result in the location of active nests, no grading, vegetation removal, or heavy equipment activity shall take place within 300 feet of non-raptor nests and 500 feet of raptor nests, or as determined by a qualified biologist and subject to review and approval by the Planning Department. Protective measures (e.g., sampling) shall be required to ensure compliance with the MBTA and California Fish and Game Code. The qualified biologist shall serve as a construction monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts occur. A report of the findings, prepared by a qualified biologist, shall be submitted to the City and RCA prior to construction-related activities that have the potential to disturb any active nests during the nesting season. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, and no vegetation	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		clearing or ground disturbance shall commence within the fenced area until the qualified biologist and Planning Department verify that the nests are no longer occupied and the juvenile birds can survive independently from the nests.	
BIO-5: Project development could conflict with City of Jurupa Valley General Plan policies protecting riparian habitats, significant trees, and other vegetation	Potentially Significant	MM BIO-7, MM BIO-8, MM BIO-9, and MM BIO-10 apply to Impact BIO-5 in addition to: MM BIO-11 A tree replacement planting program shall be implemented to mitigate for the loss of 1,604 trees as a result of the business park development. A project-specific tree mitigation ratio was developed to offset this impact and is based upon whether trees planned for removal are native or non-native and their overall health and condition. A detailed methodology for determining tree mitigation requirements is included in the Tree Removal Impact Analysis and Mitigation Determination memorandum (Appendix K). To compensate for the loss of 31 native trees and 1,573 non-native trees, the Applicant will be required to plant a minimum of 61 native trees and 507 native or non-native trees. Trees shall be selected that provide similar habitat functions and values as the trees planned for removal. Native replacement trees will be 1- to 5-gallon size, or as deemed appropriate by a qualified biologist or arborist. In addition to individual trees, several trees shall be planted in groupings of 10 trees or more, subject to availability of space and where site conditions permit (i.e., topography and soils). These groupings will provide optimal structure and cover to support potential nesting birds and roosting bats. The identification of suitable replacement trees shall be determined by a qualified biologist in coordination with an arborist and/or landscape architect and will be subject to approval by the City's Planning Department. In accordance with MSHCP provisions, the replacement trees shall not include invasive, nonnative species in the portions of the development that are adjacent to the Open Space District, which contains sensitive habitats. Invasive plants that should be avoided are included in Section 6.1 of the MSHCP, Table 6-2, "Plants That Should Be Avoided Adjacent to the MSHCP Conservation Area."	Less Than Significant

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Replacement trees may be planted at entry points, common areas, adjacent to roadways, between buildings, along the perimeters of parking lots, and within landscape screening/buffer areas. All replacement trees shall be planted within the development area and buffer areas between the development area and the proposed Open Space District. Replacement tree stands shall be mostly concentrated within the development area north of the proposed Open Space District and within buffer/screening areas along El Rivino Road. Tree mitigation performance standards shall be incorporated into the landscape plan to ensure the successful establishment and survivorship of replacement tree plantings. The landscape and planting plans shall be developed in accordance with the City of Jurupa Valley's Ordinance Number 2015-17, Chapter 9.50, related to implementing the City's Water Efficient Landscape Design Requirements. The applicant shall be required to maintain the replacement trees on the project site for no less than five years from the date of planting and shall replace any trees that die during this period; this exceeds the City's landscape maintenance requirement of one year per Ordinance Number 2015-17.	
BIO-6: Project development could conflict with the provisions of the Western Riverside County Multiple-Species Habitat Conservation Plan	Potentially Significant	MM BIO-1, MM BIO-2, and MM BIO-3 apply to Impact BIO-6 in addition to: MM BIO-12 **MSHCP Urban Wildland Interface Guidelines.** Prior to the issuance of a grading permit, the Planning Department shall verify that the following MSHCP Urban Wildland Interface Guidelines are incorporated into the project plans and implemented as conditions of approval for the project • **Lighting.** Night lighting associated with the proposed development that is adjacent to existing or proposed Conservation Areas shall be directed away to reduce potential indirect impacts to wildlife species, including LBV. • **Noise**. Proposed noise-generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms, or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations, and guidelines	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards. The applicant shall verify that the noise impact analysis to be prepared for the proposed project will include a noise assessment and require mitigation measures to reduce noise impacts from the construction and operation of the project. • **Fuels Management.** The fuels management guidelines in Section 6.4 of the MSHCP address brush management activities around new development within or adjacent to MSHCP Conservation Areas. The final project design will ensure that no fuel modification will extend into adjacent preserved Open Space lands and least Bell's vireo habitat areas. • **Invasive Species.** The landscape plans for the project shall not include invasive, nonnative species for the portions of the development areas adjacent to the Open Space District. Invasive plants that shall be avoided are in Section 6.1 of the MSHCP, Table 6-2, "Plants That Should Be Avoided Adjacent to the MSHCP Conservation Area". The above measures would serve to minimize adverse project effects on conservation configurations and would minimize management challenges that can arise during development located adjacent to preserved least Bell's vireo and/or conservation habitat areas. The project design and BMPs incorporated into the proposed project design will address and minimize edge effects associated with the urban-wildlands interface.	
5.5 CULTURAL RESOURCES			
CR-1: Eligible historic resources would be impacted by development of the proposed project.	Potentially Significant	An Interpretive Exhibit that is open to the public will be developed in the Business Park area. The development of the plant and the important relationship between the cement industry and economic development of the community, and the historical relationship between the plant and agriculture in the area would be explored in the interpretive exhibit. The eligible buildings within the plant, including the Stock House and the White Cement Plant, would be recorded in a Secretary of the Interior's Standards and	Less Than Significant

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Guidelines for Architectural and Engineering Documentation report, and their key character-defining features would be identified and assessed for feasibility to salvage in a Salvage Inventory Report. Items appropriate for salvage and interpretation would be utilized in the Interpretive Exhibit or donated to the California Citrus State Historic Park or other entities for educational purposes. All other existing buildings on the project site would be demolished. MM CR-1 The Interpretative Exhibit shall be open to the public, present a photographic history of the plant, and showcase other information and artifacts that would educate the public about the historical significance of the plant and the cement industry in the region. The construction of the Interpretative Exhibit shall be completed prior to the issuance of the Certificate of Occupancy for the last industrial building of the Specific Plan. MM CR-2 Prior to issuance of any demolition permit, the Stock House and White Cement Plant shall be recorded in accordance with the Historic American Engineering Record Level III requirements. The recordation document shall be prepared by a qualified architectural historian or historic preservation professional. The recordation document shall include a historical narrative regarding the architectural and historical importance of each building being salvaged, relocated, or demolished and its contributions to the history of cement production in the region. The document shall also record the existing appearance of each building being salvaged, relocated, or demolished, in professional large-format photographs, including exteriors, representative interior spaces and character-defining features. The property setting and contextual views shall also be documented. All recordation document components shall be completed in accordance with the Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation. Copies of the completed report shall be distributed to the Eastern Information Center at the University of California, Riverside. MM CR-3 Prior to the issuance of any demolition permit, a qualified architectural historian or historic preservation professional shall prepare an inventory of key character-defining physical features of the eligible buildings appropriate for salvage and interpretation in a Salvage Inventory Report.	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures		Level of Significance After Mitigation
			Artifacts that are unsound, decayed, or contain toxic materials (including asbestos, lead paint, PCBs, hexavalent chromium, etc.) need not be included in the salvage process. A qualified architectural historian should prepare the interpretive materials, including historic and modern photos, for placement on a website that the applicant shall maintain for ten years. It would be appropriate for this to be on the City website or a local historic society website..	
		MM CR-4	The items identified in the Salvage Inventory Report shall be made available for use in an interpretive exhibit developed for the project or donated for curatorial and/or educational purposes to a local historical society, preservation organization, or the like. Salvage materials that will not be reused for the project shall be offered for donation or advertised for a period of not less than 30 days on historic preservation websites, in the Press Enterprise newspaper, posted on the project site itself, and by other means deemed appropriate. The salvage efforts shall be conducted by the project applicant. Salvage efforts shall be documented in writing by summarizing all measures taken to encourage receipt of salvage materials by the public. Copies of notices, evidence of publication of such notices, a summary of results from the publicity efforts, a list of salvage offers (if any) that were made, and an explanation of why the features were not or could not be accepted, shall be included in the appendix of the Salvage Inventory Report. The Salvage Inventory Report shall be filed by the project applicant with the City of Jurupa Valley Planning Department after completion of the salvage	
CR-2: Potentially undiscovered archaeological resources could be impacted by project development.	Potentially Significant	MM CR-5	**Archaeological Monitoring.** A qualified archaeologist shall be retained by the developer prior to the issuance of a grading permit. If unanticipated discoveries are made during construction, all work will halt within 50 feet until the resource can be evaluated by the on-call qualified archaeologist. The project archaeologist will be allowed to make an evaluation of the find. If the resource is significant, Mitigation Measure CR-12 shall apply.	Less Than Significant
		MM CR-6	**Archeological Treatment Plan.** If a significant archaeological resource(s) is discovered on the property, ground-disturbing activities	

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		shall be suspended 100 feet around the resource(s). The archaeological monitor, the project proponent, and the City Planning Department shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary to document the size and content of the discovery such that the resource(s) can be evaluated for significance under CEQA criteria. The research design shall list the sampling procedures appropriate to exhaust the research potential of the archaeological resource(s) in accordance with current professional archaeology standards (typically this sampling level is 2 to 5 percent of the volume of the cultural deposit). At the completion of the laboratory analysis, any recovered archaeological resources shall be processed and curated according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City of Jurupa Valley Planning Department and the Eastern Information Center.	
5.6 GEOLOGY AND SOILS			
GEO-1(i): The proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42.)	No Impact	No mitigation measures are required.	No Impact

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
GEO-1(ii),(iii),(iv): The proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving , strong seismic ground shaking.	Less Than Significant	No mitigation measures are required.	Less Than Significant
GEO-2: The proposed project would not result in substantial soil erosion or the loss of topsoil.	Less Than Significant	No mitigation measures are required.	Less Than Significant
GEO-3: Project development could exacerbate existing hazards related to landslide, lateral spreading, subsidence, liquefaction, or collapse.	Potentially Significant	MM GEO-1 Prior to commencement of mass excavation and grading, the project applicant shall coordinate with the excavation/grading contractor, civil engineer and geotechnical consultant to provide a detailed work schedule to the City. This team shall be available to meet onsite with the City inspector, if requested, to address schedule details and any issues related to the geotechnical aspects of site grading. MM GEO-2 Prior to construction, to reduce hazards related to geologic conditions onsite, including the potential for settlement from collapsible soils and foundational damage from expansive soils, remedial grading may include but shall not be limited to the following : • All vegetation and deleterious materials shall be disposed of off-site prior to initiation of grading operations. • Soil over-excavation shall extend laterally a distance equal to the depth of removal but no less than five feet beyond the limits of the structures. In addition, within building limits, existing soil shall be removed and replaced as engineered fill (over-excavated) to a depth of at least five feet below the bottom of the building foundations, to the bottom of artificial fill, or five feet below existing grade, whichever is the greater depth. Beyond building limits, existing soil shall be removed and replaced as engineered fill (over-excavated) to a depth of at least two feet below proposed grade. The actual depths of removal shall be evaluated in the field by a representative of the geotechnical consultant based on actual conditions exposed during grading. • All surficial units consisting of artificial fill, upper five feet of alluvial soils, soil with roots, and loose surficial soil are considered unsuitable for support of the proposed fills and improvements	Less Than Significant

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		following removal of vegetation and deleterious materials. These materials shall be over-excavated to expose competent soil. • Environmentally unsuitable soils encountered during the excavation process shall be properly disposed of off-site in accordance with all state and local regulations. Over-excavated soils, free of deleterious and environmentally unsuitable materials, may be reused as compacted fill. • All over-excavation bottoms shall be observed by the geotechnical consultant prior to fill placement. Prior to placement of fill material, the over-excavation bottom shall be scarified to a depth of at least six inches, moisture conditioned to within one to two percent of optimum moisture content, and proof-rolled. • The geotechnical consultant shall be provided with appropriate survey staking during grading to verify that depths and locations of recommended over-excavations have been achieved. Observations and detailed geologic mapping of over-excavations shall be performed by the engineering geologist or geotechnical engineer to verify the anticipated conditions. • Any foundation remnants or construction debris associated with former structures or developments encountered within excavations shall be fully removed, and any void spaces that may be created shall be backfilled with approved compacted structural fill. • On site excavated materials to be used as compacted fill shall be placed in uniform lifts restricted to about six inches in thickness, moisture conditioned to near optimum moisture content, then mechanically compacted. Fill placement shall be subject to controlled engineering inspection by the engineer. • Fill slopes shall be designed at a slope ratio of 2:1 (horizontal:vertical) or flatter and be overbuilt and subsequently cut back to a compacted core. Fill slopes shall be constructed with keyways, backcuts, and backdrains. Keyways shall be a minimum of 15 feet wide for slopes up to 30 feet high and a minimum of half the slope height for slopes higher than 30 feet. Keyways shall be tilted a minimum 2 percent toward the back of the keyway and	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		embedded a minimum of three feet into competent material at the toe. Backcut benches shall be excavated to expose competent material where fill is placed on slopes steeper than approximately 5:1 (horizontal:vertical). Notes should be added to the grading plan to indicate these mitigation measures.	
GEO-4: Expansive soils are found onsite and could cause geologic hazards to future workers and visitors of the project site.	Potentially Significant	MM GEO-1 and MM GEO-2 are applicable to Impact GEO-4.	Less Than Significant
GEO-5: The proposed project would not 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.	No Impact	No mitigation measures are required.	No Impact
GEO-6: The proposed project could destroy paleontological resources or a unique geologic feature.	Potentially Significant	MM GEO-3 Paleontological Monitoring. A qualified paleontologist shall be retained by the developer prior to the issuance of a grading permit. The Project Paleontologist will be on-call to monitor ground-disturbing activities and excavations on the Project site following identification of potential paleontological resources by project personnel. If paleontological resources are encountered during implementation of the Project, ground-disturbing activities will be temporarily redirected from the vicinity of the find. The Project Paleontologist will be allowed to temporarily divert or redirect grading or excavation activities in the vicinity in order to make an evaluation of the find. If the resource is significant, Mitigation Measure CR-5 shall apply. MM GEO-4 Paleontological Treatment Plan. If a significant paleontological resource(s) is discovered on the property, the qualified paleontologist shall develop a plan of mitigation in consultation with the project proponent and the City. The plan which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find.	Less Than Significant

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.7 GREENHOUSE GAS EMISSIONS			
GHG-1: The proposed project would generate a net increase in GHG emissions that would have a significant impact on the environment.	Potentially Significant	The mitigation measures from Section 5.3, *Air Quality*, would also reduce GHG emissions impacts of the project. AQ-4 The project shall place signs that identify CARB anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for trucks drivers to restrict idling to no more than 5 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged; and 3) telephone numbers of the building facilities manager and CARB to report violations. AQ-5 The City shall require operators of the proposed facilities to encourage the vendor trucks (e.g., commercial deliveries) to incorporate energy efficiency improvement features through the Carl Moyer Program — including truck modernization, retrofits, and/or aerodynamic kits and low rolling resistance tires—to reduce fuel consumption. AQ-6 All buildings shall be designed to provide infrastructure to support use of electric powered forklifts and/or other on-site equipment. The project also includes PDF-GHG-1 through PDF-GHG-8 and PDF-AQ-1 through PDF-AQ-2, which would reduce GHG emissions to the extent feasible.	Significant and Unavoidable
GHG-2: The proposed project would conflict with applicable plan, policy, and regulations adopted to reduce GHG emissions	Potentially Significant	No feasible mitigation measures exist that would reduce these emissions to levels that are less than significant.	Significant and Unavoidable
5.8 HAZARDS AND HAZARDOUS MATERIALS			
HAZ-1: The proposed project would create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials.	Potentially Significant	HAZ-1 Prior to issuance of project demolition permits by the City of Jurupa Valley, the project applicant shall submit a Demolition Plan to the California Department of Toxic Substances Control (DTSC) for review and approval and shall submit proof of that approval to the City of Jurupa Valley. The project applicant shall also provide written verification to the City of Jurupa Valley demonstrating DTSC approval of a Waste Management Plan. The applicant shall fully comply with the approved plans, which together shall	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures		Level of Significance After Mitigation
			ensure compliance with local air district requirements; ensure appropriate equipment and structures/buildings decontamination, tank removal, if applicable, and building/equipment demolition; designate appropriate waste and recycling material staging areas; and provide protocols to identify areas that require additional sampling based on visual observations and field monitoring instruments (e.g., photo ionization detector) during demolition activities. A Contingency Plan shall be included as part of the Demolition Plan. The Contingency Plan shall address actions to be taken in the event that, during demolition activities, unanticipated conditions are discovered that warrant additional assessment and remediation. If such conditions are discovered, the project applicant shall promptly comply with DTSC notice requirements and shall provide the City with a copy within 24 hours of any such notification made to DTSC.	
		HAZ-2	Prior to issuance of project grading permits on the industrial portion of the project site, the project applicant shall provide written verification to the City of Jurupa Valley demonstrating DTSC approval of: 1) a Site Assessment Workplan, 2) Summary of Findings, and 3) a Response Plan. The Site Assessment Workplan shall comply with California Health and Safety Code Section 25395.94 and Section 5.3 of the CLRRA Agreements between the project applicant and DTSC. The Site Assessment Workplan will provide protocols for additional sampling in areas identified by DTSC staff to ensure that on-site soils are fully characterized, to the extent practicable, and to ensure proper classification of on-site soils for on-site reuse or for off-site disposal. The Report of Findings (or Summary of Findings) combined with the Site Assessment Workplan will constitute the Site Assessment Plan required under California Health and Safety Code Section 25395.94 and Section 5.3 of the CLRRA Agreements between the project applicant and DTSC. The Response Plan shall comply with California Health and Safety Code Section 25395.96 and Section 5.4 of the CLRRA Agreements between the project applicant and DTSC. Potential response actions include soil management, land use controls, cover, capping, and long-term operation and maintenance, as needed. The Response Plan will include measures to address worker and public safety, air quality, groundwater protection, and fugitive dust generated from the	

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		earthmoving activities during implementation of the response action. The Response Plan will include components such as: • A Soils Management Plan to ensure safe and appropriate handling of site soils and transport and off-site disposal, if necessary. • A Contingency Plan for new findings that may occur during site grading. • Dust control measures and an Air Monitoring Plan in accordance with SCAQMD Rule 1156, Rule 1466, and Rule 403, as applicable. • Any other components deemed necessary by the DTSC to protect groundwater, air quality, or human health or as required by California Health and Safety Code Sections 25395.94 and 25395.96.	
		HAZ-3 Prior to issuance of project grading permits on the SCE Substation portion of the project site, the project applicant shall provide written verification to the City of Jurupa Valley demonstrating DTSC approval of: 1) a Site Assessment Workplan, 2) Summary of Findings, and 3) a Response Plan. The Site Assessment Workplan shall comply with California Health and Safety Code Sections 25395.94 and Section 5.3 of the CLRRA Agreements between the project applicant and DTSC. The Site Assessment Workplan will provide protocols for additional sampling in areas identified by DTSC staff to ensure that on-site soils are fully characterized, to the extent practicable, and to ensure proper classification of on-site soils for on-site reuse or for off-site disposal. The Report of Findings (or Summary of Findings) combined with the Site Assessment Workplan together will constitute the Site Assessment Plan required under California Health and Safety Code Section 25395.94 and Section 5.3 of the CLRRA Agreements between the project applicant and DTSC. The Response Plan shall comply with California Health and Safety Code Section 25395.96 and Section 5.4 of the CLRRA Agreements between the project applicant and DTSC. Potential response actions include soil management, land use controls, cover, capping, and a long-term operation and maintenance plan, as needed. The Response Plan will include measures to address worker and public safety, air quality, groundwater protection, and fugitive dust generated from the earthmoving activities	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		during implementation of the response action. The Response Plan will include components such as: • A Soils Management Plan to ensure safe and appropriate handling of site soils and transport and off-site disposal, if necessary. • A Contingency Plan for new findings that may occur during site grading. • Dust control measures and an Air Monitoring Plan in accordance with SCAQMD Rule 1156, Rule 1466, and Rule 403, as applicable. • Any other components deemed necessary by the DTSC to protect groundwater, air quality, or human health or as required by California Health and Safety Code Sections 25395.94 and 25395.96.	
		HAZ-4 Prior to issuance of building permits for construction of project buildings on a particular parcel, the project applicant shall provide a copy or copies of a deed restriction or land use covenant, as applicable, that has been recorded over the parcel for which a building permit is sought. The deed restriction or land use covenant shall serve as a land use control to limit the use of the parcel to commercial/industrial use and prohibit future noncommercial /nonindustrial development, and shall be in a form approved by the DTSC and recorded pursuant to California Health and Safety Code Section 25395.99.	
		HAZ-5 Prior to issuance of a Certificate of Occupancy for each building within the Agua Mansa Commerce Park, the project applicant shall undertake and complete the necessary remedial actions identified for that respective parcel within the Response Plan under the oversight of the DTSC. The project applicant shall provide written verification from DTSC to the City of Jurupa Valley Planning Director demonstrating either: 1) that the parcel has been remediated sufficiently to allow safe occupancy; or 2) issuance of a DTSC Certificate of Completion for the Response Action on the parcel for which a Certificate of Occupancy is sought. The written verification shall serve to indicate that the parcel is suitable for commercial/industrial development based upon screening levels appropriate for a commercial land use exposure scenario, or other risk methodology required by the DTSC, and that no further investigation or remediation is required other	

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures		Level of Significance After Mitigation
			than any long-term operation and maintenance requirements or monitoring that may be required by DTSC or other regulatory agencies.	
		HAZ-6	Prior to issuance of project demolition permits by the City of Jurupa Valley for the Open Space/Recreation Park site, the project applicant shall submit a Demolition Plan to the California Department of Toxic Substances Control (DTSC) for review and approval. The project applicant shall also provide written verification to the City of Jurupa Valley demonstrating DTSC approval of a Waste Management Plan. The applicant shall fully comply with the approved plans, which together shall ensure compliance with local air district requirements; ensure appropriate equipment and structures/buildings decontamination, tank removal, if applicable, and building/equipment demolition; designate appropriate waste and recycling material staging areas; and provide protocols to identify areas that require additional sampling based on visual observations and field monitoring instruments (e.g., Photo Ionization Detector) during demolition activities. A Contingency Plan shall be included as part of the Demolition Plan. The Contingency Plan will address actions to be taken in the event that, during demolition activities, unanticipated conditions are discovered that warrant additional assessment and remediation. If such conditions are discovered, the project applicant shall promptly comply with DTSC notice requirements and shall provide the City with a copy within 24 hours of any such notification made to DTSC.	
		HAZ-7	Prior to issuance of project grading permits in the Open Space/Recreation Park site, the project applicant shall provide written verification to the City of Jurupa Valley demonstrating DTSC approval of: 1) a Site Assessment Workplan, 2) Summary of Findings, and 3) a Response Plan. The Site Assessment Workplan shall comply with California Health and Safety Code Section 25395.94 and Section 5.3 of the CLRRA Agreements between the project applicant and DTSC. The Site Assessment Workplan will provide for additional sampling in areas identified by DTSC staff to ensure that the soils within the proposed open space area are fully characterized, to the extent practicable, and to ensure proper classification of on-site soils for on-site reuse or for off-site disposal. The Report of Findings (or Summary of Findings) combined with the Site Assessment Workplan will constitute the Site Assessment Plan required under California Health and Safety	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Code Section 25395.94 and Section 5.3 of the CLRRA Agreements between the project applicant and DTSC. The Response Plan shall comply with California Health and Safety Code Section 25395.96 and Section 5.4 of the CLRRA Agreements between the project applicant and DTSC. The Response Plan will include measures to address worker and public safety, air quality, groundwater protection, and fugitive dust generated from the earthmoving activities during implementation of the response action. The Response Plan will include components such as: • A Soils Management Plan to ensure safe and appropriate handling of site soils and transport and off-site disposal, if necessary. • A Contingency Plan for new findings that may occur during site grading. • Dust control measures and an Air Monitoring Plan in accordance with SCAQMD Rule 1156, Rule 1466, and Rule 403, as applicable. • Any engineering or administrative controls or long-term operations and maintenance plan that is required by DTSC; and any other components deemed necessary by the DTSC to protect groundwater, air quality, or human health or as required by California Health and Safety Code Sections 25395.94 and 25395.96.	
HAZ-2: The proposed project would 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.	Potentially Significant	MM HAZ-1 through MM HAZ-8 apply to Impact HAZ-2.	Less Than Significant
HAZ-3: The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.	No Impact	No mitigation measures are required.	No Impact

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
HAZ-4: The proposed project is located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.	Potentially Significant	MM HAZ-1 through MM HAZ-8 apply to Impact HAZ-4.	Less Than Significant
HAZ-5: The project site is not located within the airport land use plan of either Flabob or Riverside Municipal Airports and would not result in a safety hazard or excessive noise for people residing or working in the project area.	No Impact	No mitigation measures are required.	No Impact
HAZ-6: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less Than Significant	No mitigation measures are required.	Less Than Significant
HAZ-7: The proposed project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.	No Impact	No mitigation measures are required.	No Impact
5.9 HYDROLOGY AND WATER QUALITY			
HYD-1: The proposed project would not violate any water quality standards or waste discharge requirements.	Less Than Significant	No mitigation measures are required.	Less Than Significant
HYD-2: The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land	Less Than Significant	No mitigation measures are required.	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
uses or planned uses for which permits have been granted).			
HYD-3: The proposed project would not 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: i) Result in a substantial erosion or siltation on- or off-site; ii) Substantial increase in the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) Impede or redirect flood flows.	Less Than Significant	No mitigation measures are required.	Less Than Significant
HYD-4: The proposed project would pose a risk of release of pollutants.	Less Than Significant	No mitigation measures are required.	Less Than Significant
HYD-5: The proposed project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.10 LAND USE AND PLANNING			
LU-1: The proposed project would not physically divide an established community.	Less Than Significant	No mitigation measures are required.	Less Than Significant
LU-2: The proposed project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	Less Than Significant	No mitigation measures are required.	Less Than Significant

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.11 MINERAL RESOURCES			
M-1: Project implementation would not 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..	Less Than Significant	No mitigation measures are required.	Less Than Significant
M-2: Implementation of the proposed project would not 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.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.12 NOISE			
N-1: The proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance.	Less Than Significant	No mitigation measures are required.	Less Than Significant
N-2: The proposed project would not generate excessive groundborne vibration or groundborne noise levels.	Less Than Significant	No mitigation measures are required.	Less Than Significant
N-3: The proposed project is not located within the vicinity of a private airstrip or an airport land use plan and would not expose people residing or working in the project area to excessive noise levels.	No Impact	No mitigation measures are required.	No Impact
5.13 POPULATION AND HOUSING			
P-1: The proposed project would not induce substantial population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).	Less Than Significant	No mitigation measures are required.	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
P-2: Project implementation would not result in displacing people or housing.	No Impact	No mitigation measures are required.	No Impact
5.14 PUBLIC SERVICES			
FIRE PROTECTION AND EMERGENCY SERVICES			
FP-1: The proposed project would not result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.	Less Than Significant	No mitigation measures are required.	Less Than Significant
POLICE PROTECTION			
PP-1: The proposed project would not result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.15 RECREATION			
R-1: The proposed project would not generate any additional residents that may increase the use of existing park and recreational facilities.	Less Than Significant	No mitigation measures are required.	Less Than Significant

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
R-2: The proposed project does not include recreational facilities which would have an adverse physical effect on the environment.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.16 TRANSPORTATION/TRAFFIC			
T-1: The proposed project would generate traffic volumes that would result in direct impacts and would cumulatively contribute to traffic congestion that exceeds the LOS standards at some intersections and some roadway segments in the study area.	Potentially Significant	**Alternative 1** Intersections Alt1 T-1 The project applicant shall construct the following intersection improvements prior to the issuance of the occupancy permit (each intersection is followed by its number as included in the traffic reports, Appendix K): • Rubidoux Blvd./Building 6 access (#7): ▪ Construct a westbound right turn lane • Rubidoux Blvd. /Project Access (EW) (#8): ▪ Construct NB RT (northbound right turn) lane ▪ Construct SB LT (southbound left turn) lane ▪ Construct WB LT (westbound left turn) lane ▪ Construct WB RT (westbound right turn) lane ▪ Construct new signal • Rubidoux Blvd. @ Production Circle/Project Access (#9): ▪ Construct new traffic signal (required by Cal Portland contingent upon development level and meeting signal warrant) • Building 6 Access (NS)/El Rivino Road (#18): ▪ Construct NB RT lane ▪ Construct 2nd EB through lane ▪ Construct EB RT lane ▪ Construct WB LT lane • Project Access (NS)/El Rivino Road (#19): ▪ Construct NB LT lane ▪ Construct NB RT lane ▪ Construct 2nd EB through lane	Significant and Unavoidable The proposed project would result in significant and unavoidable impacts to the following intersections: ***Alternatives 1 and 2*** • No. 22 – Hall Avenue/ El Rivino Road, City of Jurupa Valley • No. 33 – Market Street/SR60 EB ramps, Caltrans • No. 5 – Cedar Avenue/Jurupa Avenue, County of San Bernardino • No. 24 – Agua Mansa Road/El Rivino Road, County of San Bernardino • No. 36 – Riverside Avenue/Slover Avenue, City of Rialto • No. 1 – Cedar Avenue/I-10 WB ramps, County of San Bernardino • No. 2 – Cedar Avenue/I-10 EB ramps, County of San Bernardino ***Alternatives*** 1A and 2A • Same as for Alternative 1 and 2 with the exception of Intersection No. 33 for which impacts would not be significant.

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ Construct EB RT lane ▪ Construct WB LT lane • Cactus Avenue/Project Access @ El Rivino Road (#20): ▪ Construct NB LT lane ▪ Construct NB shared through/RT lane ▪ Construct 2nd EB through lane ▪ Construct WB LT lane • Building 1 Auto Access/El Rivino Road (#21): ▪ Construct NB/RT lane ▪ Construct 2nd EB through lane ▪ Construct EB RT lane ▪ Construct WB LT lane • Hall Avenue/El Rivino Road (#22): ▪ Construct NB LT lane ▪ Construct EB LT lane ▪ Construct WB LT lane ▪ Construct new traffic signal • Hall Avenue/Building 1 Access (EW) (#23): ▪ Construct NB LT lane ▪ Construct SB RT lane ▪ Construct EB LT lane ▪ Construct EB RT lane Alt1 T-2 The project applicant shall pay DIF and TUMF fees that will fund the following improvements: • Rubidoux Blvd. @ 20th Street/Market Street (#10:) • Install NB RT overlap • Modify signal phasing • Construct 2 WB LT lanes • Traffic signal modification • Install NB RT overlap	The proposed project would result in significant and unavoidable impacts to the following roadway sections: ***Alternative*** 1 • Market Street between Hall Avenue and Rivera Street (City of Jurupa Valley and City of Riverside) • Agua Mansa Road between Hall Street and El Rivino Road (City of Jurupa Valley and County of San Bernardino) ***Alternative*** 2 • El Rivino between Cedar Avenue and Cactus Avenue (City of Jurupa Valley, City of Rialto, and County of San Bernardino) • Market Street between Hall Avenue and Rivera Street (City of Jurupa Valley and City of Riverside) • Agua Mansa Road between Hall Street and El Rivino Road (City of Jurupa Valley and County of San Bernardino) ***Alternatives*** 1A and 2A • El Rivino between Cedar Avenue and Cactus Avenue (City of Jurupa Valley, City of Rialto, and County of San Bernardino) • Market Street between Hall Avenue and Rivera Street (City of Jurupa Valley and City of Riverside) • Agua Mansa Road between Hall Street and El Rivino Road (City of

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• Construct 2nd SB LT lane • Rubidoux Blvd. @ 24th Street (#11): ▪ Construct new traffic signal ▪ Construct NB LT lane ▪ Construct SB LT lane • Rubidoux Blvd. @ 26th Street (#12): ▪ Construct NB LT lane ▪ Construct SB LT lane ▪ Construct new traffic signal • Rubidoux Blvd. @ 28th Street (#13): ▪ Construct EB LT lane ▪ Construct WB LT lane • Rubidoux Blvd. @ 30th Street / SR60 WB Off Ramp (#14): ▪ Construct WB LT lane • Rubidoux Blvd. @ SR60 WB Ramp (#15): • Construct new traffic signal • Rubidoux Blvd. @ SR60 EB Ramp (#16): ▪ Construct NB RT lane ▪ Construct EB LT lane • Agua Mansa Road @ Holly Street (#25): ▪ Construct new traffic signal • Agua Mansa Road @ Market Street (#29): ▪ Construct SB LT lane ▪ Construct SB Through lane ▪ Construct second SB RT lane • Market Street @ Hall Avenue (#30): ▪ Construct N/S 2-Way LT median ▪ Construct new traffic signal • Market Street @ SR60 WB ramp (#32):	Jurupa Valley and County of San Bernardino)

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ Restripe SB RT lane to Shared through/RT lane (2035 Requirement) Alt1 T-3 The project applicant shall contribute fair share funding for the following intersection improvements prior to issuance of the first occupancy permit: Fair Share calculations are presented in Tables 49 and 50 of the TIA (Appendix K1). • Hall Avenue/El Rivino Road (#22): ▪ Construct EB LT lane ▪ Construct WB LT lane ▪ Construct new traffic signal • Market Street/SR60 EB Ramps (#33) (Caltrans): ▪ Construct 2nd SB LT lane • Cedar Avenue/I-10 WB Ramp (#1) (Caltrans) ▪ Construct 2nd WB RT lane ▪ Construct WB LT lane • Cedar Avenue/I-10 EB Ramp (#2) (Caltrans) ▪ Construct EB RT lane • Cedar Avenue @ Jurupa Avenue (#5) ▪ Construct WB LT lane ▪ Construct EB LT lane • Agua Mansa Road/El Rivino Road (#24) (SB): ▪ Construct new traffic signal • Riverside Avenue @ Slover Avenue (#36): ▪ Construct SB RT lane <u>Roadway Segments</u> Alt1 T-4 The project applicant shall contribute fair share (FS) funding or pay DIF/TUMF fees for the following roadway segment prior to issuance of the first occupancy permit: • Agua Mansa Road between Market Street and Brown Avenue (2020 Requirement, DIF)	

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ Construct two additional lanes to widen from two lanes to four lanes • Agua Mansa Road between Hall Street and El Rivino Road (2035 Requirement, FS) ▪ Construct two additional lanes to widen from two lanes to four lanes (east side pavement currently at ultimate; west wise widening only required (from S/O El Rivino Rd. to S/O Holly Street (approximately 1,200 ft) • Rubidoux Blvd between El Rivino and Production Circle ▪ Improve Rubidoux Blvd. along project frontage (east side from El Rivino Road to southerly edge of Parcel 7; included in PDF T-8) • Market Street between Agua Mansa Road and Hall Avenue (DIF/TUMF) ▪ Construct two additional lanes to widen from two lanes to four lanes • Market Street between Hall Avenue and Rivera Street (DIF/TUMF/FS) ▪ Construct two additional lanes to widen from two lanes to four lanes **Alternative 2** <u>Intersections</u> Alt2 T-1 The project applicant shall construct the following intersection improvements prior to the issuance of the occupancy permit (each intersection is followed by its number as included in the traffic reports, Appendix K): • Rubidoux Blvd./Building 6 access (#7): ▪ Construct a WB RT lane • Rubidoux Blvd. /Project Access (EW)(#8): ▪ Construct NB RT (northbound right turn) lane ▪ Construct SB LT (southbound left turn) lane	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ Construct WB LT (westbound left turn) lane ▪ Construct WB RT (westbound right turn) lane ▪ Construct new signal • Rubidoux Blvd. @ Production Circle/Project Access (#9): ▪ Construct new traffic signal (required by Cal Portland contingent upon development level and meeting signal warrant) • Building 6 Access (NS)/El Rivino Road (#18) ▪ Construct NB RT lane ▪ Construct 2nd EB through lane ▪ Construct EB RT lane ▪ Construct WB LT lane • Project Access (NS)/El Rivino Road (#19) ▪ Construct NB LT lane ▪ Construct NB RT lane ▪ Construct 2nd EB through lane ▪ Construct EB RT lane ▪ Construct WB LT lane • Cactus Avenue/Project Access @ El Rivino Road (#20) ▪ Construct NB LT lane ▪ Construct NB shared through/RT lane ▪ Construct 2nd EB through lane ▪ Construct EB RT lane ▪ Construct WB LT lane • Building 1 Auto Access/El Rivino Road (#21) ▪ Construct NB/RT lane ▪ Construct 2nd EB through lane ▪ Construct EB RT lane ▪ Construct WB LT lane • Hall Avenue/El Rivino Road (#22) ▪ Construct NB LT lane	

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ Construct EB LT lane ▪ Construct WB LT lane ▪ Construct new traffic signal • Hall Avenue/Building 1 Access (EW) (#23) ▪ Construct NB LT lane ▪ Construct SB RT lane ▪ Construct EB LT lane ▪ Construct EB RT lane	
		Alt2 T-2 The project applicant shall pay DIF and TUMF fees that will fund the following improvements: • Rubidoux Blvd. @ 20th Street/Market Street (#10): ▪ Install NB RT overlap ▪ Modify signal phasing ▪ Construct 2 WB LT lanes ▪ Traffic signal modification ▪ Install NB RT overlap ▪ Construct 2nd SB LT lane • Rubidoux Blvd. @ 24th Street (#11): ▪ Construct new traffic signal ▪ Construct NB LT lane ▪ Construct SB LT lane • Rubidoux Blvd. @ 26th Street (#12): ▪ Construct NB LT lane ▪ Construct SB LT lane ▪ Construct new traffic signal • Rubidoux Blvd. @ 28th Street (#13): ▪ Construct EB LT lane ▪ Construct WB LT lane • Rubidoux Blvd. @ 30th Street / SR60 WB Off Ramp (#14): ▪ Construct WB LT lane	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• Rubidoux Blvd. @ SR60 WB Ramp (#15): ▪ Construct new traffic signal • Rubidoux Blvd. @ SR60 EB Ramp (#16): ▪ Construct NB RT lane ▪ Construct EB LT lane • Agua Mansa Road @ Holly Street (#25): ▪ Construct new traffic signal • Agua Mansa Road @ Market Street (#29): ▪ Construct SB LT lane ▪ Construct SB Through lane ▪ Construct second SB RT lane • Market Street @ Hall Avenue (#30): ▪ Construct N/S 2-Way LT median ▪ Construct new traffic signal • Market Street @ SR60 WB ramp (#32): ▪ Restripe SB RT lane to Shared through/RT lane Alt2 T-3 The project applicant shall contribute fair share funding for the following intersection improvements prior to issuance of the first occupancy permit: • Hall Avenue/El Rivino Road (#22): ▪ Construct EB LT lane ▪ Construct WB LT lane ▪ Construct new traffic signal • Market Street/SR60 EB Ramps (#33) (Caltrans): ▪ Construct 2nd SB LT lane • Cedar Avenue/I-10 WB Ramp (#1) (Caltrans): ▪ Construct 2nd WB RT lane ▪ Construct WB LT lane • Cedar Avenue/I-10 EB Ramp (#2) (Caltrans): ▪ Construct EB RT lane	

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• Cedar Avenue @ Jurupa Avenue (#5) ▪ Construct WB LT lane ▪ Construct EB LT lane • Agua Mansa Road/El Rivino Road (#24) (SB): ▪ Construct new traffic signal • Riverside Avenue @ Slover Avenue (#36): ▪ Construct SB RT lane Roadway Segments Alt2 T-4 The project applicant shall contribute fair share (FS) funding or pay DIF/TUMF fees for the following roadway segment prior to issuance of the first occupancy permit: • Agua Mansa Road between Market Street and Brown Avenue (DIF): ▪ Construct two additional lanes to widen from two lanes to four lanes • Agua Mansa Road between Hall Street and El Rivino Road (FS): ▪ Construct two additional lanes to widen from two lanes to four lanes (east side pavement currently at ultimate; west side widening only required from S/O El Rivino Rd. to S/O Holly Street (approximately 1,200 ft) • El Rivino between Cedar Avenue and Cactus Avenue: ▪ Construct 1 additional EB lane to widen from 1 EB lane to 2 EB lanes and maintain 1 WB lane • Market Street between Agua Mansa Road and Hall Avenue (DIF/TUMF:) ▪ Construct two additional lanes to widen from two lanes to four lanes • Market Street between Hall Avenue and Rivera Street (DIF/TUMF/FS): ▪ Construct two additional lanes to widen from two lanes to four lanes	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Site Access Alternative 1A Intersections Alt1A T-1 The project applicant shall construct the following intersection improvements prior to the issuance of the occupancy permit (each intersection is followed by its number as included in the traffic reports, Appendix K): • Rubidoux Blvd./Building 6 access (#7): ▪ Construct a westbound right turn lane • Rubidoux Blvd. /Project Access (EW)(#8): ▪ Construct NB RT (northbound right turn) lane ▪ Construct SB LT (southbound left turn) lane ▪ Construct WB LT (westbound left turn) lane ▪ Construct WB RT (westbound right turn) lane ▪ Construct new signal • Rubidoux Blvd. @ Production Circle/Project Access (#9) ▪ Construct new traffic signal (required by Cal Portland contingent upon development level and meeting signal warrant) • Building 6 Access (NS)/El Rivino Road (#18) ▪ Construct NB RT lane ▪ Construct 2nd EB through lane ▪ Construct EB RT lane ▪ Construct WB LT lane • Project Access (NS)/El Rivino Road (#19) ▪ Construct NB LT lane ▪ Construct NB RT lane ▪ Construct 2nd EB through lane ▪ Construct EB RT lane ▪ Construct WB LT lane • Cactus Avenue/Project Access @ El Rivino Road (#20) ▪ Construct NB LT lane ▪ Construct NB shared through/RT lane	

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ Construct 2nd EB through lane ▪ Construct WB LT lane • Building 1 Auto Access/El Rivino Road (#21) ▪ Construct NB/RT lane ▪ Construct 2nd EB through lane ▪ Construct EB RT lane ▪ Construct WB LT lane • Hall Avenue/El Rivino Road (#22) ▪ Construct NB LT lane ▪ Construct EB LT lane ▪ Construct WB LT lane ▪ Construct new traffic signal • Hall Avenue/Building 1 Access (EW) (#23) (E+P Requirement) ▪ Construct NB LT lane Alt1A T-2 The project applicant shall pay DIF and TUMF fees prior to each building occupancy that will fund the following improvements: • Rubidoux Blvd. @ Tarragon/El Rivino (#6) ▪ Construct NB RT lane ▪ Construct EB LT lane ▪ Restripe WB Left/Thru lane to shared Thru/Right turn lane ▪ Restripe WB Right turn lane to shared Thru/Right turn lane • Rubidoux Blvd. @ 20th Street/Market Street (#10) ▪ Install NB RT overlap ▪ Modify signal phasing Construct 2 WB LT lanes Traffic signal modification ▪ Construct 2nd SB LT lane • Rubidoux Blvd. @ 24th Street (#11) ▪ Construct new traffic signal ▪ Construct NB LT lane ▪ Construct SB LT lane	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• Rubidoux Blvd. @ 26th Street (#12) ▪ Construct NB LT lane ▪ Construct SB LT lane ▪ Construct new traffic signal • Rubidoux Blvd. @ 28th Street (#13) ▪ Construct EB LT lane ▪ Construct WB LT lane • Rubidoux Blvd. @ 30th Street / SR60 WB Off Ramp (#14) ▪ Construct WB LT lane • Rubidoux Blvd. @ SR60 WB Ramp (#15) ▪ Construct new traffic signal • Rubidoux Blvd. @ SR60 EB Ramp (#16) ▪ Construct NB RT lane ▪ Construct EB LT lane • Agua Mansa Road @ Holly Street (#25) ▪ Construct new traffic signal • Agua Mansa Road @ Market Street (#29) ▪ Construct SB LT lane ▪ Construct SB Through lane ▪ Construct second SB RT lane • Market Street @ Hall Avenue (#30) ▪ Construct N/S 2-Way LT median ▪ Construct new traffic signal • Market Street @ SR60 WB ramp (#32) ▪ Restripe SB RT lane to Shared through/RT lane Alt1A T-3 The project applicant shall contribute fair share funding for the following intersection improvements prior to issuance of the first occupancy permit: • Hall Avenue/El Rivino Road (#22) ▪ Construct EB LT lane	

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ Construct WB LT lane ▪ Construct new traffic signal • Market Street/SR-60 EB Ramps (#33) (Caltrans) ▪ Construct 2nd SB LT lane • Cedar Avenue/I-10 WB Ramp (#1) (Caltrans) ▪ Construct 2nd WB RT lane ▪ Construct WB LT lane • Cedar Avenue/I-10 EB Ramp (#2) (Caltrans) ▪ Construct EB RT lane • Cedar Avenue @ Jurupa Avenue (#5) ▪ Construct WB LT lane ▪ Construct EB LT lane • Agua Mansa Road/El Rivino Road (#24)(SB) ▪ Construct new traffic signal • Riverside Avenue @ Slover Avenue (#36) ▪ Construct SB RT lane <u>Roadway Segments</u> Alt1A T-4 The project applicant shall contribute fair share (FS) funding or pay DIF/TUMF fees for the following roadway segment prior to issuance of the first occupancy permit: • Agua Mansa Road between Market Street and Brown Avenue (2020 Requirement, DIF) ▪ Construct two additional lanes to widen from two lanes to four lanes • Agua Mansa Road between Hall Street and El Rivino Road (2035 Requirement, DIF/FS) ▪ Construct two additional lanes to widen from two lanes to four lanes (east side pavement currently at ultimate; west side widening only required from S/O El Rivino Rd. to S/O Holly Street (approximately 1,200 ft)	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• El Rivino between Cedar Avenue and Cactus Avenue (2020 Requirement, FS) ▪ Construct 1 additional EB lane to widen from 1 EB lane to 2 EB lanes and maintain 1 WB lane • Improve Rubidoux Blvd. along project frontage (DIF) ▪ east side from El Rivino Road to southerly edge of Parcel 7 • Market Street between Agua Mansa Road and Hall Avenue (2020 Requirement, DIF/TUMF) ▪ Construct two additional lanes to widen from two lanes to four lanes • Market Street between Hall Avenue and Rivera Street (DIF/TUMF/FS) ▪ Construct two additional lanes to widen from two lanes to four lanes **Site Access Alternative 2A** <u>Intersections</u> Alt2A T-1 The project applicant shall construct the following intersection improvements prior to the issuance of the occupancy permit (each intersection is followed by its number as included in the traffic reports, Appendix K): • Rubidoux Blvd./Building 6 access (#7): ▪ Construct a westbound right turn lane • Rubidoux Blvd. /Project Access (EW)(#8): ▪ Construct NB RT lane ▪ Construct SB LT lane ▪ Construct WB LT lane ▪ Construct WB RT lane ▪ Construct new signal • Rubidoux Blvd. @ Production Circle/Project Access (#9): ▪ Construct new traffic signal (required by Cal Portland contingent upon development level and meeting signal warrant)	

1. Executive Summary

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• Building 6 Access (NS)/El Rivino Road (#18): ▪ Construct NB RT lane ▪ Construct 2nd EB through lane ▪ Construct EB RT lane ▪ Construct WB LT lane • Project Access (NS)/El Rivino Road (#19): ▪ Construct NB LT lane ▪ Construct NB RT lane ▪ Construct 2nd EB through lane ▪ Construct EB RT lane ▪ Construct WB LT lane • Cactus Avenue/Project Access @ El Rivino Road (#20): ▪ Construct NB LT lane ▪ Construct NB shared through/RT lane ▪ Construct 2nd EB through lane ▪ Construct WB LT lane • Building 1 Auto Access/El Rivino Road (#21): ▪ Construct NB/RT lane ▪ Construct 2nd EB through lane ▪ Construct EB RT lane ▪ Construct WB LT lane • Hall Avenue/El Rivino Road (#22): ▪ Construct NB LT lane ▪ Construct EB LT lane ▪ Construct WB LT lane ▪ Construct new traffic signal • Hall Avenue/Building 1 Access (EW)(#23): ▪ Construct NB LT lane ▪ Construct SB RT lane ▪ Construct EB LT lane	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ Construct EB RT lane Alt2A T-2 The project applicant shall pay DIF and TUMF fees prior to each building occupancy that will fund the following improvements: • Rubidoux Blvd. @ Tarragon/El Rivino (#6) (▪ Construct NB RT lane ▪ Construct EB LT lane ▪ Restripe WB Left/Thru lane to shared Thru/Right turn lane ▪ Restripe WB Right turn lane to shared Thru/Right turn lane • Rubidoux Blvd. @ 20th Street/Market Street (#10) ▪ Install NB RT overlap ▪ Modify signal phasing ▪ Construct 2 WB LT lanes ▪ Traffic signal modification ▪ Construct 2nd SB LT lane • Rubidoux Blvd. @ 24th Street (#11) ▪ Construct new traffic signal ▪ Construct NB LT lane ▪ Construct SB LT lane • Rubidoux Blvd. @ 26th Street (#12) ▪ Construct NB LT lane ▪ Construct SB LT lane ▪ Construct new traffic signal • Rubidoux Blvd. @ 28th Street (#13) ▪ Construct EB LT lane ▪ Construct WB LT lane • Rubidoux Blvd. @ 30th Street / SR60 WB Off Ramp (#14) ▪ Construct WB LT lane • Rubidoux Blvd. @ SR60 WB Ramp (#15) ▪ Construct new traffic signal • Rubidoux Blvd. @ SR60 EB Ramp (#16)	

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ Construct NB RT lane ▪ Construct EB LT lane • Agua Mansa Road @ Holly Street (#25) ▪ Construct new traffic signal • Agua Mansa Road @ Market Street (#29) ▪ Construct SB LT lane ▪ Construct SB Through lane ▪ Construct second SB RT lane • Market Street @ Hall Avenue (#30) ▪ Construct N/S 2-Way LT median ▪ Construct new traffic signal • Market Street @ SR60 WB ramp (#32) ▪ Restripe SB RT lane to Shared through/RT lane	
		Alt2A T-3 The project applicant shall contribute fair share funding for the following intersection improvements prior to issuance of the first occupancy permit: • Market Street/SR60 EB Ramps (#33) (Caltrans) ▪ Construct 2nd SB LT lane • Cedar Avenue/I-10 WB Ramp (#1) (Caltrans) ▪ Construct 2nd WB RT lane ▪ Construct WB LT lane • Cedar Avenue/I-10 EB Ramp (#2) (Caltrans) ▪ Construct EB RT lane • Cedar Avenue @ Jurupa Avenue (#5) ▪ Construct WB LT lane ▪ Construct EB LT lane • Agua Mansa Road/El Rivino Road (#24)(SB) ▪ Construct new traffic signal • Riverside Avenue @ Slover Avenue (#36) ▪ Construct SB RT lane	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Roadway Segments Alt2A T-4 The project applicant shall contribute fair share funding for the following roadway segment prior to issuance of the first occupancy permit: • Agua Mansa Road between Market Street and Brown Avenue (DIF) ▪ Construct two additional lanes to widen from two lanes to four lanes • Agua Mansa Road between Hall Street and El Rivino Road (DIF/FS) ▪ Construct two additional lanes to widen from two lanes to four lanes (east side pavement currently at ultimate; west side widening only required from S/O El Rivino Rd. to S/O Holly Street (approximately 1,200 ft) • El Rivino between Cedar Avenue and Cactus Avenue ▪ Construct 1 additional EB lane to widen from 1 EB lane to 2 EB lanes and maintain 1 WB lane • Market Street between Agua Mansa Road and Hall Avenue (DIF/TUMF) ▪ Construct two additional lanes to widen from two lanes to four lanes • Market Street between Hall Avenue and Rivera Street (DIF/TUMF) ▪ Construct two additional lanes to widen from two lanes to four lanes	
T-1: The proposed project would generate traffic volumes that would cumulatively contribute to traffic congestion that exceeds the service standards of the San Bernardino County congestion management agency, Riverside County congestion management agency, and Caltrans.	Potentially Significant	None available	Significant and Unavoidable

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Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
T-2: The proposed project would not conflict with CEQA Guidelines § 15064.3, subdivision (b).	Less Than Significant	No mitigation measures are required.	Less Than Significant
T-3: The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Less Than Significant	No mitigation measures are required.	Less Than Significant
T-4: The proposed project would not result in inadequate emergency access.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.17 TRIBAL CULTURAL RESOURCES			
TCR-1: The proposed project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe.	Potentially Significant	MM TCR-1 Native American Monitoring. Prior to the issuance of a grading permit, the applicant shall contact the consulting Native American Tribe(s) that have requested monitoring through consultation with the City during the AB 52 process. The applicant shall coordinate with the Tribe(s) to develop a Tribal Monitoring Agreement(s). A copy of the agreement shall be provided to the Jurupa Valley Planning Department prior to the issuance of a grading permit. MM TCR-2 Treatment of Discovered Native American Resources. If a significant tribal cultural resource is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and a representative of the appropriate Native American Tribe(s), the Project Proponent, and the City Planning Department shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented to protect the identified tribal cultural resources from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary to document the size and content of the discovery such that the resource(s) can be evaluated for significance under CEQA criteria. The research design shall list the sampling procedures appropriate to exhaust the research potential of the tribal cultural resources in accordance with current professional archaeology standards. The treatment plan shall require monitoring by	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		the appropriate Native American Tribe(s) during data recovery and shall require that all recovered artifacts undergo basic field analysis and documentation or laboratory analysis, whichever is appropriate. At the completion of the basic field analysis and documentation or laboratory analysis, any recovered tribal cultural resources shall be processed and curated according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility, or, the artifacts may be delivered to the appropriate Native American Tribe(s) if that is recommended by the City of Jurupa Valley. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the Jurupa Valley Planning Department, the Eastern Information Center, and the appropriate Native American Tribe(s). MM TCR-3 Disposition of Discovered Native American Resources. In the event that Native American cultural resources are inadvertently discovered during the course of grading for this project. The following procedures will be carried out for treatment and disposition of the discoveries: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the Jurupa Valley Planning Department with evidence of same: a) A fully executed reburial agreement with the appropriate culturally affiliated Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed. b) A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		be accompanied by payment of the fees necessary for permanent curation. c) If more than one Native American Group is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center by default. d) Should reburial of collected cultural items be preferred, it shall not occur until after the Phase IV monitoring report has been submitted to the Jurupa Valley Planning Department. Should curation be preferred, the developer/permit applicant is responsible for all costs and the repository and curation method shall be described in the Phase IV monitoring report.	
TCR-2: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Potentially Significant	MM TCR-1, MM TCR-2, and MM TCR-3 are also applicable to Impact TCR-2.	Less Than Significant
5.18 UTILITIES AND SERVICE SYSTEMS			
WW-1(a): The proposed project would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Less Than Significant	No mitigation measures are required.	Less Than Significant
WW-1(b): Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Potentially Significant	MM WW-1 The proposed project shall comply with the RCSD TDS Reduction Plan; or if the TDS Reduction Plan has not been adopted prior to the issuance of the first building permit; then the proposed project shall coordinate with RCSD to develop a plan that will insure wastewater delivered into RCSD's sewer collection system for treatment at the City's Treatment Plant will not have a TDS concentration exceeding 650 mg/l. The TDS	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		control methods will be accomplished using standards mutually agreed to with RCSD and may include TDS removal treatment for potable water delivered to the proposed project in whole, or for each individual building within the proposed project. TDS removal is not required for irrigation systems or fire protection systems.	
SD-1: Would 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.	Less Than Significant	No mitigation measures are required.	Less Than Significant
SW-1: The proposed project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	Less Than Significant	No mitigation measures are required.	Less Than Significant
SW-2: The proposed project would comply with federal, state, and local statutes and regulations related to solid waste.	Less Than Significant	No mitigation measures are required.	Less Than Significant
OU-1: Existing and/or proposed facilities would be able to accommodate project-generated utility demands	Less Than Significant	No mitigation measures are required.	Less Than Significant
OU-2: The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less Than Significant	No mitigation measures are required.	Less Than Significant

1. Executive Summary

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2. Introduction

2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The California Environmental Quality Act (CEQA) requires that all state and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects. This draft environmental impact report (DEIR) has been prepared to satisfy CEQA and the CEQA Guidelines. The DEIR is the public document designed to provide decision makers and the public with an analysis of the environmental effects of the proposed project, to indicate possible ways to reduce or avoid environmental damage and to identify alternatives to the project. The DEIR must also disclose significant environmental impacts that cannot be avoided; growth inducing impacts; effects not found to be significant; and significant cumulative impacts of all past, present, and reasonably foreseeable future projects.

The lead agency means "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment" (Guidelines § 21067). The City of Jurupa Valley has the principal responsibility for approval of the Agua Mansa Commerce Park Specific Plan and related land use entitlements (project). For this reason, the City of Jurupa Valley is the CEQA lead agency for this project.

The intent of the DEIR is to provide sufficient information on the potential environmental impacts of the proposed project to allow the City of Jurupa Valley to make an informed decision regarding approval of the project. Specific discretionary actions to be reviewed by the City are described in Section 3.4, *Intended Uses of the DEIR*.

This DEIR has been prepared in accordance with requirements of the:

- California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code, §§ 21000 et seq.)
- State Guidelines for the Implementation of the CEQA of 1970 (CEQA Guidelines), as amended (California Code of Regulations, §§ 15000 et seq.)

The overall purpose of this DEIR is to inform the lead agency, responsible agencies, decision makers, and the general public about the environmental effects of the development and operation of the proposed project. This DEIR addresses effects that may be significant and adverse; evaluates alternatives to the project; and identifies mitigation measures to reduce or avoid adverse effects.

2.2 NOTICE OF PREPARATION

The City of Jurupa Valley determined that an EIR would be required for this project and issued a Notice of Preparation (NOP) on July 19, 2017 (see Appendix A). The public was provided with a 30-day public review period to comment on the NOP, from July 19 to August 17, 2017. Table 2-1 compiles the comments received from commenting agencies/persons and identifies the section(s) of this DEIR where the issues are addressed. All NOP comments received during the public review period are in Appendix A.

Table 2-1 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
Native American Heritage Commission (NAHC) Gayle Totton, M.A., PhD Associate Governmental Program Analyst	7/24/17	• Provides details on Senate Bill 18 (SB 18) and Assembly Bill 52 (AB 52) requirements • Recommends lead agencies consult with all California Native American tribes traditionally and culturally affiliated with the Project area per AB 52 and SB 18 requirements • States that lead agencies should contact appropriate regional California Historical Research Information System Centers for an archaeological records search of the project area; prepare a professional cultural resources assessment report; contact the NAHC for a Sacred Lands File search; and Native American Tribal Consultation List • Lead agencies should include mitigation to reduce impacts to potentially inadvertently discovered archaeological resources during project construction, including plans for the disposition of recovered cultural items and human remains.	• Section 5.4, *Cultural Resources* • Section 5.16, *Tribal Cultural Resources*
California Department of Transportation (Caltrans) Mark Roberts Office Chief, Community and Regional Planning	7/24/17	• References a copy of a letter provided by Caltrans on the proposed project dated 1/13/2017 • Referenced letter states that all State facilities within a five-mile radius of the project, including Interstate 10 (Riverside Avenue), State Route 60 (Market Street), and Interstate 215 (Center Street), should be analyzed in the traffic impact analysis (TIA) • Data from the prepared TIA should not be more than two years old and should be based on the Southern California Association of Governments 2016 Regional Transportation Model • The TIA should include adequate truck percentages and utilize adjustment factors for passenger car equivalents • Requests all Synchro analyses and hardcopies of the TIA for review once complete	• Section 5.15, *Transportation and Traffic* • Appendix K, *Traffic Study*
South Coast Air Quality Management District Lijin Sun, J.D. Program Supervisor, CEQA IGR, Planning, Rule Development & Area Sources	8/10/17	• States that the lead agency should use SCAQMD's CEQA Air Quality Handbook and CalEEMod land use emissions software when preparing its air quality analysis. • The EIR should identify any potential adverse air quality impacts (construction and operation) that	• Section 5.2, *Air Quality* • Section 5.6, *Greenhouse Gas Emissions*

Table 2-1 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
		could occur from all phases of the project and all air pollutant sources related to the project. • The EIR should quantify criteria pollutant emissions and localized significance thresholds and compare the results to the regional and localized significant thresholds, respectively. • Air quality impacts from all phases (construction and operations) should be calculated. • A mobile health risk assessment is recommended if the proposed project generates or attracts substantial vehicular trips, especially heavy-duty diesel-fueled vehicles. • All feasible mitigation measures should be utilized for significant adverse air quality impacts. If impacts remain significant, project alternatives shall be considered and discussed to avoid or substantially lessen the air quality and health risk impacts. • If the proposed project requires a permit from SCAQMD, SCAQMD should be identified as a responsible agency for the proposed project.	
Western Riverside County Regional Conservation Authority (RCA) Charles Landry	8/14/17	• States that the project site is located in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) criteria cells 21, 22 and 55 which are designated specifically for conservation of the endangered Delhi Sands flower-loving fly (DSFLF) • Projects within criteria cells 21, 22 and 55 shall not require DSFLF surveys. Instead, 50 acres of additional reserve land shall be acquired. • The DEIR should address the project's consistency with the MSHCP's required 50-acre conservation area for projects in criteria cells 21, 22 and 55. • A Joint Project Review for MSHCP consistency is also required and should be completed prior to the DEIR completion and public review.	• Section 5.3, *Biological Resources* • Appendix D, *Biological Resources Assessment and MSHCP Consistency Analysis*
California Department of Fish and Wildlife (CDFW) – Inland Deserts Region Leslie MacNair, Regional Manager	8/16/17	• Acknowledges that the project is a specific plan and future environmental review may be forthcoming, but recommends as much specificity as possible related to each of the four project phases and that biological surveys be completed over the entirety of the Specific Plan area with results included in the DEIR • The DEIR should include the following: – Habitat assessment and vegetation map – Biological inventory of fish, amphibian, reptile, bird, and mammal species present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the project – A complete, recent inventory of rare, threatened, endangered, and other sensitive	• Section 5.3, *Biological Resources* • Appendix D, Biological Resources Assessment and MSHCP Consistency Analysis

2. Introduction

Table 2-1 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
		species within the project footprint and offsite areas with the potential to be effected – Focused species-specific/MSHCP surveys – A thorough, recent floristic-based assessment of special-status plants and natural communities – Information on regional setting – Discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions, including project-related changes on drainage patterns and water quality – Discussion of potential indirect impacts on biological resources (e.g., nearby public lands, open space, adjacent natural habitat, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands) – Evaluation of impacts to adjacent open space lands from construction and operational activities – Cumulative effects analysis for direct and indirect impacts – Mitigation measures that avoid, minimize, or mitigate impacts to sensitive plant communities with statewide rankings of S-1, S-2, S-3, and S-4 • States that mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, onsite habitat restoration and /or enhancement should be evaluated and discussed; if not viable, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. • Provides details regarding habitat revegetation/ restoration plans if the project's impacts lead to requiring preparation of such plans • Provides details regarding the Migratory Bird Treaty Act • Recommends a qualified biologist be retained onsite prior to and during all ground- and habitat-disturbing activities to move out of harm's way special status species or other wildlife • States that CDFW generally does not support the use of relocation, salvage, and/or transplantation as mitigation for species • The project site is located within the Delhi Sands Area Subunit of the Jurupa Area Plan and within MSHCP Criteria Cells 21, 22 and 55 • States that the project is subject to a Joint Project Review process through the Western Riverside County RCA and will require preparation of a Determination of Biologically Equivalent or Superior Preservation to the RCA, USFWS, and CDFW	

Table 2-1 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
		• If the proposed project will divert or obstruct the natural flow, or change the bed, channel or bank of a river of stream, a Lake and Streambed Alteration Agreement will be required • Recommends incorporating water-wise concepts in project landscape design plans (e.g., native landscaping and water-efficient and targeted irrigation systems)	
US Fish and Wildlife Services (USFWS) – Palm Springs Office Kennon A. Corey, Assistant Field Supervisor	8/17/17	• Acknowledges that the project is a Specific Plan, and that additional environmental review may be forthcoming on a project-by-project basis, but recommends as much specificity as possible related to each of the four project phases and that biological surveys be completed over the entirety of the Specific Plan area with results included in the DEIR • States that recent biological survey data are needed to adequately analyze the direct, indirect, and cumulative project impacts • Requests the DEIR describe the threshold that will be relied on for requiring additional environmental review for each phase and sub-project tiering off of the Specific Plan • States that a project consistency analysis with the MSHCP is required • The project site is located within the Delhi Sands Area Subunit of the MSHCP's Jurupa Area Plan and falls inside MSHCP Criteria Cells 21, 22, and 55 – No DSF focused surveys shall be required. Instead, 50 acres of additional reserve lands shall be acquired within the geographic areas identified as appropriate in the MSHCP • The undeveloped northernmost part of the project site is the only remaining area within the Jurupa Area Plan for the MSHCP to meet the 50-acre DSFLF habitat conservation objective. The Riverside County soil map prepared by the U.S. Natural Resources Conservation Service indicates that there are 39 to 55 acres of undeveloped DSFLF suitable habitat in the northern quarter of the site. • Recommends the project's conceptual land use plan be revised to shift commercial land uses out of DSF suitable habitat in the northernmost part of the project site (Industrial and Business Park Districts) and move them south into the Open Space District. • States that surveys for narrow endemic plants and burrowing owls should follow MSHCP/CDFW requirements – Recommends the DEIR include a mitigation measure stating that if three or fewer pairs of burrowing owls are found onsite, the project	• Section 5.3, *Biological Resources* • Appendix D, *Biological Resources Assessment and MSHCP Consistency Analysis*

2. Introduction

Table 2-1 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
		applicant will notify the USFWS and CDFW within three working days of discovering the owls, and will subsequently submit a Burrowing Owl Protection and Relocation Plan to the USFWS, CDFW, and Western Riverside County RCA for their review and approval • States that a Joint Project Review process for MSHCP consistency is required since the project site is within an MSHCP Criteria Area and that the review should be completed prior to circulation of the DEIR	
Santa Ana Regional Water Quality Control Board (RWQCB) Terri S. Reeder, Chief, Basin Planning Coastal Waters Section	8/18/17	States that fine cement kiln dust (CKD) disposal areas were covered with a cap of clay and rock by the 1990s as a closure measure, but it appears one large CKD pile remains exposed beside the Wet Weather Quarry and may still pose a threat to air and water quality. RWQCB requests that: • The Remedial Action Plan (RAP) prepared for the DEIR address the onsite CKD disposal areas and fugitive dust generated by project construction • Any movement of the caps overlying the CKD disposal areas require a rigorous safety and logistics plan for CKD dust containment • All CEQA Appendix G Checklist question be answered in the DEIR given that an Initial Study was not prepared • A discussion is provided on how the site's geologic and mining history has led to the construction of quarries and associated infrastructure, as well as the need for careful remediation. • Available closure documents be summarized in the DEIR RWQCB also states that the water-filled quarry or "Crestmore Lake" was saturated at depth with groundwater recharged by the Santa Ana River, and pollutants entering it could be carried underground and impact downgradient resources. Surface runoff onsite into Crestmore Lake can also impact groundwater quality. RWQCB requests that: • The hydrology report addresses the creation of a Water Quality Management Plan to protect the Crestmore Lake from adverse water quality impacts, by using structural and procedural best management practices • The EIR include: – Discussion of groundwater quality onsite, as well as upgradient and downgradient, and establish a baseline prior to construction. – Discuss the Riverside A Groundwater Management Zone (GMZ), over which the site is located State the Project's intentions for the two onsite wells, with their respective casing construction	• Section 5.3, *Biological Resources* • Section 5.7, *Hazards and Hazardous Materials* • Section 5.8, *Hydrology and Water Quality* • Appendix A, *Notice of Preparation (NOP), NOP Comments, and Scoping Meeting Sign-in Sheet* • Appendix G, *Hazardous Materials Reports* • Appendix H, *Hydrology & Preliminary Water Quality Management Reports*

Table 2-1 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
		measurements (camera survey) and depths to groundwater. Any abandonment must be conducted according to California Well Standards RWQCB further requests: • A monitoring program of sampling and analyses tracking for groundwater throughout the project; • Establishing a groundwater elevation contour map (with seasonal fluctuations) indicating the gradient between the SAR, Crestmore Lake, and downgradient locations; • A discussion in the DEIR about whether the brownfield designation was established by the California Department of Toxic Substances Control or another agency, along with the expected level of remediation and waste management from that agency • A discussion in the DEIR with regards to jurisdictional delineations and any actual impacted acreage • The Riverside County Department of Environmental Health be consulted regarding any dismantling activities of capped disposal sites. • Recommends the DEIR incorporate and respond to the Crestmore Quarry Mining and Reclamation Plan dated February 7, 1991, which was Riverside Cement Company's proposal for an industrial park and preserved wildlife refuge in Crestmore Lake and ephemeral wetlands within the Commercial Quarry. The DEIR should discuss requirements of the California Surface Mining and Reclamation Act and how the 1991 plan may need to be revised. Any revised reclamation plan should be included in the DEIR as an appendix. • If Crestmore Lake is identified as having a federal nexus (i.e., regulated by the US Army Corps of Engineers) the project would impact these waters and a Clean Water Act Section 404 permit would be required. • RWQCB may also determine that waste discharge requirements and associated mitigation are necessary for protection of isolated wetlands as waters of the State. An LSA from the CDFW may also be required. • The project obtain a Riverside County MS4 permit per Regional Board Order No. RB-2010-0033, NPDES Permit No. CAS 618033 • The project obtain a Construction General Permit per SWRCB Order No. 2009-0009-DWQ and implement a Storm Water Pollution Prevention Plan.	

All comments are organized based on date received.
[1] Appendix A includes responses to the full list of comments in the RWQCB letter. This table includes the comments that need to be addressed in the DEIR.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

The NOP process helps determine the scope of the environmental issues to be addressed in the DEIR. Based on this process, certain environmental categories were identified as having the potential to result in significant impacts.

2.3 SCOPE OF THIS DEIR

The scope of the DEIR was determined based on the City's NOP, and comments received in response to the NOP. Pursuant to Sections 15126.2 and 15126.4 of the CEQA Guidelines, the DEIR should identify any potentially significant adverse impacts and recommend mitigation that would reduce or eliminate these impacts to levels of insignificance.

The information in Chapter 3, *Project Description*, establishes the basis for the analysis of impacts as included in this DEIR. As described in Section 3.3.1.7, *Project Phasing and Construction,* the project is anticipated to be completed within approximately three years. As such, this DEIR has been prepared as a project-level EIR providing analysis at the level of project information available and addressing each of the discretionary approvals as listed in Section 3.3.19, *Land Use Entitlement Requests*. Regulatory requirements, applicable policies and design standards, and proposed mitigation measures have been detailed. Applicable performance standards and monitoring would assure implementation of the required regulations and mitigation measures.

2.3.1 Impacts Considered Less Than Significant

In response to the NOP and public and agency comments received during the NOP comment period the City of Jurupa Valley determined that one environmental impact category was not significantly affected by or did not affect the proposed project. Agriculture and Forestry Resources is not discussed in detail in this DEIR.

2.3.2 Potentially Significant Adverse Impacts

The City determined that 18 environmental factors have potentially significant impacts if the proposed project is implemented.

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning

- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Energy

2.3.3 Unavoidable Significant Adverse Impacts

This DEIR identifies seven significant and unavoidable adverse impacts, as defined by CEQA, that would result from implementation of the proposed project. Unavoidable adverse impacts may be considered significant on a project-specific basis, cumulatively significant, and/or potentially significant. The City must prepare a "statement of overriding considerations" before it can approve the project, attesting that the decision-making body has balanced the benefits of the proposed project against its unavoidable significant environmental effects and has determined that the benefits outweigh the adverse effects, and therefore the adverse effects are considered acceptable. The impacts that were found in the DEIR to be significant and unavoidable are:

- **Air Quality**
  - Construction-Related Emissions
  - Project Operational Emissions
  - Consistency with the Air Quality Management Plan (AQMP)
- **Greenhouse Gas Emissions**
  - Operational GHG emissions
  - Conflict with applicable plan, policy, and regulations adopted to reduce GHG emissions
- **Transportation and Traffic**
  - Conflict with applicable plan, ordinance or policy establishing performance measures for the circulation system. Some intersections exceed acceptable levels of service (2020 and 2035 scenarios). Some roadway segments exceed acceptable levels of service (2020 and 2035 scenarios)
  - Congestion Management Plan. Project implementation would result in designated highways exceeding congestion management agency service standards.

2.4 INCORPORATION BY REFERENCE

Some documents are incorporated by reference into this DEIR, consistent with Section 15150 of the CEQA Guidelines, and they are available for review at the City of Jurupa Valley Planning Department, 8930 Limonite Avenue, Jurupa Valley, CA 92509.

- **Jurupa Valley General Plan:** The 2017 City of Jurupa Valley General Plan serves as the major blueprint for directing growth in Jurupa Valley and regulates the existing land uses on the proposed project site. The General Plan analyzes existing conditions in the City, including physical, social, cultural, and environmental resources and opportunities. The General Plan also looks at trends, issues, and concerns that affect the region, includes City goals and objectives, and provides policies to guide development and change.

- **Jurupa Valley Municipal Code:** The Jurupa Valley Municipal Code is a set of laws governing the City and covers all aspects of City regulations, including zoning, permitted uses and standards, and various development requirements. Zoning district standards are also included in the code. Where applicable, code sections are referenced throughout the DEIR.

2.5 FINAL EIR CERTIFICATION

This DEIR is being circulated for public review for 45 days. Interested agencies and members of the public are invited to provide written comments on the DEIR to the City address shown on the title page of this document. Upon completion of the 45-day review period, the City will review all written comments received and prepare written responses for each. A Final EIR (FEIR) will incorporate the received comments, responses to the comments, and any changes to the DEIR that result from comments. The FEIR will be presented to the Jurupa Valley City Council for potential certification as the environmental document for the project. All persons who comment on the DEIR will be notified of the availability of the FEIR and the date of the public hearing before the City Council hearing.

The DEIR is available to the general public for review at various locations:

- City of Jurupa Valley Planning Department, 8930 Limonite Avenue, Jurupa Valley, CA 92509

- Louis Rubidoux Library, 5840 Mission Boulevard, Jurupa Valley, CA 92509

- Glen Avon Library, 9244 Galena Street, Jurupa Valley, CA 92509

- City of Jurupa Valley Planning Department Website:
  http://www.jurupavalley.org/Departments/Development-Services/Planning

2.6 MITIGATION MONITORING

Public Resources Code, Section 21081.6, requires that agencies adopt a monitoring or reporting program for any project for which it has made findings pursuant to Public Resources Code 21081 or adopted a Negative Declaration pursuant to 21080(c). Such a program is intended to ensure the implementation of all mitigation measures adopted through the preparation of an EIR or Negative Declaration.

The Mitigation Monitoring Program for the project will be completed in conjunction with the Final EIR, prior to consideration of the project by the Jurupa Valley City Council.

3. Project Description

3.1 PROJECT LOCATION

The City of Jurupa Valley is in western Riverside County in southern California. Jurupa Valley is bordered by the cities of Eastvale to the west, Norco and Riverside to the south and east, the City of Colton to the northeast, and Ontario, Fontana, and Rialto in the County of San Bernardino to the north and east (see Figure 3-1, *Regional Location*).

The 302.8-acre Specific Plan area is in the most northeastern corner of Jurupa Valley and adjacent to the City of Rialto and the unincorporated community of Bloomington in San Bernardino County. The project site is along a historic industrial corridor and on the prior Riverside Cement Plant site. The site is bounded by El Rivino Road to the north, West Riverside Canal to the south, Rubidoux Boulevard to the west, and a portion of Hall Avenue to the east. A Union Pacific Railroad spur crosses through the western project area (see Figure 3-2, *Local Vicinity*, and Figure 3-3, *Aerial Photograph*). Overall, the project site consists of the following 20 Assessor Parcel Numbers (APNs): 175-170- 005, a portion of 006, 027, 028, 030, 036, 040, 042, 043, 045, and 046; 175-180-001; and 175-200-001 through 005, and 007 through 009. A portion of the canal (APN 175-170-042) is included in the Specific Plan boundary near Rubidoux Boulevard. The boundary does not include the private canal (APNs 175-170-007 and 175-180-002) that borders the project site to the south along Agua Mansa Road.

The Specific Plan area is approximately 2.5 miles south of Interstate 10 (I-10), 1.4 miles north of State Route 60 (SR-60), and 2.5 miles west of I-215.

3.2 STATEMENT OF OBJECTIVES

Objectives for the Agua Mansa Commerce Park Specific Plan will aid decision makers in their review of the project and associated environmental impacts:

1. Promote the remediation and reuse of contaminated brownfield sites within the City, with priority given to those near environmental justice populations.

2. Adopt a Specific Plan that allows for high-cube logistics warehouse uses, e-commerce centers, research and development uses, and retail uses that would encourage private capital investment sufficient to both remediate the entire project site in accordance with DTSC requirements and to develop the Project.

3. Facilitate job growth and capitalize on predictable and marketable future development opportunities that provide the City with economic benefits through employment, tax revenues, and infrastructure improvements.

4. Locate industrial, warehousing, and service-commercial uses to areas readily accessible from major highways or rail traffic, and sufficiently separated and buffered to protect residential uses.

3.3 PROJECT CHARACTERISTICS

"Project," as defined by the CEQA Guidelines, means "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: (1)…enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100-65700" (14 Cal. Code of Reg. § 15378[a]).

3.3.1 Project Description

Following is a discussion of the project background for context, a detailed description of the proposed project's overall site plan, and the various development components, elements, and improvements that would be implemented. Project phasing is discussed in Section 3.3.4, *Project Phasing and Construction*. A complete copy of the Agua Mana Commerce Park Specific Plan is included in the technical appendices to this Draft EIR (Volume II, Appendix B).

3.3.1.1 PROJECT BACKGROUND

Established in 1906, the existing Riverside Cement Plant contains the cement plant itself, a quarry for mining limestone (used to manufacture cement and cement products), and various support buildings. The mining operation, which is in the southern portion of the site, ceased in the mid-1980s when the mine flooded, resulting in a lake south of the site called Crestmore Lake (see Figure 3-3, *Aerial Photograph*). Cement production and distribution of cement products continued until 2014. The Riverside Cement Plant is a brownfield site that requires environmental remediation to address fugitive dust from former disposal areas for cement kiln dust, and the resulting metal concentrations in soils. As shown in Figure 3-3, concrete and steel structures, cement production lines, storage silos and sheds, a cement bagging building, empty tanks, conveyor belts, soil and material stockpiles, utility tunnels, and a control center still remain onsite. Additionally, a research and development facility, adjacent to Rubidoux Boulevard on the west side of the property, is on site.

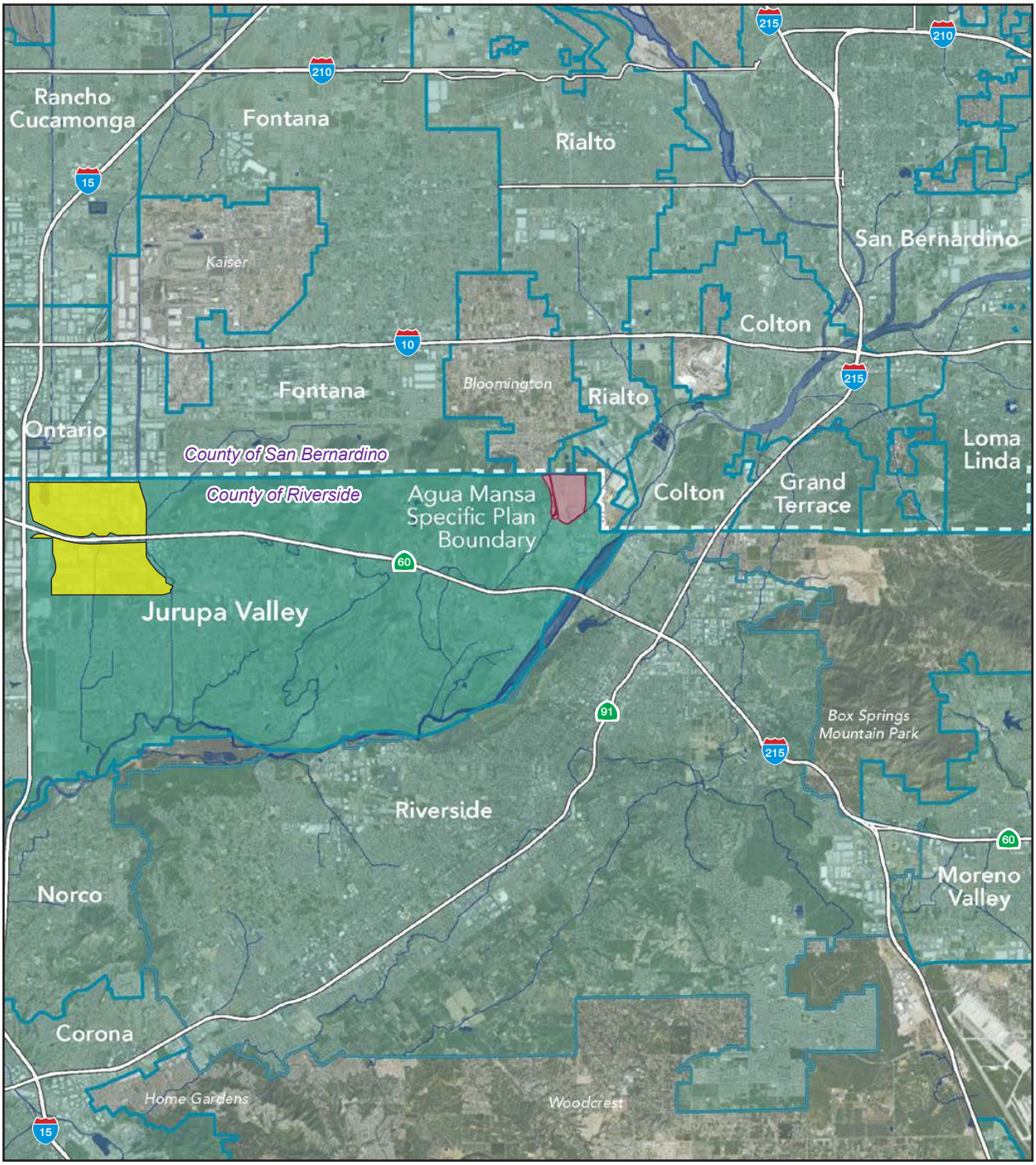
3.3.1.2 SITE PLAN

The Specific Plan area encompasses approximately 302.8 acres and would consist of three primary land uses: 1) Industrial Park, 2) Business Park with Retail Overlay and 3) Open Space District (see Figure 3-4, *Proposed Land Use Plan*, and Figure 3-5, *Conceptual Site Plan, Industrial and Business Parks*).

Project development includes remediation and demolition of all on-site structures associated with the Riverside Cement Plant followed by mass grading and site remediation. Due to extreme site topography, there would be areas that need to be graded and other areas where fill would be needed to level the site for development to facilitate a cohesive and comprehensive redevelopment of the brownfield site that the applicant is proposing.

Figure 3-1 - Regional Location

3. Project Description



- Agua Mansa Commerce Park Specific Plan Area Boundary
- Jurupa Valley
- Other Cities
- County Boundary
- Mira Loma Warehouse and Distribution Center Boundary

0 3
Scale (Miles)

Source: MIG, 2017; Jurupa Valley 2017 General Plan, 2017

3. Project Description

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Figure 3-2 - Local Vicinity

3. Project Description

Agua Mansa Commerce Park Specific Plan Area Boundary

0 2,500
Scale (Feet)

Source: MIG, 2017

3. Project Description

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Figure 3-3 - Aerial Photograph

3. Project Description

Agua Mansa Commerce Park Specific Plan Area Boundary
County Boundary
City Boundary

0 1,000
Scale (Feet)

Source: MIG, 2017

3. Project Description

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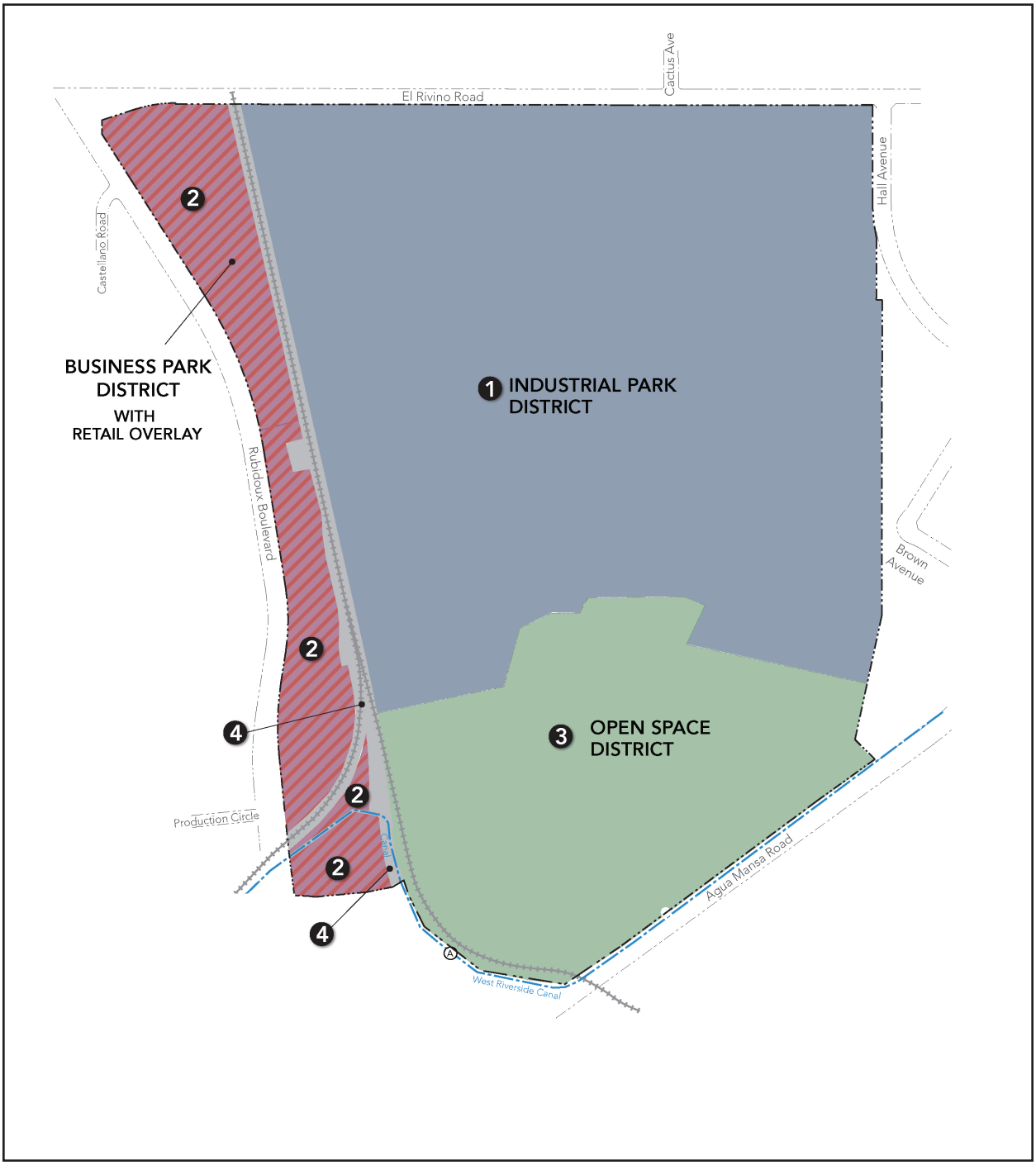
Figure 3-4 - Proposed Land Use Plan

3. Project Description



Agua Mansa Commerce Park Specific Plan Area Boundary
Industrial Park
Business Park with Retail Overlay
Open Space
Railroad
Canal

0 800
Scale (Feet)

Note: Ⓐ The private canal outside of the Specific Plan is for reference only.

Source: MIG, 2019

3. Project Description

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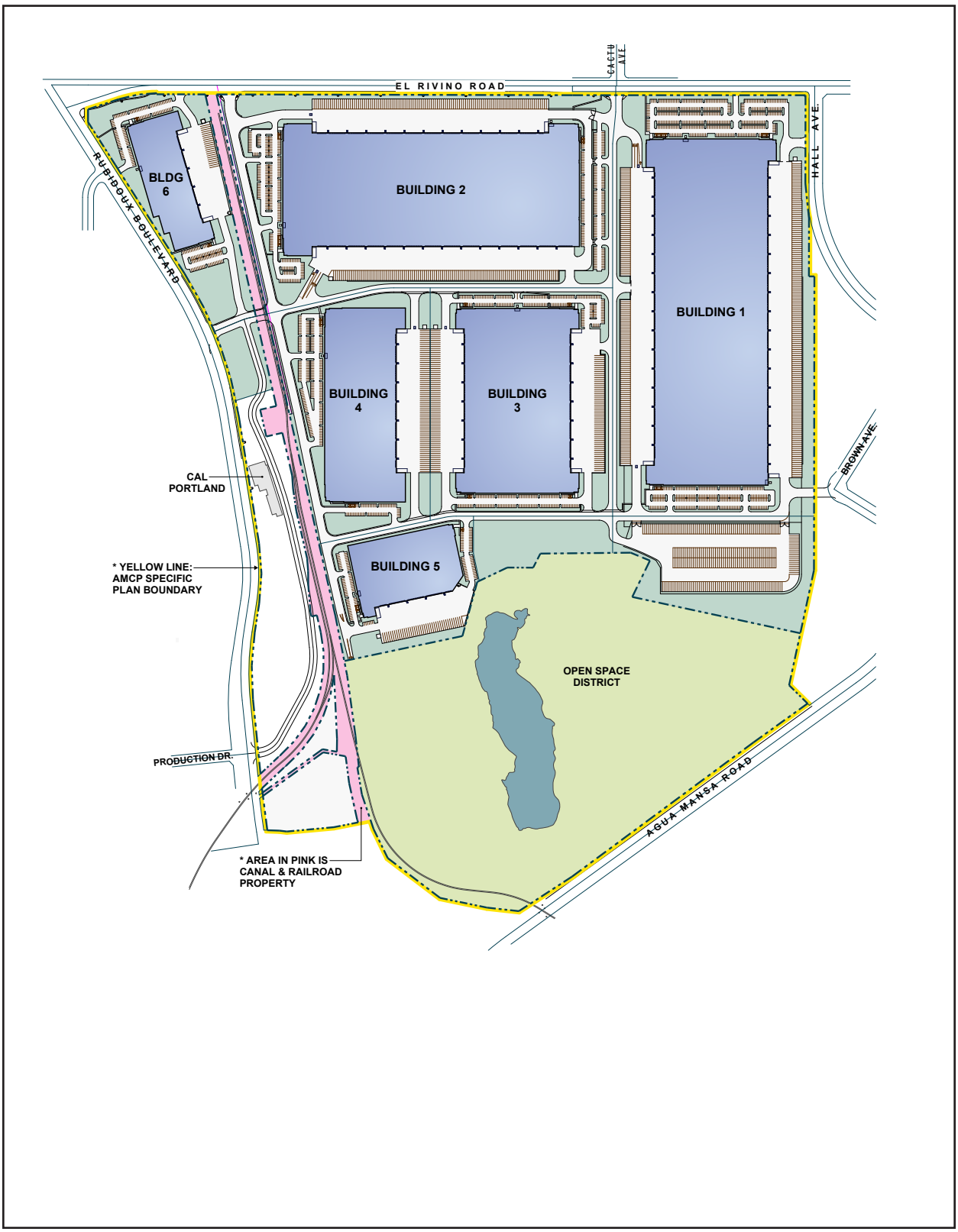
Figure 3-5 - Conceptual Site Plan - Industrial and Business Parks

3. Project Description



0 800
Scale (Feet)

Source: RGA, 2019

3. Project Description

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The Industrial Park district is 189.7 acres and would allow for 4,216,000 square feet of industrial park uses, such as manufacturing; research and development; fulfillment centers; e-commerce centers; high-cube, general warehousing, and distribution; and cross-dock facilities. The Business Park district is 33.8 acres and has two options for development: Alternative 1 would develop 200,000 square feet of business park uses; Alternative 2 would develop up to 25,000 square feet of retail and/or food service uses as well as 150,000 of business park square footage. Additionally, the Business Park district includes an existing 23,000-square-foot research and development building (CalPortland area). The Specific Plan allows for an additional 41,000 square feet of Business Park use in the CalPortland area either through expansion of the existing building or new construction.

The Open Space District is 70.9-acres. Remediation will occur within the Open Space District in accordance with a DTSC approved Response Plan. After remediation, the area is proposed to remain undeveloped. Within the Open Space District, a recreational park could be developed which allows for a range of passive and active recreation uses. If a recreational use is proposed in the future, a Park Development Plan, Conditional Use Permit, and/or other entitlements, and additional environmental analysis will be required prior to any approval.

The Union Pacific Railroad right-of-way and West Riverside Canal areas account for 8.4 acres within the Specific Plan boundaries. In the event that any portion of these properties that bisect the site is abandoned, vacated, or transferred by the respective owner and deeded to the property owner, that land would only be used for circulation, landscaping, or parking.

Table 3-1 includes a summary of the proposed development potential within each land use.

Table 3-1 Proposed Land Use Development Potential

Map Area	Specific Plan Land Use Designation	Total Building Area (Square Feet)	Acreage
1	Industrial Park (IP)	4,216,000 sf	189.7
2	Business Park With Retail Overlay (BP)	**Alternative 1:** • 200,000 sf of Business Park with no retail • Existing research and development building approximately 23,000 sf in size; plus 41,000 sf potential expansion for a total of 64,000 sf **Alternative 2:** • Up to 25,000 sf of Retail with 150,000 sf of Business Park • Existing research and development building approximately 23,000 sf in size; plus 41,000 sf potential expansion for a total of 64,000 sf	33.8
3	Open Space District (OS)	N/A	70.9
4	Railroad Right-of-Way and Canal	N/A	8.4
TOTAL		**Alternative 1: 4,480,000 SF** **Alternative 2: 4,455,000 SF**	**302.8 acres**

3.3.1.3 PROPOSED LAND USES

Industrial Park

The purpose and intent of the Industrial Park district is to accommodate industrial, storage, and warehousing uses in larger buildings. A wide range of light industrial and light manufacturing uses are also permitted in this district. The Industrial Park district permits high-cube logistics warehouse uses, fulfillment centers, e-commerce centers, warehousing and distribution, cold storage, and dock facilities. Facilities related to manufacturing, research and development, and warehousing and logistics activities consistent with the storage, assembly, and processing of manufactured goods and materials prior to their distribution to other facilities would be allowed. Facilities for outdoor storage of trucks and trailers would also be allowed. Ancillary office, employee welfare areas, and property management facilities would be allowed in conjunction with primary uses.

The Industrial Park component would encompass about 190 acres and is planned for five logistics warehouse buildings. In total, the five buildings would make up approximately 4,216,000 square feet (3,452,000 square feet of building footprint and up to 764,000 square feet of mezzanine area). Trailer, truck and/or car parking is also proposed in the southern portion of the Industrial Park area.

A key component of the Industrial Park is the specified ingress and egress points for trucks and automobiles from El Rivino Road and Hall Avenue to provide for efficient vehicle circulation and to minimize conflicts with pedestrian circulation between uses and structures.

Business Park with Retail Overlay District

The purpose of the Business Park with Retail Overlay designation is to accommodate business park and office uses, research and development, business sales and services, and very light manufacturing uses. The retail overlay is intended to allow commercial and retail uses. The retail overlay encompasses the entirety of the Business Park designation to allow retail developments. Development within this district would typically be multitenant in nature; however, single tenant buildings are not precluded.

The Business Park and Retail Overlay district would permit research and development, professional offices, limited industrial, diverse retail and personal services, food service, convenience stores, and other light industrial uses.

The 33.8-acre Business Park with Retail Overlay area consists of two development options:

- **Alternative 1:** 200,000-square foot industrial building (no retail)
- **Alternative 2:** 150,000-square foot business park building and 25,000 square feet of neighborhood serving retail use

Under both Alternative 1 and 2, an existing 23,000-square-foot building would remain in the southern portion of the Business Park area and would continue to be used as a research and development facility. The proposed Specific Plan allows for an additional 41,000 square feet of Business Park use(s) in this area, either through expansion of the existing building or new construction.

Open Space District

The 70.9-acre Open Space District component would be located in the southern portion of the Specific Plan area. Remediation will occur within the Open Space District in accordance with a DTSC approved Response Plan. Existing landforms would remain onsite, and the area is anticipated to be transitioned to a more natural state, preserving the existing terrain and scenic resources.

Within the Open Space District, a recreational park could be developed which allows for a range of passive and active recreation uses. If a recreational use is proposed in the future, a Park Development Plan, Conditional Use Permit and/or additional other entitlements, and additional environmental analysis will be required prior to any approval.

3.3.1.4 ARCHITECTURAL DESIGN AND CHARACTER

The Specific Plan includes design guidelines that would apply to all new construction of and additions to warehouses and business park buildings within the Business Park with Retail Overlay and Industrial Park districts. These design recommendations would maintain consistency within architectural styles that visually unify, define the character, and establish an appropriate, cohesive aesthetic for buildings in the Specific Plan. Consistency of materials, colors, fenestration, scale, and massing would be provided.

For high cube warehouses, exterior lighting on the site would be high powered, although shielded from above and tall to guarantee security and visibility as nightly operations warrant. Truck courts would have walls and fencing high enough to screen loading areas and to hide the views of parked semi-trucks or trailers. Walls and fencing adjacent to the public right-of-way would be softened with landscaping.

The Specific Plan area would have planned landscaped areas, drive entrances, and/or buildings to separate parking areas and to keep the parking lot from being the dominant visual element on the site. Building façades would include articulation to add visual interest and reduce monotony and would be softened with trees and landscaping. In the retail area, buildings would be clustered around courtyards and open areas where possible, and publicly accessible places would be oriented to create vista points toward nearby hills of Crestmore and/or prominent geographical features. Materials and finishes that are sustainably sourced would be used as much as possible.

3.3.1.5 ACCESS, CIRCULATION, AND PARKING

Access and Internal Circulation

As shown on Figure 3-6, *Circulation Plan*, various access points are proposed to connect internal drive aisles to adjacent streets. The Circulation Plan describes the movement of vehicles and pedestrians within the site and the connections to major regional circulation routes. The scale and orientation of the circulation network provides strategic routes for efficient mobility to help residents, workers, and visitors reach their destinations in Jurupa Valley and beyond. Under the Circulation Plan, truck restrictions of surrounding streets are observed, and conceptual improvements to accommodate new traffic are identified. The Jurupa Valley General Plan allows commercial trucks on Rubidoux Boulevard, Agua Mansa Road, El Rivino Road (west of Hall Avenue), and Hall Avenue.

3. Project Description

El Rivino Road would provide on-site access through two shared access driveways for trucks and automobiles to the Industrial Park district and one auto access to the eastern auto parking lot. Access from El Rivino Road to the northwestern Business Park with Retail Overlay and Open Space District portions of the Specific Plan area would be through a shared truck and automobile driveway. Additionally, two access roads on the eastern portion of the site, one on Hall Avenue and one on Brown Avenue, would provide on-site access through shared driveways. Three additional access points on Rubidoux Boulevard would be provided to access the Business Park with Retail Overlay area and the research and development building. Two of these access points would be shared, and one would be accessible only by automobiles.

The internal site circulation would be composed of interconnected shared driveways within each land use area leading up to access points. The proposed layout of the buildings, docks, driveways, and access points provides the most direct routes possible that minimize turns, idling, and congestion within the site. Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. The railroad spur (as shown in Figure 3-5) crosses the western portion of the site starting at the western border of the Open Space District and running north. The onsite driveway running south of Building 2 crosses the railroad spur before connecting to the access point on Rubidoux Boulevard. If access across the railroad spur line is not granted, then the Industrial Park may only be accessed from El Rivino Road, Hall Avenue, or Brown Avenue. The alternate circulation plan would alter the trip distribution for the project slightly and two circulation alternatives are proposed for the project, as discussed in Chapter 5.15.

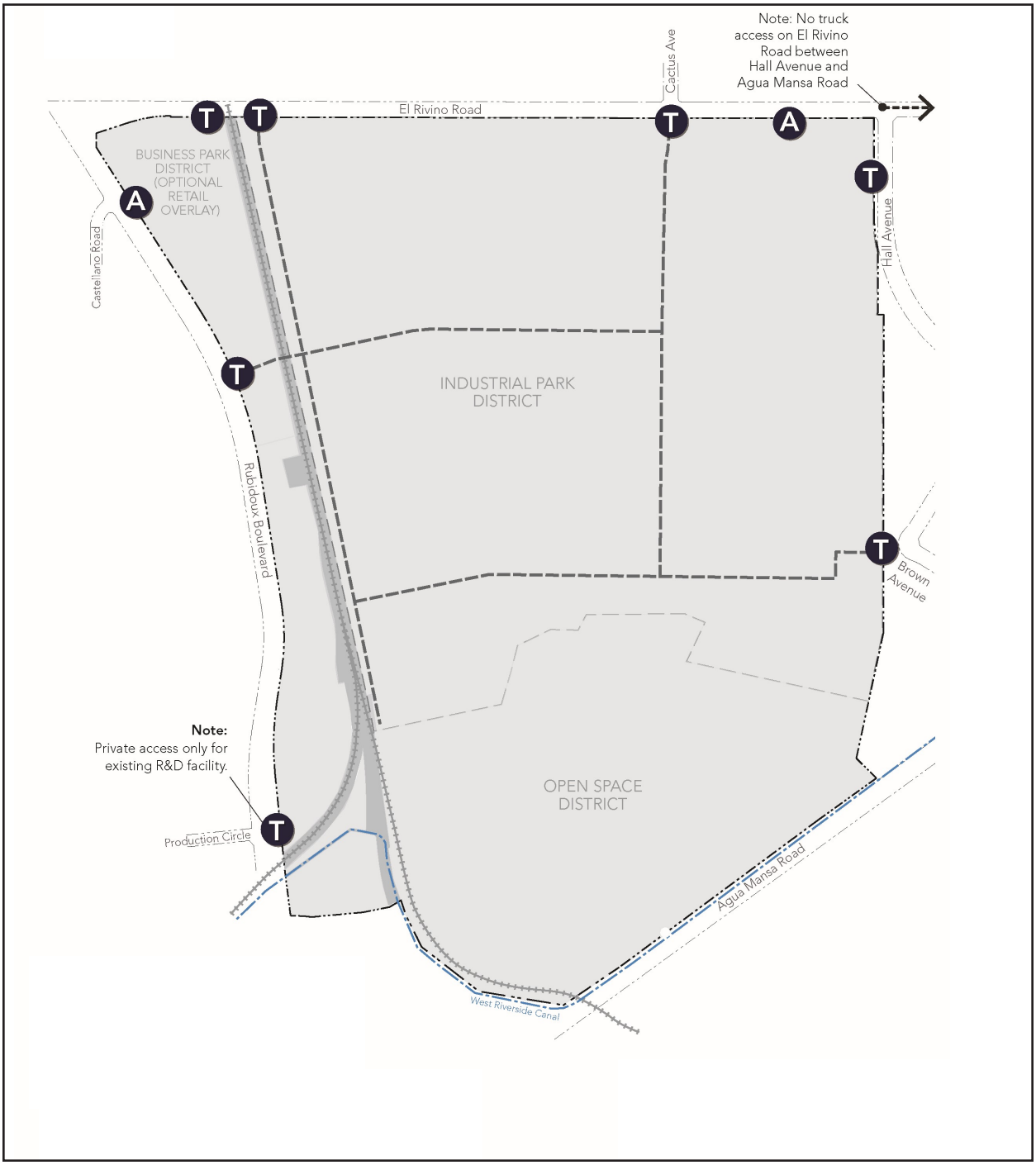
Offsite Street Improvements

The Specific Plan would also include improvements to street frontages.

- A segment of Rubidoux Boulevard, at the northwest corner of the site. Proposed improvements would include new sidewalks and parkways.
- The midsection of Rubidoux Boulevard, along the northern portion of the CalPortland property. This segment is constrained by existing landforms and the location of the CalPortland building. Due to the topography and proximity of the CalPortland building, existing retaining walls would remain in place to support the street. Additionally, sidewalks maybe sited in a different location, where feasible.
- The southerly portion of Rubidoux Boulevard along the lower section of the CalPortland property. This segment is also constrained by existing landforms. Sidewalks maybe sited in a different location, where feasible.

Figure 3-6 - Circulation Plan

3. Project Description



Agua Mansa Commerce Park Specific Plan Area Boundary

Backbone Circulation

Railroad

Canal

Truck/Auto Access

Auto Access Only

0 800
Scale (Feet)

Source: MIG, 2019

3. Project Description

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- The portion of El Rivino Road along the north boundary of the site. The southern half of El Rivino Road is within the jurisdiction of the City of Jurupa Valley, and the northern half is within the jurisdiction of the City of Rialto and unincorporated San Bernardino County. The portion of El Rivino Road within the jurisdiction of the City of Jurupa Valley would provide half-width improvements for a total 100-foot right-of-way width. Existing truck restrictions prohibit trucks on El Rivino Road between Hall Avenue and Agua Mansa Road to the east of the site. Proposed improvements would include a dedication and widening to the ultimate right-of-way along the project area, including two travel lanes, a median, and an 18-foot-wide parkway with curb adjacent landscaping. Other improvements would include installation of curb, gutters, sidewalk, parkway landscaping, and street trees along project frontage.

- The access point at Brown Avenue. Brown Avenue is a two-lane local road serving industrial businesses along Hall Avenue and Agua Mansa Road. An access easement and driveway may be provided at this access point.

- The portion of Hall Avenue along the project side of the street. Hall Avenue would be dedicated and widened to provide a 100-foot-wide right-of-way, with a 64-foot paved section that includes four travel lanes along the project area. Improvements would include installation of curb, gutters, sidewalk, parkway landscaping, and street trees. Only the western half of Hall Avenue would be improved.

Parking

Parking would be provided with at-grade surface parking lots in the Industrial Park and Business Park with Retail Overlay districts. Visitor and short-term parking areas would be provided at the front and sides of buildings to be near primary building entrances. Strategic locations along the parking site periphery would feature stormwater catch basins and bioswales to manage and clean stormwater runoff for parking lots.

The automobile-only access point on El Rivino Road leads to the eastern parking lot. Road parking spaces for vehicles and trucks are planned to further support the uses of the Specific Plan. Bicycle parking spaces would be provided in the form of bicycle racks and/or bicycle lockers. Bicycle parking would be provided in a convenient, highly visible, and well-lit area and at least as conveniently located as the most convenient automobile spaces.

Trails

Within the Specific Plan boundary, an onsite trail is proposed along the southern portion of Rubidoux Boulevard, between the CalPortland building and the intersection of Rubidoux Boulevard and Production Circle (see Figure 3.7). The northern portion of the Rubidoux Boulevard streetscape would include a pedestrian sidewalk/bike trail, connecting the proposed onsite trail to Rubidoux Boulevard and then north to its intersection with El Rivino Road. Across Rubidoux Boulevard to the west is where an equestrian trail is planned that would follow along Castellano Road and Andalusia Avenue.

3.3.1.6 INFRASTRUCTURE, UTILITIES, AND PUBLIC SERVICES

This section identifies the infrastructure, utilities, and public services and facilities provided to the Specific Plan area. This includes water, sanitary sewer, stormwater drainage, dry utilities (electricity and natural gas), law enforcement, fire, and trash collection.

Water

Two water districts provide services to properties located in the immediate vicinity of the Specific Plan area: the Rubidoux Community Services District (RCSD) and the West Valley Water District. Properties in the Specific Plan would connect to and expand existing infrastructure operated by the RCSD.

To receive water services, the Specific Plan area would need to be annexed into RCSD's boundary through the Riverside County Local Agency Formation Commission (LAFCO).

To supply water to the Specific Plan area, improvements would include a connection at the southwestern corner of the Specific Plan area to a 24-inch water main running north-south under Rubidoux Boulevard. The 24-inch main branches off into two eight-inch water mains underneath Production Circle and Container Circle. The 24-inch water main continues south and connects to the larger RCSD water network.

Sanitary Sewer

Wastewater treatment service for the Specific Plan area would also be provided by RCSD. As with water, for the project to receive RCSD sewer services, the Specific Plan area would need to be annexed into the RCSD boundary through Riverside County LAFCO.

As of 2018, RCSD sewer infrastructure in the area consists of an eight-inch main along Hall Avenue and Brown Avenue which feeds into an eight-inch main at Agua Mansa Road. This eight-inch main widens to a 10-inch main before it branches off to a 12-inch main along Wilson Street. Infrastructure also includes an eight-inch sewer main that runs north-south underneath Rubidoux Boulevard, connects to a 12-inch sewer main, and continues south to the greater RCSD sewer network.

The Specific Plan area would connect to sewer mains through new connections: one in the southwest corner of the Specific Plan area to a 12-inch sewer main near Rubidoux Boulevard, and potentially an eight-inch sewer main at Brown Avenue.

Stormwater Drainage

The Specific Plan area drains to offsite conveyances maintained by the Riverside County Flood Control and Water Conservation District (County Flood Control). Development projects would connect to these facilities and would be required to comply with storm water permitting regulations of County Flood Control. Stormwater would be collected through a network of basins and bioswales throughout the Specific Plan area. Individual development projects would use a variety of low-impact development measures to manage stormwater, including bioswales and retention basins.

Figure 3-7 - Proposed Trails

3. Project Description

Agua Mansa Commerce Park Specific Plan Area Boundary
On-Site Trail
Equestrian Trail
Sidewalk

0 1,400
Scale (Feet)

Source: MIG, 2019

3. Project Description

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Solid Waste

The City of Jurupa Valley contracts solid waste collection services through Burrtec and Waste Management under the RCSD. Contract services would be expanded to provide solid waste collection services in the Specific Plan area. All solid waste collection would be required to comply with federal, state, and local regulations for waste reduction and recycling.

Dry Utilities

Southern California Edison (SCE) provides electricity to the Specific Plan area and maintains above-ground power lines. SCE would serve electrical requirements for the project in accordance with the California Public Utilities Commission and Federal Energy Regulatory Commission tariffs.

South California Gas Company provides natural gas to the Specific Plan area. As required, additional points of connection to existing gas lines would be provided. The service would be in accordance with the Gas Company's policies and extension rules on file with the California Public Utilities Commission.

Fire

The nearest operational fire station is Riverside County Fire Department Station 38 at 5721 Mission Boulevard, approximately three miles to the south. Station 38 is operated by the Riverside County Fire Department through the Rubidoux Community Services District. To receive fire services, the Specific Plan area would need to be annexed into RCSD's boundary through Riverside County LAFCO.

Police

The City of Jurupa Valley contracts with the Riverside County Sheriff's Department. The County Sheriff would provide law enforcement services for the Specific Plan area. The closest operational station is Jurupa Valley Sheriff's Station at 7477 Mission Boulevard, approximately 4.5 miles to the southwest.

3.3.1.7 PROJECT PHASING AND CONSTRUCTION

The analysis in this DEIR assumes that project development would take approximately three years and that the first building would be completed and occupied sometime in 2020 and the last building would be completed in 2023. Detailed assumptions regarding impact analysis that are dependent upon project schedule are included in the respective sections (e.g., air quality, traffic). Although the project may be delayed beyond the original schedule estimates, the analysis is determined to be conservative.[1]

Demolition and remediation activities are projected to last approximately four months. It is estimated that 147,960 tons of demolition debris would be generated, with 12,660 tons of material disposed offsite, and the remaining 135,300 tons reused onsite. Site preparation, grading, and excavation would begin after demolition and take approximately five and a half months. Overall, it is conservatively assumed that up to 20,000 cubic

[1] For example, for construction-related air emissions, the analysis represents a 'worst-case.' Emissions factors for construction decrease as time passes as emission regulations before more stringent. A delayed construction schedule would also not alter the findings of the traffic study since cumulative development is based on year 2035.

yards of soil may need to be exported offsite. The first phase of building construction would begin after the site preparation phase is completed. The remaining five buildings are assumed to be phased, with construction starts staggering about six months for each. Each building would include some moderate grading work from the initial mass grades to attain final grades. Each of the last five buildings would take approximately nine months to complete, with the majority of paving and all exterior painting completed in the last month of each building phase. Wet and dry utilities would be brought online concurrently.

Offsite infrastructure improvements would commence after all related design and permits are approved, and construction would commence no later than the issuance of the first building permit. Completion of improvements would be no later than the issuance of a certificate of occupancy for a building that triggers the need to complete such work.

3.3.1.8 REMEDIATION PROCESS AND AGENCY INVOLVEMENT

The Department of Toxic Substances Control (DTSC) is the lead agency for the Brownfield Voluntary Cleanup Program, which allows DTSC and the Regional Water Quality Control Board to oversee brownfield sites. Therefore, DTSC is responsible for overseeing and directing all site investigation and cleanup activities in a manner that ensures that the standards and requirements of both agencies are fully addressed.

A Site Assessment Workplan would be prepared by the developer for DTSC review. The Workplan would identify soil sampling requirements onsite. Evaluation of all soil sampling results would classify excavated soil into three categories:

- Soils to be disposed of offsite due to hazardous classification, unacceptable risk to human health, or groundwater protection.
- Impacted soil (above screening levels for commercial/industrial use or groundwater protection) that could be disposed of offsite, encapsulated onsite or placed in a lined, capped consolidation area, as deemed appropriate by DTSC.
- Soil that meets screening levels for both commercial/industrial use and groundwater protection and can be used in an unrestricted manner for fill material across the site.

All requirements related to onsite consolidation of impacted soils would be addressed in the DTSC-approved Response Plan. The Response Plan would include measures to address worker safety, air quality, groundwater protection, fugitive dust generated from the potential presence of former cement kiln dust, and would be designed to include a soils management plan to ensure safe and appropriate handling of site soils and transport and disposal if necessary. The Response Plan would also include dust control measures, an air monitoring plan, and any long-term operations and maintenance plan that is required by DTSC.

Generally, the earthwork plan for the project involves a cut-and-fill grading plan that would involve approximately 2.1 million cubic yards of soil handling. The project site is expected to balance, but as a conservative measure, it is estimated that up to 20,000 cubic yards of soil may need to be exported offsite.

Due to the large scale of the redevelopment site and the complexity involved, the DTSC recognizes and anticipates that not all of the sampling locations would be known until after completion of this EIR; for example, some soil characterization may need to be completed only after demolition activities have progressed (such as after building and structure foundation slabs are removed). DTSC staff would be present onsite at regular intervals during this process to visually inspect for areas of soil with staining and odors that may indicate the need for additional sampling and characterization.

Following grading, the placement of the building pads and pavement on each parcel of the redevelopment site may also serve as a further engineering control or "cap" on the site to prevent exposure to potential fugitive dust resulting from potentially impacted soil. Finally, a land use covenant or deed restriction may be recorded for each parcel, as required, limiting the use of the properties for commercial/industrial development and prohibiting future residential development.

During the construction of the industrial and business park parcels, and until the DTSC issues a Certificate of Completion for the remediation activities, the open space area would remain in its existing fenced state to prevent public access.

3.3.1.9 LAND USE ENTITLEMENT REQUESTS

The proposed project would require approval of the following entitlement requests:

- **General Plan Amendments.**
  1. To change the land use designation from "Business Park" with Specific Plan Overlay (BP-SPO) to the following land use designations:
     - Heavy Industrial (HI) with Specific Plan Overlay to be applied within the Industrial Park District of Agua Mansa Commerce Park Specific Plan
     - Light Industrial (LI) with Specific Plan Overlay to be applied within the Business Park with Retail Overlay of Agua Mansa Commerce Park Specific Plan
     - Open Space – Recreation (OS-R) with Specific Plan Overlay to be applied within the Open Space District of the Agua Mansa Commerce Park Specific Plan
  2. To create a "Rubidoux Warehouse and Distribution Center Overlay" in the General Plan
  3. To establish "Rubidoux Warehouse and Distribution Center Overlay" on the Industrial Park District of the Agua Mansa Commerce Park Specific Plan.
- **Change of Zone.** To rezone the existing zoning from "Manufacturing-Heavy" and "Manufacturing-Service Commercial" to "Specific Plan."
- **Specific Plan.** To adopt the Agua Mansa Commerce Park Specific Plan which would supersede the existing Agua Mansa Specific Plan No. 210 from the project site.
- **Tentative Parcel Map**.

- **Site Development Permit.** To establish the speculative buildings for the future uses.
- **Development Agreement.**

3.4 INTENDED USES OF THE DEIR

This is a Project EIR that examines the potential environmental impacts of the proposed Agua Mansa Commerce Park Specific Plan. This DEIR also addresses various actions by the City and others to adopt and implement the proposed project. It is the intent of the DEIR to evaluate the environmental impacts of the proposed project, thereby enabling the City of Jurupa Valley, other responsible agencies, and interested parties to make informed decisions with respect to the requested entitlements. The anticipated approvals required for this project are:

Lead Agency	Action
City of Jurupa Valley	▪ Certification of the Agua Mansa Commerce Park Specific Plan EIR ▪ Approval of City of Jurupa Valley General Plan Amendments ▪ Approval of City of Jurupa Valley Change of Zone ▪ Adoption of the Agua Mansa Commerce Park Specific Plan ▪ Approval of Tentative Parcel Map ▪ Approval of Site Development Permit ▪ Approval of Development Agreement
Responsible Agencies	**Action**
Riverside County Local Agency Formation Commission	▪ Approval of Project Site Annexation into Rubidoux Community Services District's Boundary (for water and wastewater services)
Santa Ana Regional Water Quality Control Board	▪ Issuance of National Pollution Discharge Elimination System (NPDES) Permit ▪ Issuance of Construction General Permit Coverage ▪ Issuance of Industrial General Permit Coverage
United States Army Corps of Engineers	▪ Issuance of CWA Section 404 Permit to regulate dredged or fill material into waters of the United States.
Western Riverside County Regional Conservation Authority	▪ Determination of Multiple-Species Habitat Conservation Plan consistency during the Joint Project Review.
California Department of Toxic Substances Control	▪ Approval of Demolition Plan, Waste Management Plan, Site Assessment Workplan, Summary of Findings, and Response Plan.
California Department of Fish and Wildlife	▪ Confirmation of final mitigation measure per the Joint Project Review (JPR 18-09-24-01) ▪ Streambed Alteration Agreement

4. Environmental Setting

4.1 INTRODUCTION

This section provides a "description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, ... from both a local and a regional perspective" (Guidelines § 15125[a]), pursuant to provisions of the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The environmental setting provides the baseline physical conditions from which the lead agency will determine the significance of environmental impacts resulting from the proposed project.

4.2 REGIONAL ENVIRONMENTAL SETTING

4.2.1 Regional Location

The City of Jurupa Valley is in western Riverside County of southern California. Jurupa Valley is bordered by the cities of Eastvale to the west; Norco and Riverside to the south and east; Colton to the northeast; and Ontario, Fontana, and Rialto in the County of San Bernardino to the north and east (see Figure 3-1, *Regional Location*).

Figure 3-1 provides a visual of regional access to the City provided by various freeways. State Route 60 (SR-60) traverses Jurupa Valley in an east-west direction; Interstate 15 (I-15) travels north-south along the City's western boundary; Interstate 10 (I-10) travels in an east-west direction and is to the north in the County of San Bernardino; and Interstate 215 (I-215) travels north-south to the east of the City. The Santa Ana River generally forms the City's southern boundary.

4.2.2 Regional Planning Considerations

4.2.2.1 SCAG REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized metropolitan planning organization for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted in April 2016 (SCAG 2016). Major themes in the 2016 RTP/SCS include integrating strategies for land use and transportation; striving for sustainability; protecting and preserving existing transportation infrastructure;

increasing capacity through improved systems managements; providing more transportation choices; leveraging technology; responding to demographic and housing market changes; supporting commerce, economic growth and opportunity; promoting the links between public health, environmental protection and economic opportunity; and incorporating the principles of social equity and environmental justice into the plan.

The RTP/SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce GHG emissions from transportation (excluding goods movement). The RTP/SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets identified by the California Air Resources Board. However, the RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the RTP/SCS; instead, it provides incentives to governments and developers for consistency. The proposed project's consistency with the applicable 2016-2040 RTP/SCS policies is analyzed in detail in Section 5.9, *Land Use and Planning*.

4.2.2.2 SOUTH COAST AIR BASIN AIR QUALITY MANAGEMENT PLAN

The City is in the South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District (SCAQMD). Pollutants emitted into the ambient air by stationary and mobile sources and are regulated by federal and state law and standards are detailed in the SoCAB Air Quality Management Plan (AQMP). Air pollutants for which Ambient Air Quality Standards (AAQS) have been developed are known as criteria air pollutants—ozone (O_3), carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide, coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead. VOC and NO_x are criteria pollutant precursors and go on to form secondary criteria pollutants, such as O_3, through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants depending on whether they meet AAQS for that pollutant. Based on the SoCAB AQMP, the SoCAB is designated as nonattainment for O_3, and $PM_{2.5}$ under the California and National AAQS, nonattainment for lead (Los Angeles County only) under the National AAQS, and nonattainment for PM_{10} under the California AAQS.[1] The proposed project's consistency with the applicable AAQS is discussed in Section 5.2, *Air Quality*.

4.2.2.3 GREENHOUSE GAS EMISSIONS REDUCTION LEGISLATION

Current State of California guidance and goals for reductions in greenhouse gas (GHG) emissions are generally embodied in Executive Order S-03-05; Assembly Bill 32 (AB 32), the Global Warming Solutions Act (2008); and Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act.

Executive Order S-3-05, signed June 1, 2005, set the following GHG reduction targets for the state:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

[1] CARB approved SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the national AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM_{10} standards during the period from 2004 to 2007. In June 2013, the EPA approved the State of California's request to redesignate the South Coast PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.

AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-3-05. Based on the GHG emissions inventory conducted for its 2008 Scoping Plan, the California Air Resources Board (CARB) approved a 2020 emissions limit of 427 million metric tons of carbon dioxide-equivalent emissions ($MMTCO_2e$) for the state (CARB 2008). CARB is required to update the Scoping Plan every five years. In 2015, the governor signed Executive Order B-30-15 into law, establishing a GHG reduction target for year 2030, which was later codified under SB 32 (2016). The 2016-2017 update to the Scoping Plan addresses the 2030 target of a 40 percent below 1990 levels.

In 2008, SB 375 was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles traveled and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 17 regions in California managed by a metropolitan planning organization (MPO). In addition, SB 375 requires CARB to update the targets for the MPOs every eight years. The targets as set by CARB in 2010 for the SCAG region are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). Per the SCAG 2016-2040 RTP/SCS, adopted on April 7, 2016, the region will meet or exceed the 2010 passenger per capita targets (SCAG 2016). The updated targets for the SCAG region as set by CARB in March 2018 are an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2018). These targets became effective on October 1, 2018 and are applicable for the 2019 RTP/SCS update being initiated by SCAG.

The project's ability to meet these regional GHG emissions reduction target goals is analyzed in Section 5.6, *Greenhouse Gas Emissions*.

4.3 LOCAL ENVIRONMENTAL SETTING

4.3.1 Location and Land Use

4.3.1.1 PROJECT LOCATION

The project site is approximately 302.8 acres and encompasses the former Riverside Cement Plant in the northeast quadrant of the City of Jurupa Valley. The site is bounded by Rubidoux Boulevard to the west, El Rivino Road and the San Bernardino/Riverside County line to the north, Hall Avenue to the east, and West Riverside Canal to the south (see Figure 3-2, *Local Vicinity*).

4.3.1.2 EXISTING LAND USES

Onsite Uses

The Riverside Cement Plant was in operation from 1906 until 2014. The plant facility for cement and cement products manufacturing included several former quarries for the mining of limestone and various support buildings. There is a mix of paved roadways, open space, soil and material stockpiles, machinery, and buildings. Concrete and steel structures that were used in the cement manufacturing process remain onsite and are not in operation. Additional structures that remain onsite from the plant operations include white and grey cement production lines, storage silos and sheds, a cement bagging building, empty tanks, conveyor belts, utility tunnels, a control center, and an administration building. A water-filled quarry is at the southern portion of the cement plant. Vacant and undeveloped lands along the northern and western sides make up the rest of the project site. A Southern California Edison substation is near the northern part of the project site, and Union Pacific railroad tracks cross the site on the west.

Surrounding Uses

Surrounding land uses directly adjacent to the project site include industrial uses and single-family residences to the north in the City of Rialto; vacant land and industrial uses to the east along Hall Avenue and to the west along Rubidoux Boulevard; and industrial and public facilities (solid waste transfer station) uses to the south across the Canal and Agua Mansa Road. (see Figure 4-1 *Surrounding Land Use*).

Further west is the neighborhood of Crestmore Heights, a semirural and low density residential neighborhood. Low density residences are also to the northeast of the project site near El Rivino Road and Hall Avenue. The remaining project area is predominantly industrial uses.

4.3.2 Local Planning Considerations

4.3.2.1 GENERAL PLAN

The City of Jurupa Valley General Plan Land Use Element includes a citywide land use plan that designates the entire project site Business Park-Specific Plan (BP-SP) (Jurupa Valley 2017). The BP designation allows employee-intensive uses, including research and development, technology centers, corporate offices, clean industry, and supporting retail uses. The Specific Plan overlay requires preparation of a specific plan before an area can be further developed.

4.3.2.2 ZONING

Under the Jurupa Valley Land Use Ordinance, the majority of the project site is zoned Manufacturing-Heavy (M-H). The northeast corner of the site is zoned Manufacturing-Service Commercial (M-SC).

Figure 4-1 - Surrounding Land Use

4. Environmental Setting

Agua Mansa Commerce Park Specific Plan Area Boundary

Other Cities

0 1,300
Scale (Feet)

Source: Google Earth Pro, 2019

4. Environmental Setting

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4.3.2.3 AGUA MANSA INDUSTRIAL CORRIDOR SPECIFIC PLAN

The project site is within the Agua Mansa Industrial Corridor Specific Plan (AMICSP), also called Agua Mansa Specific Plan No. 210, and designated Heavy Industrial in the AMICSP land use plan. This category of use is consistent with the current development on the project site. Areas designated for Heavy Industrial can be utilized for manufacturing, resource extraction, compounding of material, packaging, treatment, processing, or assembly of goods (Willdan & Williams 1986). The AMICSP, adopted in 1986, was funded jointly by the counties of San Bernardino and Riverside and the cities of Colton and Rialto and applies to all participating jurisdictions. In 2011, the City of Jurupa Valley incorporated and absorbed the area that was previously in Riverside County's jurisdiction. The Agua Mansa Commerce Park Specific Plan would replace this designation for the proposed site.

4.3.2.4 MIRA LOMA WAREHOUSE AND DISTRIBUTION CENTER OVERLAY

The Mira Loma Warehouse and Distribution Center Overlay (MLO) is in the northwest section of the City (see Figure 3-1, *Regional Location*) and consists primarily of large logistics warehouses with storage, loading, and shipping facilities and industrial/manufacturing properties. The area has a high concentration of commercial and industrial truck traffic and includes some small-scale retail commercial and services adjacent to a small residential neighborhood. This overlay is designed to limit the locations of logistics and similar supply-chain uses to the MLO area. The proposed project site is outside the MLO. A general plan amendment is required to allow warehousing and distribution uses outside the MLO (Jurupa Valley 2017).

4.3.3 Environmental Resources and Infrastructure

4.3.3.1 CLIMATE AND AIR QUALITY

The project site is approximately 40 miles inland from the Orange County coast in the central portion of the SoCAB. The climate in the SoCAB is mild and tempered by cool ocean breezes. Temperatures are normally mild (62° to 72°F), with rare extremes above 100°F or below freezing (32°F). Precipitation is typically 9 to 15 inches annually in the SoCAB. The county gets an annual rainfall of about 11 inches.

However, the year 2013 marked the driest year in recorded state history and led Governor Edmund G. Brown Jr. to proclaim a state of emergency regarding the dry conditions throughout California. The drought conditions led to extended months of high temperatures with little to no precipitation throughout the SoCAB. Governor Brown issued several Executive Orders addressing drought, including Executive Orders B-29-2015, calling for a 25 percent statewide reduction in urban potable water use, and B-37-16, which sets actions to use water more wisely, eliminate water waste, strengthen local drought resilience, and improve agricultural water use efficiency and drought planning. The Governor ended the drought state of emergency in the SoCAB in April 2017, but maintained water reporting requirements and prohibitions on wasteful practices, such as watering during or right after rainfall (CalOES 2017).

The SoCAB is designated as nonattainment for O_3, and $PM_{2.5}$ under the California and National AAQS, nonattainment for lead (Los Angeles County only) under the National AAQS, and nonattainment for PM_{10}

under the California AAQS. Additional information regarding air quality and climate change regulations affecting Jurupa Valley is provided in Section 4.2.2, *Regional Planning Considerations*, above.

Project impacts on climate and air quality conditions in the City are analyzed in Sections 5.2, *Air Quality*, and 5.6, *Greenhouse Gas Emissions*, of this DEIR.

4.3.3.2 BIOLOGICAL RESOURCES

The project site is predominantly developed with the former Riverside Cement Plant and quarry, which is now filled with water, forming Crestmore Lake (see Figure 3-3 *Aerial Photograph*). There are also several sensitive natural communities onsite, including the southern cottonwood willow riparian forest, southern riparian scrub, southern riparian forest, southern willow scrub, and southern sycamore alder riparian woodland. Several special-status plant and animal species also have the potential to occur on the project site based on habitat requirements and geographic ranges. The site is also within a predetermined survey area for narrow endemic plant species, least Bell's vireo, southwestern willow flycatcher, burrowing owl, and Delhi sands flower-loving fly. Further, the site contains jurisdictional features potentially regulated by the US Army Corps of Engineers and California Department of Fish and Wildlife.

Additional information regarding the project site's biological resources and its project-related impacts are provided in Section 5.3, *Biological Resources*.

4.3.3.3 GEOLOGY AND LANDFORM

Jurupa Valley is within the fault-bounded, northwest-southeast trending Perris Block in the Peninsular Ranges geomorphic province of California. The Perris Block is bounded on the east by the San Jacinto Fault Zone, on the north by Cucamonga Fault Zone, and on the west by Elsinore Fault Zone.

The project site is in the eastern end of the Jurupa Mountains on the south side of the San Bernardino Valley. Quarrying and subsurface mining activities were initiated in 1906 to mine the limestone within the southern portion of the site. Prior to quarrying, the limestone was present as two generally irregular, roughly parallel, lenticular limestone bodies dipping primarily east-northeast. The upper (shallower) and lower (deeper) limestone bodies are referred to as Sky Blue and Chino Limestones, respectively. The limestone is coarsely crystalline, associated with metamorphosed sediments, enveloped and cut by intrusive igneous rocks and contact metamorphic minerals.

The site is underlain by a variety of geologic units, including Holocene to late Pleistocene age, eolian deposits consisting of unconsolidated, gray to tan, massive, fine grained sand forming stabilized dunes. The northern portion of the site is underlain by Holocene to late Pleistocene age, young alluvial fan deposits consisting of unconsolidated, gray, cobbley and bouldery alluvium of Lytle Creek fan. The western, southern, and eastern portions of the site are underlain by two geologic units consisting of artificial fill and intermixed tonalite marble and schist. The artificial fill consists of uncompacted and undocumented fill from mining operations, cement kiln dust, and unconsolidated talus deposits.

Additional information regarding the project site's geology and its project-related impacts are provided in Section 5.5, *Geology and Soils*.

4.3.3.4 HYDROLOGY AND WATER QUALITY

The City of Jurupa Valley is within the Upper Santa Ana Watershed of the Santa Ana River Basin Region, which is a group of connected inland basins and open coastal basins drained by surface streams flowing generally southwestward to the Pacific Ocean.

The project site is directly tributary to the Santa Ana River via existing infrastructure owned and operated by the Riverside County Flood Control and Water Conservation District. The infrastructure includes the Belltown Market Street Storm Drain system, the Agua Mansa Brown Avenue Storm Drain, Wilson Street Storm Drain and Laterals, and Outlet Erosion Control Basins. Approximately 172 acres of the project site are tributary to the Belltown Market system, 22 acres are tributary to the Agua Mansa Brown Avenue system, and 91 acres are retained within the site. There are no existing storm drains onsite; therefore, current stormwater runoff by sheet flow is drained southerly toward Agua Mansa Road.

Refer to Section 5.8, *Hydrology and Water Quality*, for additional information regarding hydrological conditions and an analysis of project impacts on hydrology and water quality.

4.3.3.5 NOISE

Community noise levels are measured in terms of the "A-weighted decibel" (dBA). A-weighting is a frequency correction that correlates overall sound pressure levels to the frequency response of the human ear. The noise rating scale used in California for land use compatibility assessment is the Community Noise Equivalent Level (CNEL). The CNEL scale represents a time-weighted, 24-hour average noise level based on the A-weighted decibel. Noise levels in the project area are influenced primarily by motor vehicle traffic along El Rivino Road, Agua Mansa Road, and Rubidoux Boulevard. Noise from existing industrial uses surrounding the project site also adds to the noise levels in the project area.

Refer to Section 5.11, *Noise*, for additional information concerning the noise environment and an analysis of project-related noise impacts.

4.3.3.6 PUBLIC SERVICES AND UTILITIES

Fire Services

The Rubidoux Community Services District (RCSD) contracts fire and emergency medical services with the California Department of Forestry and Fire Protection (CAL FIRE) and Riverside County Fire Department (RCFD). Four CAL FIRE/RCFD stations are within the City limits. Rubidoux Station 38 at 5722 Mission Boulevard is the first-in station closest to the site.

Police Services

Jurupa Valley contracts police services from the Riverside County Sheriff's Department. The Sheriff's station is at 7477 Mission Boulevard west of the project site.

Parks and Recreation Services

Park services are provided by Riverside County Regional Park and Open-Space District and the Jurupa Area Recreation and Park District. The closest park facility to the project site is Avalon Park at 2500 Avalon Street about 1.0 mile south of the site.

Water

The project site is adjacent to the RCSD service boundary. As part of the proposed project, the site would be annexed into RCSD's boundary through an approval by the Riverside County Local Agency Formation Commission (LAFCO). Upon approval by LAFCO, RCSD would provide water conveyance and supply services to the site.

Wastewater

RCSD would also provide wastewater services to the project site once LAFCO approves the project's proposed annexation into RCSD's service boundary. Wastewater generated onsite would be treated at the City of Riverside Water Quality Control Plant and the Western Riverside County Regional Wastewater Authority's treatment plant.

Solid Waste

Burrtec and Waste Management provide solid waste collection services to the City and project site through the RCSD. Solid waste is hauled to and disposed at landfills operated by Riverside County Department of Waste Resources, primarily at the Badland Sanitary Landfill in Moreno Valley and the El Sobrante Landfill in Corona.

Dry Utilities

Southern California Edison provides electricity services to the project site, and Southern California Gas Company provides natural gas services to the site.

Sections 5.13, *Public Services,* 5.14, *Recreation*, and 5.17, *Utilities and Service Systems*, provide additional info regarding existing public service, recreation, and utilities conditions. An analysis of project-related impacts is also provided in each section.

4.3.3.7 SCENIC FEATURES

Land uses surrounding the project site include vacant land, industrial businesses, and single-family residences. The Jurupa Mountains located further west of the project site have dramatic sloping terrain that provides a natural scenic backdrop for the communities of Crestmore Heights and Belltown and can also be seen from the project site.

Onsite, the closed Riverside Cement Plant and associated buildings occupy the northern half of the site while several limestone quarries occupy the southern portion. The Chino Quarry is a prominent feature onsite and was formerly used for mining as the Crestmore Mine. Today, it has flooded and formed Crestmore Lake (see

Figure 3-3 *Aerial Photograph*). The lake is a north-south orientated excavation, flanked by slopes with gradients ranging between 33 degrees to subvertical. These slopes are referred to as Skyblue Hill.

Refer to Section 5.1, *Aesthetics,* for additional information concerning existing scenic features, vistas, and resources, and an analysis of project-related impacts.

4.3.3.8 TRANSPORTATION AND TRAFFIC

The nearest freeways to the project site are SR-60 to the south, I-15 to the west, I-10 to the north, and I-215 to the southeast. Interstates and highways on the Riverside County Congestion Management Program (CMP) system near the project site include I-215 and SR-60. Principal arterials on the County's CMP system near the project site include Rubidoux Boulevard/Market Street and Agua Mansa Road (RCTC 2011).

Public transit in Jurupa Valley is provided by Riverside Transit Agency (RTA). The closest bus stops to the project site are located to the north and south along Rubidoux Boulevard via Route 29, which has roughly 50-minute service intervals starting as early as 5:00 a.m. and ending as late as 8:30 a.m. There is also a Metrolink station (Pedley Station) in the City approximately 6.4 miles southeast of the site.

There are no paved sidewalks or bike lanes along either side of the segments of Rubidoux Boulevard and El Rivino Road that border the project site's western and northern boundary, respectively. Agua Mansa Road to the south also does not have any paved sidewalks or bike lanes on the side closest to the project site; however, the southern side of the road has a paved sidewalk.

Refer to Section 5.15, *Transportation and Traffic*, for additional information concerning existing transportation facilities and traffic conditions and an analysis of project-related impacts.

4.4 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed where they are significant. It further states that this discussion shall reflect the level and severity of the impact and the likelihood of occurrence, but not in as great a level of detail as that necessary for the project alone. Section 15355 of the Guidelines defines cumulative impacts to be "...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts represent the change caused by the incremental impact of a project when added to other proposed or committed projects in the vicinity.

The CEQA Guidelines (Section 15130 [b][1]) state that the information utilized in an analysis of cumulative impacts should come from one of two sources:

A. A list of past, present and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency.

B. A summary of projections contained in an adopted General Plan or related planning document designed to evaluate regional or area-wide conditions.

4. Environmental Setting

The cumulative impact analysis in this EIR uses both methods as described more specifically in each cumulative impact section. The geographic area in which cumulative impacts are considered varies between sections in Chapter 5, *Environmental Analysis*, of this EIR, and is identified in the *Cumulative Impacts* subsection of each section of Chapter 5. For instance, for utilities and service systems, the area considered is the service area of each utility provider. The geographic scope of air quality is the South Coast Air Basin, which is the air basin where the project site is located.

Table 4.1 shows approved and pending projects in the City of Jurupa Valley within a two-mile radius of the proposed project. The table specifies dwelling units and the nonresidential area associated with the projects. Figure 4-2 gives a graphical representation of the project locations.

Table 4.1 City of Jurupa Valley Related Approved and Pending Projects Within 2-Miles of the Proposed Project

ID	Project	Land Uses	Dwelling Units	Nonresidential Area (acres)
CITY OF JURUPA VALLEY – Approved projects[1]				
JVA1	Market Street Commercial	Shopping center		0.3
JVA2	Avalon Court	Single-family residential	24	
JVA3	Emerald Ridge South	Single/multifamily residential	215	
JVA4	Emerald Ridge North	Single-family residential	184	
JVA5	West Riverside Landfill Solar	Solar farm		74
JVA6	Inland Empire Cold Storage	Cold storage		1
JVA7	Highland Park Highland Park 2	Single-family residential	398 34	
CITY OF JURUPA VALLEY – Pending projects[1]				
JVP1	Rubidioux Commercial Development LLC	Industrial		7
JVP2	New Rio Vista Specific Plan 2016	Single/multifamily residential, with a school site, parks and open space	1,299	600 open space
JVP3	RCSD Headquarters	Commercial		0.8
JVP4	Bailey Building	Industrial		0.8
JVP5	Carson Companies	Warehouses		7.7
JVP6	Kiewit	Industrial		1.5
		Total	**2,154**	**693.1**
		Warehousing		**7.7**
		Industrial		**10.3**

[1] Source: Tam 2018.

In addition to the projects shown in Table 4.1, potential cumulative impacts due to new projects beyond the City boundary, have also been addressed in the traffic impact analysis (TIA). A list of related projects in surrounding jurisdictions is provided in Table 4.2. The location of these projects is shown in Figure 4-3, *Cumulative Projects, Surroundings Jurisdiction.*

Table 4.2 Cumulative Projects – Surrounding Jurisdictions

ID	Project	Land Uses	Jurisdiction	Dwelling Units	Nonresidential Area (acres)
SB1	Bloomington Phase 1 Project	Apartments, senior living, and library	Unincorporated San Bernardino County	196	0.2
SB2	Bloomington Business Center	Warehouses	Unincorporated San Bernardino County		8.2
SB3	Slover High–Cube Warehouse	Warehouses	Unincorporated San Bernardino County		16
SB4	Thrifty Oil	Warehouses	Unincorporated San Bernardino County		8.5
SB5	Cedar Avenue Technology Park	Warehouses	Unincorporated San Bernardino County		4.2
SB6	Slover/Cactus Warehouse	Warehouses	Unincorporated San Bernardino County		5.9
SB7	Dollar Store	Commercial	Unincorporated San Bernardino County		0.2
SB8	Single Family Residential	Single-family residential	Unincorporated San Bernardino County	22	
SB9	Western Realco	Warehouses	Unincorporated San Bernardino County		15.5
F1	West Valley Logistics Center	Warehouses	City of Fontana		82.6
SB10	Rialto Commerce Center	Warehouses	Unincorporated San Bernardino County		84
C1	Southwest Regional Operations Center	Offices	City of Colton		2.9
SB11	Bloomington 167	Single-family residential	Unincorporated San Bernardino County	167	
R1	I-10/60 Logistics Center	Warehouses	City of Rialto		56.7
C2	Agua Mansa Commerce Center	Warehouses	City of Colton		10.3
C3	Agua Mansa Commerce Center	Warehouses	City of Colton		6.9
C4	Agua Mansa Logistics Center	Warehouses	City of Colton		18.6
C5	Roquet Ranch Specific Plan	Mixed-use residential/commercial/ Park	City of Colton	1,050	0.7
R1	Center Street Warehouse	Manufacturing	City of Riverside		7
JV1	Palm Communities	Multifamily residential	City of Jurupa Valley	49	
R2	4253 Fairgrounds Street, 3630 Fairmont Street, 3105 Market Street,	Warehouses, hotel, apartments	City of Riverside	385	0.3
JV2	Mission Gateway Plaza and Villas	Mixed-use residential/commercial	City of Jurupa Valley	68	0.8
SB12	Agua Mansa High Cube Warehouse	Warehouses Industrial	Unincorporated San Bernardino County		11 0.7
			Total **Warehousing** **Industrial**	**1,971**	**341.2** **328.7** **7.7**

[1] Source: Gandini 2018.

Under the 2017 General Plan, the City will experience incremental conversion of vacant land in various locations of the City based on market conditions over the years. The projected growth conditions in the City

by 2035 include conversion of a total of 4,494 acres of vacant developable land, which is 16.1 percent of the total City area. If development occurs at a regular pace, that would equal roughly 236.6 acres or 5 percent per year for approximately 19 years (2016 to 2035). Future growth is expected to add a maximum of 14,332 new residential units and maximum of 36.6 million square feet of new nonresidential building (Jurupa Valley 2017). Projections for residential and nonresidential buildout projections are shown in Table 4-3.

Table 4-3 City of Jurupa Valley General Plan Buildout Projections

	Existing Land Uses (acres)	2035 Additional Units		2035 Additional Population (Persons)		Change, 2014-2035		Percent Change, 2014-2035	
		Maximum	Less Intense*	Maximum	Less Intense	Maximum	Less Intense	Maximum	Less Intense
Residential	10,023.6	14,332	10,032	152,587	136,464	+53,745	+37,622	54%	38%
Non-Residential	4,660.5	840	630	41,376	31,032	Not Provided	Not Provided	Not Provided	Not Provided

Source: Jurupa Valley 2017.
* Less Intense" land use density is considered to be 70% or 0.7 of maximum density, which is more likely and typically experienced given physical and other constraints often encountered during development.

Following is a summary of the approach and extent of cumulative impacts, which are further detailed in each topical environmental section:

- **Aesthetics.** Cumulative impacts consider the potential for the project and related projects to impact scenic resources in the City, including scenic viewsheds and landforms, open space, and assessment of area-wide vistas (e.g., Jurupa Mountains).
- **Air Quality.** Air quality impacts are both regional impacts and localized impacts. For cumulative impacts, the analysis is based on the regional boundaries of the South Coast Air Basin.
- **Biological Resources.** Cumulative biological resources impacts consider regional habitat loss, protected species, and wildlife corridors. The area considered for cumulative impacts is the Western Riverside Multiple Species Habitat Conservation Plan area.
- **Cultural Resources.** Cumulative impacts consider the potential for the proposed project in conjunction with related development projects to result in compounded impacts on cultural resources in the area within a one-half-mile radius for historical, archaeological, and paleontological resources.
- **Geology and Soils.** Geologic and soils impacts are site specific and generally do not combine to result in cumulative impacts.
- **Greenhouse Gas (GHG) Emissions.** GHG emissions impacts are not site-specific impacts but cumulative impacts. Therefore, the cumulative analysis in this DEIR analyzes the project's cumulative contribution to GHG emissions impact.

Figure 4-2 - City of Jurupa Valley Cumulative Projects Within 2-Miles of the Proposed Project

Agua Mansa Commerce Park Specific Plan Area Boundary

JVA1 / JVP1 Approved and Pending Projects

0 2,000
Scale (Feet)

Source: Google Earth Pro, 2018

4. Environmental Setting

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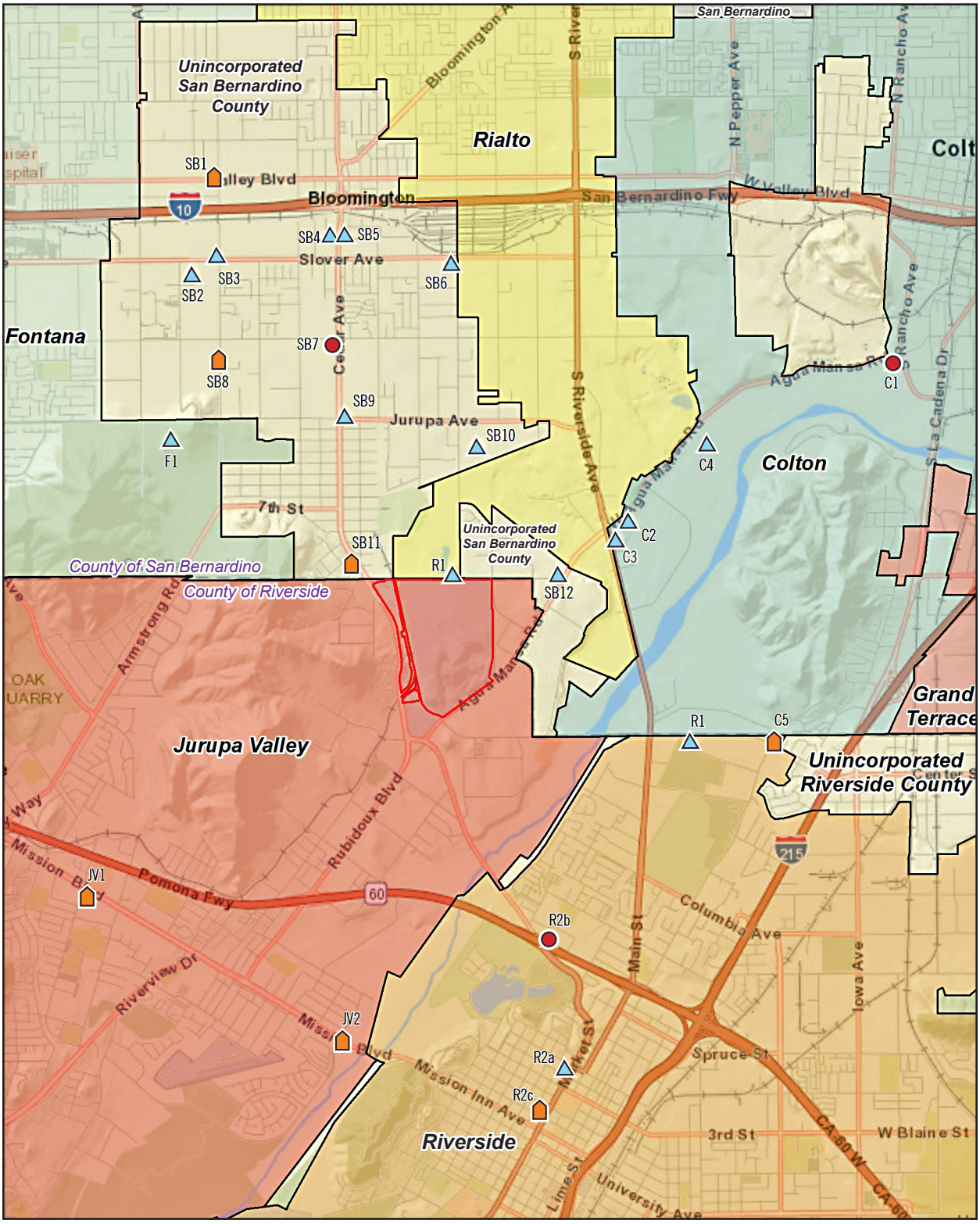
Figure 4-3 - Cumulative Projects - Surrounding Jurisdictions

4. Environmental Setting



Agua Mansa Commerce Park Specific Plan Area Boundary

City Boundary

Residential/Mixed Use

Commercial

Warehousing/Industrial

0 5,000
Scale (Feet)

Source: ESRI, 2019

PlaceWorks

4. Environmental Setting

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- **Hazards and Hazardous Materials.** The cumulative impact for hazards and hazardous materials is based on the Riverside County's Environmental Health Department (RSEHD) service area. The RSEHD is the Certified Unified Program Agency (CUPA) for Jurupa Valley.

- **Hydrology and Water Quality.** Cumulative hydrological impacts are based on the boundaries of the Upper Santa Ana River Watershed, and runoff impacts are based on the Riverside County Flood Control and Water Conservation District's service area.

- **Land Use and Planning.** Cumulative impacts are based on jurisdictional boundaries and related plans, including the City of Jurupa Valley General Plan, regional land use plans, and SCAG's RTP/SCS.

- **Mineral Resources.** Cumulative mineral resources impacts are based on the San Bernardino Production-Consumption (P-C) Region. P-C regions were selected such that the majority (95 percent) of the construction aggregate produced in the region is consumed in the region.

- **Noise.** Cumulative noise impacts are based on the traffic study, which considers the regional growth based on citywide and regional projections.

- **Population and Housing.** Cumulative impacts are based on regional demographic patterns identified in regional plans, including the City of Jurupa Valley General Plan and SCAG's RTP/SCS.

- **Public Services.** Cumulative impacts are based on potential related development within each service provider's boundaries—CAL FIRE/RCFD and Riverside County Sheriff's Department.

- **Recreation.** Cumulative impacts are assessed relative to the City of Jurupa Valley parkland standards and cumulative impacts to the Riverside County Regional Park and Open-Space District and the Jurupa Area Recreation and Park District.

- **Transportation and Traffic.** The traffic study considers both project-specific impacts and the project's cumulative contribution to traffic in the project vicinity. To assess cumulative traffic conditions, existing traffic is combined with project trips, regional ambient growth, and trips generated by the projects specified in Table 11 of the Traffic Study.

- **Tribal Cultural Resources.** Cumulative impacts related to tribal cultural resources are based on the local Native American tribes' culturally significant areas and include, but are not limited to, cultural landscapes and regions, specific heritage sites, and other tribal cultural places.

- **Utilities and Service Systems.** Cumulative impacts related to water supply and distribution systems and wastewater conveyance and treatment would be contiguous with the Rubidoux Community Services District's service area. Cumulative impacts related to stormwater drainage would be contiguous with Upper Santa Ana River basin hydrologic units. Solid waste collection services would be contiguous with the Waste Management and Burrtec service area, and landfill services would be contiguous with the Riverside County Department of Waste Resources service area. Cumulative impacts to natural gas and electricity services

would be contiguous with the Southern California Gas Company and Southern California Edison service areas, respectively.

Please refer to Chapter 5, *Environmental Analysis*, of this DEIR for a discussion of the cumulative impacts for each environmental resource area.

4.5 REFERENCES

California Air Resources Board (CARB). 2008, October. Climate Change Proposed Scoping Plan: A Framework for Change.

———. 2010, August. Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375. Staff Report.

———. 2018, February. Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets. https://www.arb.ca.gov/cc/sb375/sb375_target_update_final_staff_report_feb2018.pdf.

California Governor's Office of Emergency Services (CalOES). 2017, April 7. Governor Brown Lifts Drought Emergency, Retains Prohibition on Wasteful Practices. http://www.oesnews.com/governor-brown-lifts-drought-emergency-retains-prohibition-on-wasteful-practices/

Jurupa Valley, City of. 2017, September. City of Jurupa Valley General Plan. http://www.jurupavalley.org/Portals/0/Planning/2017%20Draft%20General%20Plan%20(adopted%20with%20changes%20not%20included)/2017%20General%20Plan%20(rev%205-6-19).pdf?ver=2019-05-14-184014-957.

Riverside County Transportation Commission (RCTC). 2011, December 14. 2011 Riverside County Congestion Management Program. http://www.rctcdev.info/uploads/media_items/congestionmanagementprogram.original.pdf.

Southern California Association of Governments (SCAG). 2016 April 7. Regional Transportation Plan/Sustainable Communities Strategy. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf.

Tam, Annette (senior planner). 2018, May 18. Personal correspondence. City of Jurupa Valley.

Willdan Associates and Williams-Kuebelbeck & Associates (Willdan & Williams). 1986, July. Agua Mansa Industrial Corridor Specific Plan. http://www.sbcounty.gov/Uploads/lus/SpecificPlans/AMSP.pdf.

5. Environmental Analysis

Chapter 5 examines the environmental setting of the proposed project, analyzes its effects and the significance of its impacts, and recommends mitigation measures to reduce or avoid impacts. This chapter has a separate section for each environmental issue area that was determined to need further study in the EIR. This scope was determined by the Notice of Preparation (NOP), published July 19, 2017, and by public and agency comments received during the NOP comment period from July 19 to August 17, 2017 (see Appendix A). Environmental issues and their corresponding sections are:

- 5.1 Aesthetics
- 5.2 Air Quality
- 5.3 Biological Resources
- 5.4 Cultural Resources
- 5.5 Geology and Soils
- 5.6 Greenhouse Gas Emissions
- 5.7 Hazards and Hazardous Materials
- 5.8 Hydrology and Water Quality
- 5.9 Land Use and Planning
- 5.10 Mineral Resources
- 5.11 Noise
- 5.12 Population and Housing
- 5.13 Public Services
- 5.14 Recreation
- 5.15 Transportation and Traffic
- 5.16 Tribal Cultural Resources
- 5.17 Utilities and Service Systems

Sections 5.1 through 5.17 provide a detailed discussion of the environmental setting, impacts associated with the proposed project, and mitigation measures designed to reduce significant impacts where required and when feasible. The residual impacts following the implementation of any mitigation measure are also discussed. Potential Energy impacts are detailed in Chapter 9.

5. Environmental Analysis

Organization of Environmental Analysis

To assist the reader with comparing information between environmental issues, each section is organized under nine major headings:

- Environmental Setting
- Notice of Preparation (NOP)/Scoping Comments
- Thresholds of Significance
- Applicable Policies and Design Features
- Environmental Impacts
- Cumulative Impacts
- Level of Significance Before Mitigation
- Mitigation Measures
- Level of Significance After Mitigation
- References

In addition, Table 1-2 in Chapter 1, *Executive Summary,* has a table that summarizes all impacts by environmental issue.

Terminology Used in This Draft SEIR

The level of significance is identified for each impact in this DEIR. Although the criteria for determining significance are different for each topic area, the environmental analysis applies a uniform classification of the impacts based on definitions consistent with CEQA and the CEQA Guidelines:

- **No impact.** The project would not change the environment.
- **Less than significant.** The project would not cause any substantial, adverse change in the environment.
- **Less than significant with mitigation incorporated.** The EIR includes mitigation measures that avoid substantial adverse impacts on the environment.
- **Significant and unavoidable.** The project would cause a substantial adverse effect on the environment, and no feasible mitigation measures are available to reduce the impact to a less than significant level.

5.1 AESTHETICS

This section of the Draft Environmental Impact Report (DEIR) describes the existing landform and aesthetic character of the project site and surrounding area and describes views of the project site from surrounding areas. It also analyzes the potential aesthetic and visual impacts resulting from implementation of the Agua Mansa Commerce Park Specific Plan (proposed project).

5.1.1 Environmental Setting

5.1.1.1 REGULATORY BACKGROUND

Federal Regulations

There are no federal regulations that are applicable to the topic of aesthetics in Jurupa Valley.

State Regulations

There are no State regulations that are applicable to the topic of aesthetics in Jurupa Valley.

Regional Policies

There are no regional regulations that are applicable to the topic of aesthetics in Jurupa Valley.

City General Plan Policies

The specific policies outlined in the City's General Plan Land Use Element and Conservation and Open Space Element that are related to aesthetics and that apply to the proposed Project are listed in Table 5.9-2, *City of Jurupa Valley General Plan Consistency Analysis*.

5.1.1.2 VISUAL CHARACTER

The closed Riverside Cement Plant facility encompasses most of the project site. As shown on Figure 5.1-1, *Site Photos*, the facility includes several quarries in the southern portion of the site, concrete and steel structures used in cement manufacturing, paved roadways, soil and material stockpiles, machinery, and vacant buildings. Additional structures that remain onsite from plant operations include white- and grey-cement production lines, storage silos and sheds, cement bagging building, empty tanks, conveyor belts, soil and material stockpiles, utility tunnels, a control center, and a research and development facility, adjacent to Rubidoux Boulevard, on the west side of the property. Crestmore Lake, a large, water-filled limestone quarry, is at the southern portion of the cement plant (see Figure 3-3 *Aerial Photograph*). Vacant and undeveloped lands along the northern and western sides make up the rest of the project site. Many shrubs, grass, and trees are scattered on the project site and along the site perimeters.

Due to the nature of the former cement plant facility, the 302.8-acre project site has quite a large variation in ground elevation. Ground surface elevations vary from approximately 835 feet above mean sea level (amsl) to approximately 985 feet amsl. The southern portion of the site includes Crestmore Lake (from the flooded Chino Quarry), large open pits, and significant elevation relief. The Chino Quarry is flooded to an elevation of

approximately 815 feet amsl, and the ground surface elevation adjacent to the quarry is approximately 915 feet amsl, so the water level is about 100 feet below the adjacent ground surface elevation (see Figure 5.1-1, *Site Photos*).

Surrounding land uses include vacant land and low density single-family residences to the north in the City of Rialto; vacant land and industrial uses to the east along Hall Avenue and to the west along Rubidoux Boulevard; and industrial and public facilities uses to the south along Agua Mansa Road. Further west is Crestmore Heights, a semirural and low density residential neighborhood of Jurupa Valley (see Figure 4-1 *Surrounding Land Use*). The remaining project area is predominantly industrial uses.

5.1.1.3 LANDFORM

The San Gabriel and San Bernardino mountain ranges are located roughly 20 miles north of Jurupa Valley and the project site in San Bernardino County. Within the City, the Jurupa Mountains are north of State Route 60 (SR-60) and directly west of the project site. They are partially visible from various viewpoints on the project site; however, views from the site of the San Gabriel and San Bernardino Mountains are mostly obstructed due the site's elevation changes, existing tree lines in the northern portion of the site, and various soil and material stockpiles.

A predominant landform within the site is the large limestone boulder and hill, approximately 985 feet amsl, adjacent to what remains of the flooded Chino Quarry in the southern portion of the site.

5.1.1.4 SCENIC VISTAS AND CORRIDORS

According to the Jurupa Valley General Plan, there are no scenic corridors or vistas near the project site. The closest City-designated scenic corridors are segments of Crestmore Road and 46th Street, roughly 3.5 miles south of the project site (Jurupa Valley 2017).

5.1.1.5 LIGHT AND GLARE

The Riverside Cement plant facility and associated buildings are closed except for the research and development building in the CalPortland area. No light and glare are produced from within the project site except from the 23,000-square-foot research and development building in the northwest corner of the site. Light and glare from surrounding uses are limited to low-density residences to the north and industrial uses to the east, west, and south. Most of the areas directly across El Rivino Road to the north, Rubidoux Boulevard to the west, and Hall Avenue to the east are vacant or grazing lands with no light sources onsite.

There are no streetlights on El Rivino Road, Hall Avenue, Agua Mansa Road, or Rubidoux Boulevard except at larger intersections. Thus, there are generally minimal sources of light and glare in the project area.

5.1.2 Notice of Preparation (NOP)/Scoping Comments

A Notice of Preparation (NOP) for the proposed Project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of aesthetics.

Figure 5.1-1 - Site Photos

5. Environmental Analysis

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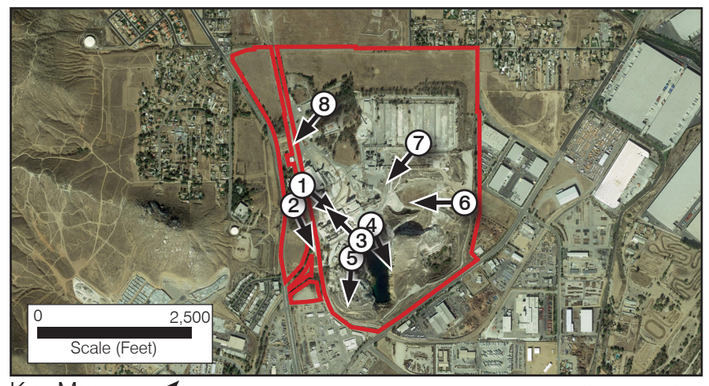

Key Map

1 Site Photo Locations and Directions (8)

Agua Mensa Commerce Park Specific Plan Area Boundary

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Key Map Source: Google Earth Pro,2017

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In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall—8930 Limonite Avenue, Jurupa Valley, CA 92509—to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.1.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in §15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to aesthetics are based on criteria contained in Appendix G of the CEQA Guidelines According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

AE-1 Have a substantial adverse effect on a scenic vista.

AE-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

AE-3 Substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.

AE-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

5.1.4 Applicable Policies and Design Features

5.1.4.1 PLANS, POLICIES, AND PROGRAMS

No existing plans, policies, or programs are applicable to the proposed project's impacts to aesthetics.

5.1.4.2 PROJECT DESIGN FEATURES

PDF AE-1 As required by the Specific Plan, building heights shall comply with Table 3.2 *Development Standards*.

PDF AE-2 The Specific Plan includes a conceptual landscape plan that focuses on landscaping along public roadways; to soften hardscapes and buildings; to provide buffers between different uses; and to enhance the overall character of the Industrial and Business parks (see Figure 5.1-2 *Conceptual Landscape Plan*). Thematic landscaping design (i.e., heights, accents, and patterns) can further define the visual character of the site, emphasize focal points, provide shade, and add visual interest.

PDF AE-3 The Specific Plan includes lighting requirements that dictate the location, shielding, orientation, and height of lighting fixtures so as to contribute to the building identity and

provide enhanced safety and security for pedestrians and vehicles. All lighting shall comply with Table 3.8, *Lighting Requirements,* of the Specific Plan.

PDF AE-4 The Specific Plan includes requirements for walls, fences, and screens. The design requirements dictate the height, material, gates, enclosures, landscaping, and screening types so as to complement the prevailing architecture and design of the Specific Plan Area

PDF AE-5 The Specific Plan includes design requirements for signs and requires a Comprehensive Master Sign Program to be submitted with a Site Development Permit for review and approval by the Planning Director prior to the issuance of the first building permit.

5.1.5 Environmental Impacts

5.1.5.1 METHODOLOGY

Aesthetic/Visual Character Analysis

The assessment of aesthetic impacts is subjective by nature. Aesthetics generally refer to the identification of visual resources and the quality of what can be seen, as well as an overall visual perception of the environment. This analysis attempts to identify and objectively examine factors that contribute to the perception of aesthetic impacts. Potential aesthetic impacts can be evaluated by considering proposed building setbacks, scale, massing, typical construction materials, and landscaping features of the proposed project. The Jurupa Valley Land Use Ordinance includes a variety of provisions related to development standards for residential and nonresidential development (i.e., building height limits, setbacks, landscaping, lighting and signage). However, there are no locally designated or defined standards or methodologies for the assessment of aesthetic impacts. Conceptual plans and perspectives of the Agua Mansa Commerce Park Specific Plan are included to help examine the aesthetic compatibility of the conceptual plans with the surrounding area and potential impacts to visual resources and viewers in the project area.

Light and Glare Analysis

Nighttime illumination and glare analysis address the effects of a project's exterior lighting upon adjoining uses and areas. Light and glare impacts are determined by comparing the existing light sources with the proposed lighting plan or policies. If the project has the potential to generate spill light on adjacent sensitive receptors or generate glare for receptors in the vicinity of the site, mitigation measures can be provided to reduce potential impacts, as necessary.

Figure 5.1-2 - Conceptual Landscape Plan

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Source: MIG, 2019

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

According to the City's general plan, there are no scenic corridors or vistas near the project site. Landforms with potential scenic vistas include the San Gabriel and San Bernardino mountain ranges roughly 20 miles north of the project site and the Jurupa Mountains directly west of the project site. Views toward these mountains from the project site and surrounding roadways are mostly obstructed due the site's and roadways' topographic changes and existing tree lines. Additionally, buildings developed onsite have maximum building height requirements of 100 feet for the Industrial Park District, 50 feet for the Business Park and Retail Overlay District, and 35 feet for the Open Space District. Views toward the mountains would not be substantially impacted by development of the proposed buildings.

Further, a major element of the proposed project is the environmental remediation of the existing brownfield site, which would reduce the blight and provide an opportunity for the development of a state of the art, modern industrial area. Impacts would be less than significant.

Level of Significance before Mitigation: With implementation of PDF AE-1, Impact AE-1 would be less than significant.

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

According to the California Department of Transportation Scenic Highway System, there are no state scenic highways in or near the City of Jurupa Valley (Caltrans 2011). Additionally, according to the Jurupa Valley General Plan, there are no scenic corridors near the project site. The closest City-designated scenic corridors are segments of Crestmore Road and 46th Street that are roughly 3.5 miles south of the project site and cannot be seen (Jurupa Valley 2017). Thus, no impact would occur to scenic resources within a state scenic highway or a City-designated scenic corridor.

Level of Significance before Mitigation: Impact AE-2 would cause no impact.

Impact AE-3 Threshold: Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Development of the proposed Specific Plan would involve site clearing and mass grading, construction of new industrial, business park, and possible retail buildings and open space in the three proposed land use districts—Industrial Park, Business Park with Retail Overlay, and Open Space. Prior to any grading activities, the former Riverside Cement Plant facility and associated buildings would be demolished and much of the material will be recycled and reused on-site. The mass grading for the site includes cuts and fills up to 35 feet, with total grading yardage estimated at 2.1 million cubic yards. This is required to mass grade the site to even out the project site's topography, which currently varies from approximately 835 to 985 feet amsl.

The proposed Specific Plan includes development standards for each land use district that provide the regulatory framework for the Agua Mansa Commerce Park (see Table 5.1-1).

Table 5.1-1 Development Standards

Development Standards	Land Use Districts		
	Industrial Park	Business Park with Retail Overlay	Open Space
Maximum Lot Coverage	55%	60%	NA
Minimum Lot Dimensions			
Lot Size	20,000 SF	10,000 SF	NA
Average Width	100 feet	75 feet	NA
Building Height			
Maximum Height	100 feet	50 feet	35 feet
Minimum Landscape Setback			
Rubidoux Boulevard	NA	20 feet	NA
El Rivino Road	20 feet	20 feet	NA
Hall Avenue	20 feet	NA	NA
Agua Mansa Road	NA	NA	20 feet
Interior Side	0 feet	10 feet	NA
Interior Rear	0 feet	0 feet	NA
Minimum Building Setbacks			
Rubidoux Boulevard	NA	20 feet	NA
El Rivino Road	90 feet	20 feet	NA
Hall Avenue	90 feet	NA	NA
Agua Mansa Road	NA	NA	20 feet
Interior Side	10 feet	10 feet	NA
Interior Rear	10 feet	10 feet	NA

Source: Agua Mansa Commerce Park Specific Plan, 2019.

General development standards related to outdoor storage; lighting; landscaping; walls, fences and screening; and signs are also provided in the Specific Plan to ensure cohesive development of the whole Agua Mansa Commerce Park.

Further, design guidelines in the Specific Plan provide a framework for future development to maintain high quality and complementary design; create a functional and sustainable place; and establish themes or standards for building design and materials, landscaping, and site design.

Industrial and Business Park Districts

The proposed Industrial Park District would encompass about 190 acres and is conceptually planned for five logistics warehouse buildings, making up approximately 4,216,000 square feet of industrial uses—3,452,000 square feet of building footprint and up to 764,000 square feet of mezzanine area (see Figure 3-5, *Conceptual Site Plan*). Industrial uses may include, for example, manufacturing, research and development, fulfillment centers, e-commerce centers, high-cube, general warehousing and distribution, and cross-dock facilities. Trailer, truck, and/or car parking areas are also proposed in the southern portion of the Industrial Park area.

The proposed Business Park with Retail Overlay District encompasses 33.8 acres and has two development options:

- **Alternative 1:** 200,000-square-foot industrial building (no retail)
- **Alternative 2:** 150,000-square-foot business park building and 25,000 square feet of neighborhood serving retail use

An existing 23,000-square-foot building would remain in the southern portion of the Business Park area and would continue to be used as a research and development facility. The proposed Specific Plan allows for an additional 41,000 square feet of Business Park use(s) in this area, either through expansion of the existing building or new construction.

The intent of the design guidelines for the Industrial and Business park districts is to encourage visually interesting buildings that complement the surrounding uses while providing opportunities for economic activity. Figure 5.1-3, *Industrial and Business Park District Vision and Design*, illustrates examples of proper design, building materials, colors, and architectural features that can be envisioned for the proposed industrial and business park districts. Rather than conventional box-shaped industrial and business buildings, the design guidelines encourage contemporary designs with breaks, variations, different building materials, colors, and architectural form to create distinctive building designs. Maintaining consistency within architectural styles based on the Specific Plan's design guidelines would visually unify, define the character, and establish an appropriate, cohesive aesthetic for buildings in the Specific Plan. Pertinent design guidelines, from the Specific Plan, related to development of the Industrial and Business park areas include:

- Building Façade
  - Feature the highest level of articulation on façades visible from public streets.
  - Include a recognizable base, middle, and top in each facade. Typical base treatments include textured materials or change in materials or paint colors. Typical top treatments include cornice elements, roof overhangs, stepped parapets, textured materials, different materials or paint colors, and vertical expressions.
  - Offset or architecturally treat long expanses of wall surfaces every 150 feet with material changes, pilasters and posts, staggered walls, or landscape treatments to prevent monotony.
- Entries, Doors, and Windows
  - Portray a quality office appearance for primary entries and tie the entry into the overall mass and building composition. Design entry features as a significant aspect of the building's overall composition.
  - Provide shade and visual relief through recessed or covered entrances.
  - Highlight primary building entries through the massing of the building, special materials, colors, detailing, and/or other architectural treatment.
- Building Materials and Finishes

- Ensure consistency of materials, colors, fenestration, scale, and massing with the intended architectural style or theme.
- Incorporate similar and complementary massing materials and details into rear and side elevations.
- Materials such as decorative concrete, stucco, exterior plaster, tile, stone, metal, and glass are appropriate primary exterior materials for buildings.
- Unfinished exterior surfaces are not permitted on any building façade.

Additionally, given the industrial nature of the project, buffering and screening are important design features to screen truck courts and loading/service areas. Walls and fences used for screening and buffering would be used along with additional landscaping, including shrubs, trees, and ground-covering plants. Truck loading areas should be screened from the public rights-of-way but still designed to allow for safe, efficient space for trucks to maneuver.

Well-designed signs at the entryways and within the industrial and business park areas would also contribute to the cohesiveness of the two areas. The design guidelines require land use district–specific master sign programs that implement a unifying sign theme throughout the Industrial and Business parks. Signs must be constructed of high-quality materials such as wood, metal, stone and plexiglass; located in areas of the façade for easy viewing and not to obscure other key parts of the building; and carefully lit to provide adequate lighting but not distract motorists. They must provide simple, clear and easily legible text and be designed as an integral design element of a building's architecture, consistent with architectural style, scale, articulation, proportions, materials, and colors.

The Specific Plan's conceptual landscape plan focuses on landscaping along public roadways, softening hardscapes and buildings, providing buffers between different uses, and enhancing the overall character of the industrial and business parks (see Figure 5.1-2, *Conceptual Landscape Plan*). Thematic landscaping design (i.e., heights, accents, and patterns) can further define the visual character of the site, emphasize focal points, provide shade, and add visual interest. For example, parking lot landscaping can help reduce heat buildup, improve aesthetics, and enhance pedestrian paths connecting the parking lot to the industrial and business buildings. A drought-tolerant plant palette can include colorful shrubs and groundcovers, ornamental grasses and succulents, evergreen and deciduous trees, and species native to the area or naturalized to the area, providing visual comfort along pedestrian paths and streetscapes and within public gathering areas.

Figure 5.1-3 - Industrial and Business Park District Vision and Design

Walls and fences complement building colors and design; adjacent plantings can grow to soften the wall or fence at maturity.

A combination of metal and glass establishes a unique building identity.

Exterior building facades such as a variation of materials and colors, articulation of building form, and architectural design elements (e.g. projecting features or lighting) create visual interest and break up the mass of buildings.

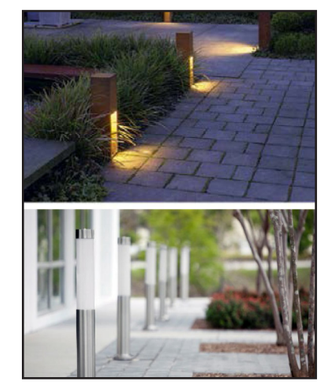
Window design creates a horizontal emphasis and frames the primary building entry.

A variety of colors, materials, and unique architecture highlight the building entry.

Loading areas can be screened from the public right-of-way while still being designed with sufficient space for trucks to maneuver.

Landscaping helps define unique building character and enhance aesthetic quality.

Signage scaled for motorists, pedestrians, and trucks provide clear signage and direction.



Pedestrian scale lighting used along pedestrian walkways and at building entries help subtly illuminate walkways and corridors.

Source: MIG, 2019

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Retail Overlay Area

The Retail Overlay is intended to allow commercial and retail uses, typically multitenant in nature, and can include neighborhood-serving retail and personal services, food service, convenience stores, etc. In addition to the required development standards, the Specific Plan also includes design guidelines for the retail overlay area. Design guidelines include avoiding long, monotonous building facades; encouraging building step backs, cutouts, modulations, balconies, and patios; ensuring Crime Prevention Through Environmental Design best practices; utilizing techniques with varying textures, colors, materials, architectural styles, and visual graphics; installing appropriate signage that provide clear direction to visitors while also complementing and integrating into the exterior building design; installing decorative paving on walkways, pavement, and other pedestrian pathways; and encouraging porches, covered walkways, and awnings to create a sense of arrival at major retail entryways.

Open Space District

The Open Space District will be remediated in accordance with a DTSC approved Response Plan and will remain as open space and preserve the existing terrain and scenic resources. A recreational park could be developed which allows for a range of passive and active recreation uses. If a recreational use is proposed in the future, a Park Development Plan, Conditional Use Permit, and/or other entitlements, and additional environmental analysis will be required prior to any approval.

Conclusion

The project site has a long history of industrial activity as a cement manufacturing plant and limestone quarry/mine and is currently vacant. Development in accordance with the Specific Plan would substantially change the visual character of the current site conditions. However, development standards and design guidelines detailed in the Specific Plan would ensure that the industrial and business parks and open space areas are developed in a coordinated manner with compatible land uses and cohesive design. Therefore, the proposed project would not degrade the project site compared to its existing conditions and would instead remediate and redevelop the currently underutilized site with more economically viable developments.

Furthermore, according to the Census 2010 Urbanized Area Outline Maps, the project site is in the Riverside-San Bernardino, CA Urbanized Area (Census Bureau 2012). The land use entitlement requests for the project include rezoning the project site to "Specific Plan." Therefore, the proposed development is subject to the Specific Plan's development standards and no other zoning requirements. The project would not conflict with the Specific Plan development requirements, and impacts would be less than significant.

Level of Significance before Mitigation: With implementation of PDF AE-1, PDF AE-2, PDF AE-3, and PDF AE-4, Impact AE-3 would be less than significant.

Impact AE-4 Threshold: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The proposed project would result in new lighting sources to provide nighttime illumination for the industrial, business park, and retail buildings (interior and exterior), internal streets, and sidewalks. Lighting would also be used to enhance security and safety for pedestrians and vehicles within the Specific Plan area. Nighttime lighting associated with the project would be partially visible to the residential neighborhoods to the north and to motorists on adjacent roadways (i.e., El Rivino Road, Hall Avenue, and Rubidoux Boulevard).

Project-related lighting would be regulated by the proposed Specific Plan development standards and design guidelines. Types of lighting for the project would include, but not be limited to, street lighting, parking lot and pedestrian lighting, landscape accent lighting, building monument lighting, and security lighting.

Table 3.7 of the Specific Plan establishes the following development standards for lighting within the project site:

- **Location:** Adequate lights would be provided for all parking areas, truck courts, vehicular and pedestrian circulation, building exteriors, service areas, courtyards, arcades, and seating areas.
- **Pedestrian Lighting:** All pedestrian walkways, building entries, and pathways would be illuminated to provide pedestrian orientation and clearly identify a safe and secure route between parking areas and points of entry to the building.
- **Service Area Lighting:** Service area and security lighting would be directed to areas within the limits of the service area. Wall-mounted, security-type, service area lighting fixtures would be used only in screened service areas and only if direct light is kept within these areas. In all other areas, wall-mounted service lighting would consist of cut-off fixtures.
- **Orientation:** All exterior lighting fixtures would be directed downward to illuminate pedestrian pathways and parking areas and avoid unnecessary glare and light pollution. However, uplighting effects to promote nighttime identity and character would be allowed provided such exterior lighting features use indirect or hidden lighting sources for wall washing or illuminating architectural elements, landscaping, entries, and pedestrian areas.
- **Height:** Pole-mounted, building-mounted, or tree-mounted lighting fixtures would be no more than 30 feet high to minimize direct glare beyond the parking lot or service area.
- **Shielding:** Pole-mounted lights would be shielded, and the light directed away from the public streets. Pole-mounted lights would use cut-off fixtures and would not be directed toward residences. Projects must ensure zero light spill offsite.
- **Light Fixtures:** Building entries shall be lit with soffit, bollard, step, or comparable lighting.

Design guidelines in the Specific Plan ensure all project-lighting is uniform in nature, provides safety, enhances the scenic quality of the project site, and minimizes glare. For example, pedestrian walkways and building entries would be illuminated to provide pedestrian orientation and to clearly identify secure routes between parking areas and point of entry to buildings. Pedestrian lighting would be human scaled, subdued, and warm-white in tone. Courtyards, arcades, and seating areas would be illuminated to promote pedestrian use and safety. Exterior lights would be used to accent entrances, activity areas, steps, ramps, and special architectural features.

The proposed project does not include any components that would include large expanses of reflective materials that would result in the generation of substantial amounts of glare. Moreover, proposed landscaping would screen some potential sources of glare from affecting nearby motorists or residents. To reduce potential glare effects, reflective or opaque glass and metal trims would be discouraged, and building materials would express earth tones Accordingly, a less than significant glare impact would occur.

Compliance with the development standards and design guidelines in the Specific Plan would ensure new sources of light and glare do not adversely affect day or nighttime views in the project area. As shown in Figure 3-5, *Conceptual Site Plan*, the proposed buildings are mostly set back from adjacent roadways, which would help in reducing project-related light spilling onto neighboring uses. No substantial light sources would be installed onsite, and most lighting would be similar to that of neighboring industrial uses. Thus, overall light and glare impacts associated with the proposed project would be less than significant.

Level of Significance before Mitigation: With implementation of PDF AE-3, Impact AE-4 would be less than significant.

5.1.6 Cumulative Impacts

5.1.6.1 AESTHETIC/VISUAL CHARACTER

When evaluating cumulative aesthetic impacts, a number of factors must be considered. The cumulative study area for aesthetic impacts is the viewshed that includes the project site and surrounding areas. The context in which a project is being viewed will also influence the significance of the aesthetic impact. The contrast a project has with its surrounding environment may actually be reduced by the presence of other cumulative projects. If most of an area is or is becoming more urbanized, the contrast may be less since the project would not stand out as much. In order for a cumulative aesthetic impact to occur, the proposed elements of the cumulative projects would need to be seen together or in proximity to each other. If the projects are not near each other, the viewer would not perceive them in the same scene.

Because aesthetic impacts are localized to the project site and immediately surrounding area, cumulative impacts would include nearby projects in the area. As shown in Figures 4-2, *Cumulative Projects Within 2-Miles of the Proposed Project*, and Table 4-1, *Related Approved and Pending Projects Within 2_Miles of the Proposed Project*, cumulative projects (approved as well as reasonably foreseeable) near the project site include Inland Empire Cold Storage, West Riverside Landfill Solar, Rubidoux Commercial Development, Rialto Commerce Center and Kiewit Infrastructure. As with the proposed project, these cumulative projects would alter the visual character within their immediate vicinity. However, because of the highly industrialized nature of the overall area, development of the proposed project and cumulative projects would not negatively impact the visual character of the area.

Additionally, this would not constitute a significant adverse impact because the project site and cumulative development sites are anticipated to be developed in accordance with the City's General Plan and Land Use Ordinance. Furthermore, as with the proposed project, the applicants of cumulative development projects would be subject to City's site development review and approval.

In consideration of the preceding factors, the project's contribution to cumulative aesthetic impacts would be rendered less than considerable, and therefore, less than cumulatively significant.

Light and Glare

Sources of light and glare from surrounding uses in the vicinity of the proposed project are limited to low-density residences to the north and industrial uses to the east, west, and south. Most of the areas directly across El Rivino Road to the north, Rubidoux Boulevard to the west, and Hall Avenue to the east are vacant or grazing lands with no light sources. There are no streetlights on El Rivino Road, Hall Avenue, Agua Mansa Road, or Rubidoux Boulevard except at larger intersections.

Lighting from the proposed project would combine with the potential increase in lighting associated with the aforementioned cumulative development. This would result in new lighting sources in the area. Project-related lighting would be regulated by the proposed Specific Plan development standards and design guidelines. Additionally, the cumulative development projects would be required to adhere to the lighting requirements of the City of Jurupa Valley Municipal Code. The municipal code requires that all lighting fixtures, including spotlights, electrical reflectors, and other means of illumination for signs, structures, landscaping, parking, loading, unloading and similar areas be focused, directed, and arranged to prevent glare or direct illumination on streets or adjoining property.

In consideration of the preceding factors, the project's contribution to cumulative light and glare impacts would be rendered less than considerable, and therefore less than cumulatively significant.

5.1.7 Level of Significance Before Mitigation

Impact AE-2 would cause no impact.

Upon implementation of PDF AE-1, Impact AE-1 would be less than significant.

Upon implementation of PDF AE-1, PDF AE-2, PDF AE-3, and PDF AE-4, ImpactAE-3 would be less than significant.

Upon implementation of PDF AE-3, Impact AE-4 would be less than significant.

5.1.8 Mitigation Measures

No mitigation measures are required.

5.1.9 Level of Significance After Mitigation

Impacts would be less than significant.

5.1.10 References

California Department of Transportation (Caltrans). 2011, September. Scenic Highway System. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/.

Jurupa Valley, City of. 2017, September. City of Jurupa Valley 2017 General Plan.

United States Census Bureau (Census Bureau). 2012, May 22. 2010 Census Urban Area Maps – Riverside, San Bernardino. https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua75340_riverside--san_bernardino_ca/.

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5.2 AIR QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the air quality impacts based on the following technical studies prepared by Urban Crossroads, Inc. for the proposed Agua Mansa Commerce Park Specific Plan.

- *Agua Mansa Commerce Park Specific Plan, Air Quality Impact Analysis, City of Jurupa Valley*, Urban Crossroads, January 28, 2019.
- *Agua Mansa Commerce Park Specific Plan, Diesel Mobile Source Health Risk Assessment, City of Jurupa Valley*, Urban Crossroads, November 6, 2018.
- *Agua Mansa Commerce Park Specific Plan Supplemental Air Quality Assessment,* Urban Crossroads, January 28, 2019.

Complete copies of these studies are included as technical appendices to this Draft EIR (Appendices C1 and C2, respectively).

The purpose of this section is to evaluate the potential impacts to air quality associated with construction and operation of the proposed project and recommend measures to mitigate impacts considered potentially significant in comparison to thresholds established by the South Coast Air Quality Management District (SCAQMD) for projects in the South Coast Air Basin (SoCAB).

The following are definitions for terms used throughout this section.

- **AAQS:** Ambient Air Quality Standards
- **CAA:** Clean Air Act
- **Concentrations:** Refers to the amount of pollutant material per volumetric unit of air. Concentrations are measured in parts per million (ppm), parts per billion (ppb), or micrograms per cubic meter ($\mu g/m^3$).
- **Criteria Air Pollutants:** Those air pollutants specifically identified for control under the Federal Clean Air Act (currently six: carbon monoxide, nitrogen oxides, lead, sulfur oxides, ozone and particulates).
    - **CO.** Carbon monoxide, a common product of incomplete combustion. A criteria pollutant with state and federal standards. Not a primary photochemical reaction compound but involved in photochemical reactions. Dissipates rapidly and is therefore only important on a local scale near sources.
    - **NO_X.** Nitrogen oxides, a common product of combustion in the presence of nitrogen. Includes nitrogen dioxide (NO_2), which is a criteria pollutant with state and federal standards. Locally and regionally important due to its involvement in the photochemical formation of ozone (O_3).
    - **O_3.** Ozone, a gas mainly produced by a photochemical reaction between reactive organic gases and oxides of nitrogen in the presence of sunlight (also produced by molecular oxygen in the presence of

ultraviolet light or electrical discharge). A strong oxidant that is damaging at ground level but necessary at high altitude (in the stratosphere, where it absorbs dangerous ultraviolet light). Also considered an important greenhouse gas. A criteria pollutant with state and federal standards.

- **Pb.** Lead is heavy metal, present in the environment mainly due to historical use in motor vehicle fuel. Primarily associated with lead smelting operations. A criteria pollutant with state and federal standards. Primarily of concern near sources.
- **PM_{10}/$PM_{2.5}$.** Coarse particulate matter/fine particulate matter, that portion of particulate matter that tends to penetrate into the human lung. The subscript refers to aerodynamic diameter. Criteria pollutants with state and federal standards. Locally and regionally important.
- **SO_X.** Sulfur oxides, a common product of combustion in the presence of sulfur. Associated primarily with diesel and coal burning. Includes SO_2, a criteria pollutant with state and federal standards.

- **DPM.** Diesel particulate matter
- **HRA.** health risk assessment
- **OEHHA.** Office of Environmental Health Hazard Assessment
- **ppm.** parts per million
- **VOCs.** Volatile organic compounds, a portion of total organic compounds or gases; excludes methane, ethane, and acetone (due to low photochemical reactivity). Regionally important due to their involvement in the photochemical reaction that produces ozone.
- **TAC.** toxic air contaminant
- **Tpy.** tons per year
- **$\mu g/m^3$.** micrograms per cubic meter

5.2.1 Environmental Setting

5.2.1.1 REGULATORY BACKGROUND

Federal and State

Ambient Air Quality Standards

US Environmental Protection Agency

The EPA is responsible for setting and enforcing the National AAQS for O_3, CO, NO_x, SO_2, PM_{10}, $PM_{2.5}$, and lead. The EPA has jurisdiction over emissions sources that are under the authority of the federal government, including aircraft, locomotives, and emissions sources outside state waters (outer continental shelf). The EPA

also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the California Air Resources Board (CARB).

The federal Clean Air Act was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the National AAQS, and specifies future dates for achieving compliance. The CAA also mandates that states submit and implement State Implementation Plans for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the National AAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the project site include Title I (Non-attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions were established with the goal of attaining the National AAQS for the following criteria pollutants—O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and lead. The National AAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a National AAQS for $PM_{2.5}$.

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

California Air Resource Board

The CARB, which became part of the California EPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and regulating emissions from consumer products and motor vehicles. The California CAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the California AAQS by the earliest practical date. The CARB established the California AAQS for all pollutants for which the federal government has National AAQS, and also establishes standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. However, at this time, hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in the SoCAB because they are not considered a regional air quality problem. Generally, the California AAQS are more stringent than the National AAQS. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety to protect the public health and welfare. National and California AAQS currently in effect are shown in Table 5.2-1.

5. Environmental Analysis
AIR QUALITY

Table 5.2-1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)[8]	1 hour	0.09 ppm	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 hours	0.070 ppm		0.070 ppm (137 µg/m^3)		
Respirable Coarse Particulate Matter (PM_{10})[9]	24 hours	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		-		
Fine Particulate Matter ($PM_{2.5}$)[9]	24 hours	-	-	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	-	Non-Dispersive Infrared Photometry (NDIR)
	8 hours	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	-	
	8 hours (Lake Tahoe)	6 ppm (7 mg/m^3)		-	-	
Nitrogen Dioxide (NO_2)[10]	1 hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	0.100 ppm (188 µg/m^3)	-	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	-	Ultraviolet Fluorescence Spectrophotometry (Pararosaniline Method)
	3 Hour	-		-	0.5 ppm (1300 µg/m^3)	
	24 hours	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	-	
	Annual Arithmetic Mean	-		0.030 ppm (for certain areas)[11]	-	
Lead (Pb)[12,13]	30-Day Average	1.5 µg/m^3	Atomic Absorption	-	-	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	-		0.15 µg/m^3		

Table 5.2-1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Visibility Reducing Particles[14]	8 hours	See Footnote 14	Beta Attenuation and Transmittance through Filter Tape	No Federal Standard		
Sulfates (SO_4)[5]	24 hours	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 hour	0.01 ppm	Gas Chromatography			

Source: Urban Crossroads 2019a

1 California standards for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, 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.

2 National standards (other than O_3, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

3 Concentration expressed first in 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 degrees Celsius and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

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

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

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

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

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

9 On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 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.

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

11 On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

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

13 The national standard for leas 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 one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standards are approved.

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

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards in Table 5.2-1. The air quality in a region is considered in attainment by the state if the measured ambient air pollutant levels for O_3, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are not equaled or exceeded at any time in any consecutive three-year period; and the federal standards (other than O_3, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The O_3 standard is attained when the fourth highest eight-hour

concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

California Energy Commission

Energy Efficiency Standards

California Code of Regulations Title 24 Part 6, California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2016 version of Title 24 was adopted by the California Energy Commission (CEC) and became effective on January 1, 2017, and is applicable to the project. The CEC indicates that the 2016 Title 24 standards will reduce energy consumption by 5 percent for nonresidential buildings above what was achieved by the 2013 Title 24 (CEC 2015).

California Green Building Standards

California Code of Regulations Title 24 Part 11, California Green Building Standards Code (CALGreen), is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went into effect on January 1, 2011, and is administered by the California Building Standards Commission. CALGreen is updated on a regular basis, with the most recent update consisting of the 2016 California Green Building Code Standards that became effective January 1, 2017. Local jurisdictions are permitted to adopt more stringent requirements, as state law provides methods for local enhancements. The State Building Code provides the minimum standard that buildings must meet in order to be certified for occupancy, which is generally enforced by the local building official. CALGreen requires:

- **Short-term bicycle parking.** If a commercial project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one 2-bike capacity rack. (CALGreen Section 5.106.4.1.1)

- **Long-term bicycle parking.** For new buildings with 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of tenant-occupied motorized vehicle parking capacity, with a minimum of one space. (Section 5.106.4.1.2)

- **Designated parking.** Provide designated parking in commercial projects for any combination of low-emitting, fuel-efficient, and carpool/van pool vehicles, as shown in Table 5.106.5.2. (Section 5.106.5.2)

- **Recycling by occupants.** Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling. (Section 5.410.1)

- **Construction waste.** A minimum 65 percent diversion of construction and demolition waste from landfills, increasing voluntarily to 80 percent for new homes and commercial projects (Sections 5.408.1, A5.408.3.1 [nonresidential], A5.408.3.1 [residential]). All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled. (Section 5.408.3)

- **Wastewater reduction.** Each building shall reduce the generation of wastewater by one of the following methods:
  - The installation of water-conserving fixtures (Section 5.303.3) or
  - Using nonpotable water systems (Section 5.303.4).

- **Water use savings.** 20 percent mandatory reduction of indoor water use with voluntary goal standards for 30, 35 and 40 percent reductions. (Sections 5.303.2, A5303.2.3 [nonresidential])

- **Water meters**. Separate water meters for buildings in excess of 50,000 square feet or buildings projected to consume more than 1,000 gallons per day. (Section 5.303.1)

- **Irrigation efficiency.** Moisture-sensing irrigation systems for larger landscaped areas. (Section 5.304.3)

- **Materials pollution control.** Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particleboard. (Section 5.404)

- **Building commissioning.** Mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies. (Section 5.410.2)

Air Pollutants of Concern

Criteria Air Pollutants

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

- **Carbon Monoxide (CO).** A colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter mornings, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, motor vehicles operating at slow speeds are the primary source of CO in the SoCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

- **Sulfur Dioxide (SO_2).** A colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high-sulfur-content fuel oils and coal and from chemical processes at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SOx).

- **Nitrogen Oxides (NO_x).** Nitrogen oxides (NO_x) consist of nitric oxide (NO), nitrogen dioxide (NO_2) and nitrous oxide (N_2O) and are formed when nitrogen (N_2) combines with oxygen (O_2). Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. Nitrogen oxides are typically created during combustion processes and are major contributors to smog formation and acid deposition. NO_2 is a criteria air pollutant and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the seven types of nitrogen oxide compounds, NO_2 is the most abundant in the atmosphere. Because ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than those indicated by the regional monitoring station.

- **Ozone (O_3).** A highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_x), both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

- **PM_{10} (Particulate Matter less than 10 microns).** A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. The size of the particles (10 microns or smaller, about 0.0004 inch or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. PM_{10} also causes visibility reduction and is a criteria air pollutant.

- **$PM_{2.5}$ (Particulate Matter less than 2.5 microns).** A similar air pollutant consisting of tiny solid or liquid particles which are 2.5 microns or smaller (often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include sulfates formed from SO_2 release from power plants and industrial facilities and nitrates that are formed from NO_x release from power plants, automobiles, and other combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions. $PM_{2.5}$ is a criteria air pollutant.

- **Volatile Organic Compounds (VOC).** Volatile organic compounds are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form ozone to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The SCAQMD uses the terms VOC and ROG (see below) interchangeably.

- **Reactive Organic Gases (ROG).** Similar to VOC, ROGs are also precursors in forming ozone and consist of compounds containing methane, ethane, propane, butane, and longer-chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROGs are a criteria pollutant since they are a

precursor to O_3, which is a criteria pollutant. The SCAQMD uses the terms ROG and VOC (see previous) interchangeably.

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

Health Effects of Criteria Air Pollutants

- **Ozone (O_3).** Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible subgroups for ozone effects. Short-term exposure (lasting for a few hours) to ozone at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated ozone levels are associated with increased school absences. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple sports and live in communities with high ozone levels. Ozone exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes ozone may be more toxic than exposure to ozone alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.

- **Carbon Monoxide (CO).** Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with oxygen transport and competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (oxygen deficiency) as seen at high altitudes. Reduction in birth weight and impaired neurobehavioral development have been observed in animals chronically exposed to CO, resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels; these include preterm births and heart abnormalities.

- **Particulate Matter (PM_{10} and $PM_{2.5}$).** A consistent correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks, and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association

between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life-span, and an increased mortality from lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long term exposure to particulate matter. The elderly, people with preexisting respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$.

- **Nitrogen Dioxide (NO_2).** Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increases in resistance to air flow and airway contraction are observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these subgroups. In animals, exposure to levels of NO_2 considerably higher than ambient concentrations result in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of ozone exposure increases when animals are exposed to a combination of ozone and NO_2.

- **Sulfur Dioxide.** A few minutes of exposure to low levels of SO_2 can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow and reduction in breathing capacity leading to severe breathing difficulties are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2. Animal studies suggest that despite SO_2 being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor.

- **Lead (Pb).** Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death, although it appears that there are no direct effects of Pb on the respiratory system. Pb can be stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland), and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous environmental Pb exposure of their mothers.

- **Odors.** The science of odor as a health concern is still new. Merely identifying the hundreds of VOCs that cause odors poses a big challenge. Offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, studies have shown that the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress.

Toxic Air Contaminants

In 1984, as a result of public concern for exposure to airborne carcinogens, the CARB adopted regulations to reduce the amount of air toxic contaminant emissions resulting from mobile and area sources, such as cars, trucks, stationary products, and consumer products. According to the Ambient and Emission Trends of Toxic Air Contaminants in California journal article which was prepared for CARB, results show that between 1990-2012, ambient concentration and emission trends for the seven TACs responsible for most of the known cancer risk associated with airborne exposure in California have declined significantly (between 1990 and 2012). The seven TACs studied include those that are derived from mobile sources: diesel particulate matter (DPM), benzene, and 1,3-butadiene; those that are derived from stationary sources: perchloroethylene and hexavalent chromium; and those derived from photochemical reactions of emitted VOCs: formaldehyde and acetaldehyde. TACs data was gathered at monitoring sites from both the Bay Area and South Coast Air Basins. Several of the sites in the SoCAB include Reseda, Compton, Rubidoux, Burbank, and Fontana. The decline in ambient concentration and emission trends of these TACs are a result of various regulations CARB has implemented to address cancer risk.

Regional

The project is within the jurisdiction of the SCAQMD. In 1976, California adopted the Lewis Air Quality Management Act, which created SCAQMD from a voluntary association of air pollution control districts in Los Angeles, Orange, Riverside, and San Bernardino counties. The geographic area that SCAQMD covers is the SoCAB. SCAQMD develops comprehensive plans and regulatory programs for the region to attain federal standards by dates specified in federal law. The agency is also responsible for meeting state standards by the earliest date achievable, using reasonably available control measures.

Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated attainment or nonattainment for each California AAQS.

Serious nonattainment areas are required to prepare air quality management plans that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of "best available retrofit control technology" to existing sources.
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development).

- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions.
- Implementing reasonably available transportation control measures and ensuring a substantial reduction in the growth rate of vehicle trips and miles traveled.
- Significant use of low emissions vehicles by fleet operators.
- Sufficient control strategies to achieve a 5 percent or more annual reduction in emissions or 15 percent or more in a period of three years for ROGs, NOx, CO, and PM_{10}. However, air basins may use an alternative emission reduction strategy that achieves a reduction of less than 5 percent per year under certain circumstances.

Currently, the National and California AAQS are exceeded in most parts of the SoCAB for PM_{10}, $PM_{2.5}$, and ozone. In response, the SCAQMD has adopted a series of air quality management plans (AQMP) to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and minimize any negative fiscal impacts of air pollution control on the economy.

In March 2017, the SCAQMD released the Final 2016 AQMP. The 2016 AQMP continues to evaluate current integrated strategies and control measures to meet the National AAQS and explores new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2012 AQMP, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016 RTP/SCS and updated emission inventory methodologies for various source categories.

SCAQMD rule development through the 1970s and 1980s resulted in dramatic improvement in Basin air quality. Nearly all control programs developed through the early 1990s relied on (1) the development and application of cleaner technology; (2) add-on emission controls, and (3) uniform CEQA review throughout the Basin. Industrial emission sources have been significantly reduced by this approach, and vehicular emissions have been reduced by technologies implemented at the state level by CARB (see Appendix C1 for a discussion of trends in regional air quality and toxic air contaminants).

Local

City General Plan Policies

The specific General Plan policies relating to air quality are listed in Table 5.9-2, *City of Jurupa Valley General Plan Consistency Analysis*.

5.2.1.2 EXISTING CONDITIONS

The project site is in the 6,745-square-mile SoCAB within the jurisdiction of SCAQMD. Under the 1977 Lewis-Presley Air Quality Management Act, the SCAQMD is responsible for bringing air quality in areas under its

jurisdiction into conformity with federal and state air quality standards. The SoCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east.

Regional Climate

The regional climate has a substantial influence on air quality in the SoCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality.

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

Although the climate of the SoCAB can be characterized as semiarid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SoCAB climate. Humidity restricts visibility in the SoCAB, and the conversion of sulfur dioxide to sulfates is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity in the SoCAB is 71 percent along the coast and 59 percent inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent, and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90 percent of the SoCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SoCAB, with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SoCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year, there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SoCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods each year of strong, dry offshore winds, locally called "Santa Anas." During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering

terrain toward the ocean. Another characteristic wind regime in the SoCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island that results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

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

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

Wind Patterns and Project Location

The distinctive climate of the project area and the SoCAB is determined by its terrain and geographical location. The Basin is in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant and high mountains forming the remainder of the perimeter.

Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season.

Attainment Designations

The SCAQMD monitors levels of various criteria pollutants at 37 permanent monitoring stations and 5 single-pollutant source lead (Pb) air monitoring sites throughout the air district. In 2017, the federal and state AAQS were exceeded on one or more days for ozone, PM_{10}, and $PM_{2.5}$ at most monitoring locations. No areas of the SoCAB exceeded federal or state standards for NO_2, SO_2, CO, sulfates or lead. See Table 5.2-2 for attainment designations for the SoCAB. Appendix 2.1 in Appendix C of this EIR provides geographic representation of the state and federal attainment status for applicable criteria pollutants in the SoCAB.

Table 5.2-2 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State Designation	Federal Designation
Ozone – 1-hour	Nonattainment	Nonattainment ("Extreme")
Ozone – 8-hour	Nonattainment	Nonattainment ("Extreme")
PM_{10}	Nonattainment	Attainment (Maintenance)
$PM_{2.5}$	Nonattainment	Nonattainment ("Serious)
CO	Attainment	Attainment (Maintenance)
NO_2	Attainment	Unclassifiable/Attainment
SO_2	Attainment	Unclassifiable/Attainment
Lead	Attainment	Nonattainment (Partial)
All others	Attainment/Unclassified	Attainment/Unclassified

Source: Urban Crossroads 2019a

Local Air Quality

Criteria Air Pollutants

The nearest long-term air quality monitoring site to the project site for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ is the SCAQMD's Metropolitan Riverside County[1] monitoring station (SRA 23), which is approximately 2.2 miles southwest of the project site. The most recent three years of data available is shown in Table 5.2-3 and identifies the number of days AAQS were exceeded for the study area, which is considered to be representative of the local air quality at the project site. Data for O_3, NO_2, PM_{10}, and $PM_{2.5}$ for 2015 through 2017 were obtained from CARB's iADAM Air Quality Data Statistics. Data for CO were obtained from the SCAQMD Air Quality Data Tables. It should be noted that the CO data for 2017 is currently unavailable from both CARB and SCAQMD. Additionally, data for SO_2 has been omitted because attainment is regularly met in the South Coast Air Basin, and few monitoring stations measure SO_2 concentrations.

[1] The federal nonattainment designation for lead is only applicable to the Los Angeles County portion of the SoCAB.

Table 5.2-3 Project Area Air Quality Monitoring Summary 2015–2017

Pollutant/Standard	Number of Days Thresholds Were Exceeded and Maximum Levels		
	2015	2016	2017
Ozone (O_3)[1]			
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	0.132	0.142	0.145
State 8-hour ≥ 0.07 ppm (days exceed threshold)	0.105	0.104	0.118
Federal 8-Hour > 0.075 ppm (days exceed threshold)	1	1	2
Max. 1-Hour Conc. (ppm)	31	33	47
Max. 8-Hour Conc. (ppm)	55	69	81
	59	71	82
Carbon Monoxide (CO)[1]			
Max. 1-Hour Conc. > 35 ppm	2.5	1.7	—
Max. 8-Hour Conc. > 20 ppm	1.7	1.3	—
Nitrogen Dioxide (NO_2)[2]			
Max. Federal 1-Hour Conc. > 0.100 ppm	0.057	0.073	0.063
Max. State 1-Hour Conc. (ppm) > 0.18 ppm	0.057	0.073	0.063
Federal Stand. Design Value	14	15	15
State Stand. Design Value	15	15	14
Federal 1-Hour > 0.18 ppm (days exceed threshold)	0	0	0
State 1-Hour > 0.18 ppm (days exceed threshold)	0	0	0
Coarse Particulates (PM_{10})[1]			
Max. Federal 24-Hour Conc. > 150 µg/m^3	107.4	170.5	137.6
Federal Arithmetic Mean µg/m^3	32.2	38.1	39.0
Federal 24-Hour Conc. > 150 µg/m^3 (days exceed threshold)	0	0	0
Fine Particulates ($PM_{2.5}$)[1]			
Max. Federal 24-Hour Conc. > 0.35 µg/m^3	54.7	51.5	50.3
Max. State 24-Hour Conc. µg/m^3	61.1	60.8	50.3
Federal Arithmetic Mean µg/m^3	11.8	12.5	12.2
N. Samples Exceeding Federal 24-Hour Standard	9	5	7

Source: Urban Crossroads 2019a
Sources: Data for O_3, NO_2, PM_{10}, and $PM_{2.5}$ from CARB's iADAM; data for CO from SCAQMD Air Quality Data Tables.
— = data not available from CARB or SCAQMD

Cancer Risk

Based on information from CARB, overall cancer risk throughout the Basin has had a declining trend since 1990. In 1998, following an exhaustive 10-year scientific assessment process, CARB identified particulate matter from diesel-fueled engines as a toxic air contaminant. The SCAQMD initiated a comprehensive urban toxic air pollution study, called MATES-II (for Multiple Air Toxics Exposure Study). DPM accounts for more than 70 percent of the cancer risk. In 2008 the SCAQMD prepared an update to the MATES-II study, referred to as MATES-III. MATES-III estimates the average excess cancer risk level from exposure to TACs is an approximately 17 percent decrease in comparison to the MATES-II study. Nonetheless, the SCAQMD's most recent in-depth analysis of the toxic air contaminants and their resulting health risks for all of southern California was from the *Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES IV,* which shows that cancer risk has decreased more than 55 percent between MATES III (2005) and MATES IV (2015).

MATES-IV study represents the baseline health risk for a cumulative analysis. It calculated cancer risks based on monitoring data collected at 10 fixed sites within the SoCAB. None of the fixed monitoring sites are within the local area of the project site. However, MATES-IV has extrapolated the excess cancer risk levels throughout the Basin by modeling the specific grids. MATES-IV modeling predicted an excess cancer risk of 797.48 in one million for the project area. DPM is included in this cancer risk along with all other TAC sources. DPM accounts for 68 percent of the total risk shown in MATES-IV. Cumulative project-generated TACs are limited to DPM.

Sensitive Receptors

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, individuals with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as "sensitive receptors"; they are also locations where individuals may remain for 24 hours.

Sensitive receptors in the vicinity of the project site are illustrated in Figure 5.2-1, *Sensitive Receptor Locations*. The nearest sensitive receptors are represented by locations R2 and R10. Location R2 represents existing residential homes that are approximately 133 feet from the project site across El Rivino Road. Location R10 represents the residential homes that are 111 feet from the project site across Rubidoux Boulevard.

R1: Approximately 347 feet north of the project site, R1 represents existing residential homes east of Cedar Avenue, north of El Rivino Road.

R2: Location R2 represents the existing residential homes north of the project site at roughly 133 feet across El Rivino Road.

R3: Location R3 represents the existing residential homes on El Rivino Road approximately 297 feet east of the project site.

R4: Location R4 represents the existing residential homes east of the project site, across the Hall Avenue, south of El Rivino Road.

R5: Approximately 2,232 feet southeast of the project site, R5 represents an existing residential home on Wilson Street.

R6: Location R6 represents the existing residential homes south of the project site at roughly 3,018 feet on Hall Avenue.

R7: Location R7 represents the existing Avalon Park at approximately 2,172 feet southwest of the project site.

R8: Location R8 represents the existing residential homes west of the project site on Castellano Road.

R9: Location R9 represents the existing residential homes at approximately 585 feet west of the project site on Castellano Road.

R10: Location R10 represents the existing residential homes west of the project site at roughly 111 feet across Cedar Avenue.

5.2.2 Notice of Preparation / Scoping Comments

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. The comments from the NOP review that will be addressed in the air quality section are in Table 5.2-4.

Table 5.2-4 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
South Coast Air Quality Management District Lijin Sun, J.D. Program Supervisor, CEQA IGR, Planning, Rule Development & Area Sources	8/10/17	States that the lead agency should use SCAQMD's CEQA Air Quality Handbook and CalEEMod land use emissions software when preparing its air quality analysis. The EIR should identify any potential adverse air quality impacts (construction and operation) that could occur from all phases of the project and all air pollutant sources related to the project. The EIR should quantify criteria pollutant emissions and localized significance thresholds and compare the results to the regional and localized significant thresholds, respectively. Air quality impacts from all phases (construction and operations) should be calculated. A mobile health risk assessment is recommended if the proposed project generates or attracts substantial vehicular trips, especially heavy-duty diesel-fueled vehicles. All feasible mitigation measures should be utilized for significant adverse air quality impacts. If impacts remain significant, project alternatives shall be considered and discussed to avoid or substantially lessen the air quality and health risk impacts. If the proposed project requires a permit from SCAQMD, SCAQMD should be identified as a responsible agency for the proposed project.	Section 5.2, *Air Quality* Section 5.6, *Greenhouse Gas Emissions*

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

Figure 5.2-1 - Sensitive Receptor Locations

5. Environmental Analysis

Receptor Locations —●— Distance from Receptor to Project Site Boundary (in feet)

0 1,400
Scale (Feet)

Source: Urban Crossroads, 2019

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5.2.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to air quality are based on criteria in Appendix G of the CEQA Guidelines.

AQ-1 Conflict with or obstruct implementation of the applicable air quality plan.

AQ-2 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

AQ-3 Expose sensitive receptors to substantial pollutant concentrations.

AQ-4 Create objectionable odors affecting a substantial number of people.

5.2.3.1 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT THRESHOLDS

The SCAQMD has developed regional and localized significance thresholds for regulated pollutants, as summarized at Table 5.2-5. The SCAQMD's CEQA Air Quality Significance Thresholds (March 2015) indicate that any projects in the SoCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact. It should be noted that the SCAQMD provides a threshold for emissions of lead; however, for purposes of this analysis no lead emissions are calculated because there are no substantive sources of lead emissions. Additionally, the air quality modeling program (discussed below) does not calculate any emissions of lead from typical construction or operational activities.

Table 5.2-5 Maximum Daily Emissions Thresholds

Air Pollutant	Construction	Operations
Regional Thresholds		
Reactive Organic Gases (ROGs)/Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Nitrogen Oxides (NO_X)	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO_X)	150 lbs/day	150 lbs/day
Particulates (PM_{10})	150 lbs/day	150 lbs/day
Particulates ($PM_{2.5}$)	55 lbs/day	55 lbs/day
Localized Thresholds[1]		
NOX	281 lbs/day (Grading)	281 lbs/day
CO	1,789 lbs/day (Grading)	1,789 lbs/day
PM10	23 lbs/day (Grading)	6 lbs/day
PM2.5	9 lbs/day (Grading)	2 lbs/day

Source: Urban Crossroads 2019a
Notes: Regional Thresholds presented in this table are based on the SCAQMD Air Quality Significance Thresholds, March 2015. Localized Thresholds presented in this table are based on the SCAQMD Final Localized Significance Threshold Methodology, July 2008.
[1] Based on SCAQMD Air Quality Significance Thresholds, March 2015

5.2.4 Applicable Policies and Design Features

5.2.4.1 PLANS, POLICIES, AND PROGRAMS

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to air quality. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP AIR-1 The project is required to comply with the provisions of South Coast Air Quality Management District Rule 401, "Visible Emissions." Rule 401 requires that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the U. S. Bureau of Mines.

PPP AIR-2 The project is required to comply with the provisions of South Coast Air Quality District Rule 402, "Nuisance." Rule 402 requires that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause injury or damage to business or property.

PPP AIR-3 The project is required to comply with the provisions of South Coast Air Quality Management District Rule 1113, "Architectural Coatings." Rule 1113 limits the release of volatile organic compounds into the atmosphere during painting and application of other surface coatings.

PPP AIR-4 The project is required to comply with the provisions of South Coast Air Quality Management District Rule 1301, "General." This rule is intended to provide pre-construction review requirements to ensure that new or relocated facilities do not interfere with progress in attainment of the NAAQS, while future economic growth within SCAQMD is not unnecessarily restricted. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. Rule 1301 also limits emission increases of ammonia, and Ozone Depleting Compounds (ODCs) from new, modified or relocated facilities by requiring the use of Best Available Control Technology (BACT).

PPP AIR-5 The proposed project is required to comply with Title 24 of the CCR established by the California Energy Commission regarding energy conservation standards.

5.2.4.2 PROJECT DESIGN FEATURES

The project incorporates the following design features, including requirements from the Agua Mansa Commerce Park Specific Plan. Because these features are integral to the project and/or are regulatory requirements, the features are not considered mitigation measures.

PDF-AQ-1 **Require Equipment to Turn Off When Not in Use**. The project will require building operators to ensure (by contract specifications) that equipment, including heavy-duty equipment, motor vehicles, and portable equipment, will be turned off when not in use for more than five minutes. Truck idling shall not exceed five minutes. All facilities will post signs requiring that trucks shall not be left idling for more than five minutes pursuant to Title 13 of the California Code of Regulations, Section 2485. Nighttime (after 10:00 PM) truck idling would not be permitted.

PDF-AQ-2 **Use of 2010 or better model year engines**. The project requires contractors and building operators (by contract specifications) using on-road heavy-duty diesel trucks with a gross vehicle weight rating greater than 14,000 pounds to have a 2010 model year engine or newer or be equipped with a particulate matter trap, as available. Pursuant to a phase-in schedule established by the EPA and the California Air Resources Board, all heavy- and heavier-duty diesel-fueled trucks must have a 2010 Model Year engine or newer by 2023. Thus, this measure shall be in effect on the project until 2023. It is recommended that the above options be included as a condition of project approval, and that the building user keep a truck log that would be available to the City or its designee upon request to verify compliance.

PDF-AQ-3 **Ridesharing and Transit Incentives**. The building operator will support and encourage ridesharing and transit incentives for the construction crew by providing crews with the needed resources to organize rideshares, such as bulletin boards or email announcements. The construction contractor will also fully or partially subsidize transit fares or passes for the construction crew members who can feasibly use transit.

PDF-AQ-4 **Alternative Fueled Outdoor Cargo Handling Equipment.** All on-site outdoor cargo-handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) will be powered by compressed natural gas, propane, or electric engines.

5.2.5 Environmental Impacts

5.2.5.1 METHODOLOGY

Detailed methodology of the proposed project air quality analysis is provided in Appendix C1 for criteria air pollutants and Appendix C2 for cancer risk and hazards.

5.2.5.2 IMPACT ANALYSIS

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

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

Currently, these state and federal air quality standards are exceeded in most parts of the Basin. In response, the SCAQMD has adopted a series of Air Quality Management Plans to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

In March 2017, the SCAQMD released the Final 2016 AQMP. The 2016 AQMP continues to evaluate current integrated strategies and control measures to meet the National AAQS as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2012 AQMP, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016 RTP/SCS and updated emission inventory methodologies for various source categories. The project's consistency with the AQMP will be determined using the 2016 AQMP, as discussed below.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's *CEQA Air Quality Handbook* (1993). These indicators are discussed below:

Consistency Criterion No. 1

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

Construction Impacts

The violations that Consistency Criterion No. 1 refer to are the California and National AAQS. California and National AAQS violations would occur if LSTs or regional significance thresholds were exceeded. The SCAQMD developed Local Significance Threshold (LST) methodology that can be used to determine whether or not a project may generate significant adverse localized air quality impacts.

SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003 (revised in 2009), recommending that all air quality analyses include an assessment of both construction and

operational impacts on the air quality of nearby sensitive receptors. The project would not exceed any of the applicable LSTs. The project would exceed the applicable regional significance thresholds for emissions of VOCs and NO_X. Therefore, the project would have the potential to conflict with the AQMP according to this criterion.

Operational Impacts

The violations that Consistency Criterion No. 1 refers to are the California and National AAQS violations, which would occur if LSTs or regional significance thresholds were exceeded. The project would not exceed any of the applicable LSTs. The project would have the potential to exceed the applicable regional significance thresholds for operational activity for emissions of VOCs, NO_X, and PM_{10}. Therefore, the project would have the potential to conflict with the AQMP according to this criterion.

On the basis of the preceding discussion, the project would be inconsistent with the first criterion.

Consistency Criterion No. 2

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

The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the Southern California Association of Governments, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City of Jurupa Valley General Plan is considered to be consistent with the AQMP.

Construction Impacts

Peak day emissions generated by construction activities are largely independent of land use assignments but are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities.

Operational Impacts

The City's General Plan designated the project site "Business Park with Specific Plan Overlay." The project is proposing a general plan amendment for:

- Heavy Industrial/Specific Plan Overlay land use designation for the Industrial Park District

- Light Industrial/Specific Plan Overlay land use designation for the Business Park with Retail Overlay District
- Open Space–Recreation for the Open Space District

The project proposes to construct industrial and non-industrial land uses that would likely exceed the growth intensities allowed in the General Plan. Therefore, the project would have the potential to conflict with the AQMP.

On the basis of the preceding discussion, the project would be inconsistent with the second criterion.

AQMP Consistency Conclusion

The project has the potential to result in or cause National or California AAQS violations. Construction-source emissions would exceed the applicable SCAQMD regional thresholds for NO_X. Operational-source emissions would exceed the applicable SCAQMD regional thresholds for NO_X, VOCs, and PM_{10}. Additionally, the project proposes a General Plan Amendment (GPA) to convert the site to industrial warehousing. Because the project requires a GPA, emissions from the project are not included in the current AQMP. Therefore, the project would have the potential to conflict with the AQMP.

Level of Significance before Mitigation: Even with implementation of PPP's AIR-1 through PPP AIR-5, Impact AQ-1 would remain potentially significant. There are no mitigation measures that would reduce the impact to less than significant, and Impact AQ-1 is considered significant and unavoidable.

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

Construction Emissions

The estimated maximum daily construction emissions without mitigation are summarized on Table 5.2-6. Detailed construction model outputs are presented in Appendix 3.1 of the Air Quality Study in Appendix C1. The PPP's that are currently applicable during construction activity for this project are PPP AIR-1 through PPP AIR-4 above. Rule 401 (Visible Emissions), Rule 402 (Nuisance), and Rule 1113 (Architectural Coatings). Under the assumed scenarios, emissions resulting from the project construction would exceed criteria pollutant thresholds established by the SCAQMD for emissions of VOCs and NOx even with implementation of the PPP's.

Table 5.2-6 Maximum Daily Peak Construction Emissions Summary (without mitigation)

Year	Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2019	16.80	205.46	122.05	0.33	27.28	12.011
2020	371.34	348.13	209.99	0.44	37.94	23.10
2021	486.11	280.80	205.58	0.46	34.10	18.96
2022	176.89	228.33	185.61	0.39	27.20	15.84
2023	49.26	26.04	36.94	0.06	2.27	1.39
Maximum Daily Emissions	**486.11**	**348.13**	**209.99**	**0.46**	**37.94**	**23.10**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	NO	NO	NO	NO

Source: Urban Crossroads 2019a.
Note: Emissions represent the worst-case scenario for development under Alternatives 1 and 2.

Operational Emissions

It is anticipated that the first building of this project would be completed and occupied sometime in 2020 and the last building would be completed into 2023. It is important to note that a 2020 year will be used for operational analysis purposes for all buildings (consistent with the project's traffic impact analysis). For the long-term operation emissions analysis, Alternatives 1 and 2 are analyzed.

Alternative 1

Project operational-source emissions are summarized on Table 5.2-7. Alternative 1 of the proposed project consists of five high-cube warehouse distribution center buildings totaling 4,216,000 square feet (3,452,000-square-foot building footprint with 764,000 square feet of mezzanine), an approximately 71.3-acre regional park, and 200,000 square feet of light industrial. As indicated, project emissions would exceed regional thresholds of significance established by the SCAQMD for emissions of VOCs, NO_X, and PM_{10}.

Table 5.2-7 Operational Emissions for Alternative 1 (Without Mitigation)

Operational Activities	Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer Scenario						
Area Source	100.29	4.32E-03	0.48	3.00E-05	1.68E-03	1.68E-03
Energy Source	0.51	4.60	3.87	0.03	0.35	0.35
Mobile (Passenger Cars)	6.39	9.09	134.32	0.48	56.27	15.11
Mobile (Trucks)	20.12	712.61	146.53	2.74	93.14	29.94
Mobile (Other Uses)[1]	1.69	12.06	20.17	0.08	5.60	1.55
On-site Equipment	2.35	28.59	12.49	0.05	0.94	0.86
Max Daily Operational Emissions	131.33	766.95	317.83	3.38	156.31	47.81
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	NO	NO	**YES**	NO
Winter Scenario						
Area Source	100.29	4.32E-03	0.48	3.00E-05	1.68E-03	1.68E-03
Energy Source	0.51	4.60	3.87	0.03	0.35	0.35
Mobile (Passenger Cars)	5.04	9.37	107.19	0.43	56.27	15.11
Mobile (Trucks)	20.50	733.79	153.69	2.72	93.16	29.95
Mobile (Other Uses)	1.44	12.10	17.47	0.07	5.60	1.55
On-site Equipment	2.35	28.59	12.49	0.05	0.94	0.86
Max Daily Operational Emissions	130.13	788.45	295.17	3.29	156.33	47.82
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	NO	NO	**YES**	NO

Source: Urban Crossroads 2019a.
[1] Mobile-source emissions from Alternative 1 Land Uses (Research & Development and Regional Park)

Alternative 2

Project operational-source emissions without mitigation are summarized on Table 5.2-8. Alternative 2 of the Proposed project consists of 170,000 square feet of business park and 25,000 square feet of commercial retail. As indicated, project emissions would exceed regional thresholds of significance established by the SCAQMD for emissions of VOCs, NO_X, and PM_{10}.

Table 5.2-8 Operational Emissions for Alternative 2 (Without Mitigation)

Operational Activities –	Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer Scenario						
Area Source	100.17	4.31E-03	0.47	3.00E-05	1.67E-03	1.67E-03
Energy Source	0.33	3.01	2.52	0.02	0.23	0.23
Mobile (Passenger Cars)	5.26	7.49	110.72	0.39	46.39	12.45
Mobile (Trucks)	18.34	656.15	131.91	2.54	85.21	27.41
Mobile (Other Uses)[1]	8.12	57.29	92.56	0.36	25.45	7.02
On-site Equipment	2.35	28.59	12.49	0.05	0.94	0.86
Max Daily Operational Emissions	134.58	752.53	350.98	3.36	158.21	47.98
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	NO	NO	**YES**	NO
Winter Scenario						
Area Source	100.17	4.31E-03	0.47	3.00E-05	1.67E-03	1.67E-03
Energy Source	0.33	3.01	2.52	0.02	0.23	0.23
Mobile (Passenger Cars)	4.16	7.72	88.36	0.35	46.39	12.45
Mobile (Trucks)	18.70	675.44	138.67	2.51	85.22	27.42
Mobile (Other Uses)	6.89	57.39	80.89	0.33	25.45	7.03
On-site Equipment	2.35	28.59	12.49	0.05	0.94	0.86
Max Daily Operational Emissions	132.60	772.15	323.39	3.26	158.23	48.00
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	YES	YES	NO	NO	YES	NO

Source: Urban Crossroads 2019a.
[1] Mobile-source emissions from Alternative 2 Land Uses (Business Park, Commercial Retail, Research & Development and Regional Park)

Overlap of Construction and Operational Phase

Based on the assumed construction and buildout schedule of the proposed project, there is potential for overlap between construction and operational activity. It should be noted that based on the estimated construction schedule, the demolition, grading (i.e. rough grading), and site remediation phase would precede occupancy of any of the proposed buildings within the project site. There would be no overlap between the site remediation and rough grading operations with the occupancy of the buildings. The vertical construction phase of the six warehouse buildings within the project site would occur on an individual basis and could result in an overlap with occupancy. Combining the maximum daily construction emissions with the maximum daily operational emissions would give a maximum daily emission representing peak construction activity and full buildout of

the project, a scenario that would not occur. At the request of SCAQMD, potential hypothetical overlap of construction and operational activities is shown in Table 5.2-9. SCAQMD does not have a significance threshold for construction/operation overlap; therefore, this analysis is included for informational purposes only.

Table 5.2-9 Potential Overlap of Construction and Operational Activities

	Emissions (pounds per day)					
Maximum Daily Emissions	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Construction Peak Emissions	105.11	194.20	239.50	0.46	30.80	9.93
Maximum Operational Emissions	134.58	584.91	350.98	3.36	158.21	47.98
Max Daily Combined Emissions	239.69	779.11	590.48	3.82	189.01	57.91

Source: Urban Crossroads 2019a.

Level of Significance before Mitigation: Even with implementation of PPP's AIR-1 through PPP AIR-5, Impact AQ-2 would remain potentially significant. Mitigation Measures AQ-1 to AQ-6 are required to reduce construction impacts to less than significant. There are no mitigation measures that would reduce the operational impact to less than significant, and Impact AQ-2 is considered significant and unavoidable.

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

Construction LST Analysis (Criteria Air Pollutants)

The maximum disturbed acreage during peak grading activity would be approximately six acres per day. Although the daily grading area is greater than five acres, the applicable SCAQMD localized thresholds for a five-acre site from the "Final Localized Significance Threshold Methodology" document's mass rate look-up tables are used to first provide a conservative screening analysis of the construction emissions. This is conservative because it estimates emissions of the six-acre area and concentrates them into a five-acre site. If the emissions from the six-acre area are less than the thresholds for a five-acre area, it can be assumed that impacts would be less than significant. A 34-meter receptor distance is utilized to determine the LSTs for emissions of CO, NO_2, PM_{10}, and $PM_{2.5}$.

Table 5.2-10 identifies the localized impacts at the nearest receptor location in the vicinity of the project. Without mitigation, localized construction emissions would not exceed the applicable SCAQMD LSTs during grading for emissions of any criteria pollutant. Outputs from the model runs for construction LSTs are provided in Appendix 3.1 of the Air Quality Study in Appendix C1.

Table 5.2-10 Construction Localized Significance Summary

On-Site Grading Emissions	Emissions (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	128.45	79.26	12.59	8.16
SCAQMD Localized Threshold	281	1,789	23	9
Threshold Exceeded?	NO	NO	NO	NO

Source: Urban Crossroads 2019a.

Operational LSTs (Criteria Air Pollutants)

For projects that exceed five acres, the five-acre LST look-up tables can be used as a screening tool to determine which pollutants require additional detailed analysis. As with construction LSTs, this approach is conservative because it assumes that all on-site emissions associated with the project would occur within a concentrated five-acre area. Therefore, LSTs for a five-acre site during operations are used as a screening tool to determine if further detailed analysis is required.

Alternative 1

As shown on Table 5.2-11, operational emissions would not exceed the LST thresholds for the nearest sensitive receptor. Therefore, the project would have a less than significant localized impact during operational activity.

Table 5.2-11 shows the calculated emissions for the project's operational activities compared with the applicable LSTs. The LST analysis includes on-site sources only; however, the CalEEMod outputs do not separate on-site and off-site emissions from mobile sources. In an effort to establish a maximum potential impact scenario for analytic purposes, the emissions shown on Table 5.2-11 represent all on-site project-related stationary (area) sources and project-related mobile sources. It is assumed that the maximum distance a passenger car and/or truck would travel through the project site is equivalent to the length from one end of the project site to the other. Therefore, an on-site travel distance of approximately 0.40 mile/2,112 feet for each passenger car and truck trip will be used for analytical purposes. It should be noted that not all passenger cars or trucks would travel the entire distance through the site, but as a conservative measure, this distance was applied to all vehicles. Modeling based on these assumptions demonstrates that even within broad encompassing parameters, project operational-source emissions would not exceed applicable LSTs.

Table 5.2-11 Localized Significance Operations Summary for Alternative 1

Peak Operational Emissions	Emissions (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	40.94	21.68	3.71	1.91
SCAQMD Localized Threshold	281	1,789	6	2
Threshold Exceeded?	NO	NO	NO	NO

Source: Urban Crossroads 2019a.

Alternative 2

As shown on Table 5.2-12 operational emissions would not exceed the LST thresholds for the nearest sensitive receptor. Therefore, the project would have a less than significant localized impact during operational activity.

Table 5.2-12 Localized Significance Operations Summary for Alternative 2

Peak Operational Emissions	Emissions (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	39.82	21.32	3.75	1.84
SCAQMD Localized Threshold	281	1,789	6	2
Threshold Exceeded?	NO	NO	NO	NO

Source: Urban Crossroads 2019a.

Level of Significance before Mitigation: Impact AQ-3 for LSTs for criteria air pollutants would be less than significant.

Operational Community Risk and Hazards (Diesel PM)

The Health Risk Assessment (HRA) evaluates the potential mobile source health risk impacts to sensitive receptors (residents) and adjacent workers associated with the development of the proposed project, more specifically, health risk impacts as a result of exposure to diesel particulate matter (DPM) as a result of heavy-duty diesel trucks accessing the site. Additional analysis is provided for Site Access Alternatives 1A and 2A, consistent with the traffic impact analysis in Appendix K of this EIR, which evaluates Site Access Alternatives 1A and 2A if connectivity between Buildings 1 to 5 (Industrial Park) and Rubidoux Boulevard does not exist because access is not possible across the railroad spur line.

Per the traffic impact analysis, the project is expected to generate a total of approximately 7,674 trip-ends per day (actual vehicles) and includes 2,457 truck trip-ends per day under Alternative 1. Under Alternative 2 conditions, the project is expected to generate a total of approximately 9,741 trip-ends per day (actual vehicles), with truck trips reduced to 2,245 truck trip-ends per day. The HRA relies on the net project trips (as opposed to the passenger car equivalents) to accurately account for the effect of individual truck trips on the study area roadway network.[2] The summary of health and cancer risk for the four project alternatives are shown in Table 5.2-13 and described in more detail below.

[2] Net project truck trip ends are used for the HRA to best estimate diesel particulate emissions directly from the number of diesel-fueled trucks. Passenger car equivalents (PCEs) are typically used in traffic analyses to normalize and compare truck trips to passenger vehicles.

Table 5.2-13 Summary of Cancer and Non-Carcinogenic Risks

	Cancer Risk (per million)					
Location	Alternative 1	Alternative 2	Site Access Alternative 1A[1]	Site Access Alternative 2A[1]	Significance Threshold	Exceeds Significance Threshold?
Maximum Exposed Sensitive Receptor	3.93	3.68	3.92	3.68	10	NO
Maximum Exposed Worker Receptor	0.65	0.60	0.65	0.61	10	NO
	Hazard Index					
Location	Alternative 1	Alternative 2	Site Access Alternative 1A[1]	Site Access Alternative 2A [1]	Significance Threshold	Exceeds Significance Threshold?
Maximum Exposed Sensitive Receptor	0.001	0.001	0.001	0.001	1.0	NO
Maximum Exposed Worker Receptor	0.002	0.002	0.002	0.002	1.0	NO

Source: Urban Crossroads 2018b.
[1] Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. If access across the rail line is not permitted, then trip distribution for the project would be altered slightly from the analysis for Alternative 1 and 2. This is identified as Site Access Alternative 1A and 2A.

Alternative 1

Residential Exposure Scenario:

The residential land use with the greatest potential exposure to project DPM source emissions is located immediately adjacent to the project site, approximately 133 feet across and to the north of El Rivino Road at an existing residential dwelling unit. At the maximally exposed individual receptor, the maximum incremental cancer risk attributable to project DPM source emissions is estimated at 3.93 in one million, which is less than the threshold of 10 in one million.[3] At this same location, non-carcinogenic risks were estimated to be 0.001, which would not exceed the applicable threshold of 1.0.[4] Therefore, the project would not cause a significant human health or cancer risk to adjacent residences.

Worker Exposure Scenario:

Potential risk to on-site workers is not required to be addressed through the typical health risk assessment process employed by SCAQMD and OEHHA. Further, the California Air Pollution Control Officers Association (CAPCOA) in their 2009 report "Health Risk Assessments for Proposed Land Use Projects," indicates that on-site receptors should only be included in health risk assessments if they are persons not employed by the project and if they would remain on- site for long periods of time (e.g. a caretaker residence that would reside there for most of the day and could be there for 24 hours per day for an extended period of

[3] Threshold is based on guidance from the South Coast Air Quality Management District (SCAQMD) as described in Section 1.0 of this report.
[4] Threshold is based on guidance from the South Coast Air Quality Management District (SCAQMD) as described in Section 1.0 of this report.

time). Persons not employed by the project would not remain on-site for any significant period. Therefore, a health risk assessment for on-site workers is not required or recommended.

The worker receptor land use with the greatest potential exposure to project DPM source emissions is located off-site at the Aramark Uniform Services building (1135 Hall Avenue) immediately adjacent to the east of proposed Building 1 due to the meteorological conditions and due to the proximity of on-site idling. At the maximally exposed individual worker, the maximum incremental cancer risk impact at this location is 0.65 in one million, which is less than the threshold of 10 in one million. Maximum non-carcinogenic risks at this same location were estimated to be 0.002, which would not exceed the applicable threshold of 1.0. Therefore, the project would not cause a significant human health or cancer risk to adjacent workers.

Alternative 2

Residential Exposure Scenario:

The residential land use with the greatest potential exposure to project DPM source emissions is located immediately adjacent to the project site approximately 133 feet across and to the north of El Rivino Road at an existing residential dwelling unit. At the maximally exposed individual receptor, the maximum incremental cancer risk attributable to project DPM source emissions is estimated at 3.68 in one million, which is less than the threshold of 10 in one million. At this same location, non-carcinogenic risks were estimated to be 0.001, which would not exceed the applicable threshold of 1.0. Therefore, the project would not cause a significant human health or cancer risk to adjacent residences.

Worker Exposure Scenario:

The worker receptor land use with the greatest potential exposure to project DPM source emissions is located off-site at the Aramark Uniform Services building (1135 Hall Avenue), immediately adjacent to the east of proposed Building 1 due to the meteorological conditions and due to the proximity of on-site idling. At the maximally exposed individual worker, the maximum incremental cancer risk impact at this location is 0.60 in one million, which is less than the threshold of 10 in one million. Maximum non-carcinogenic risks at this same location were estimated to be 0.002, which would not exceed the applicable threshold of 1.0. Therefore, the project would not cause a significant human health or cancer risk to adjacent workers.

Site Access Alternative 1A

Residential Exposure Scenario:

The residential land use with the greatest potential exposure to project DPM source emissions is located immediately adjacent to the project site approximately 133 feet across and to the north of El Rivino Road at an existing residential dwelling unit. At the maximally exposed individual receptor, the maximum incremental cancer risk attributable to project DPM source emissions is estimated at 3.92 in one million, which is less than the threshold of 10 in one million. At this same location, non-carcinogenic risks were estimated to be 0.001, which would not exceed the applicable threshold of 1.0. Therefore, the project would not cause a significant human health or cancer risk to adjacent residences.

Worker Exposure Scenario:

The worker receptor land use with the greatest potential exposure to project DPM source emissions is located off-site at the Aramark Uniform Services building (1135 Hall Avenue) immediately adjacent to the east of proposed Building 1 due to the meteorological conditions and due to the proximity of on-site idling. At the maximally exposed individual worker, the maximum incremental cancer risk impact at this location is 0.65 in one million, which is less than the threshold of 10 in one million. Maximum non-carcinogenic risks at this same location were estimated to be 0.002, which would not exceed the applicable threshold of 1.0. Therefore, the project would not cause a significant human health or cancer risk to adjacent workers.

Site Access Alternative 2A

Residential Exposure Scenario:

The residential land use with the greatest potential exposure to project DPM source emissions is located immediately adjacent to the project site approximately 133 feet across and to the north of El Rivino Road at an existing residential dwelling unit. At the maximally exposed individual receptor, the maximum incremental cancer risk attributable to project DPM source emissions is estimated at 3.68 in one million, which is less than the threshold of 10 in one million. At this same location, non-carcinogenic risks were estimated to be 0.001, which would not exceed the applicable threshold of 1.0. Therefore, the project would not cause a significant human health or cancer risk to adjacent residences.

Worker Exposure Scenario:

The worker receptor land use with the greatest potential exposure to project DPM source emissions is located off-site at the Aramark Uniform Services building (1135 Hall Avenue) immediately adjacent to the east of proposed Building 1 due to the meteorological conditions and due to the proximity of on-site idling. At the maximally exposed individual worker, the maximum incremental cancer risk impact at this location is 0.61 in one million, which is less than the threshold of 10 in one million. Maximum non-carcinogenic risks at this same location were estimated to be 0.002, which would not exceed the applicable threshold of 1.0. Therefore, the project would not cause a significant human health or cancer risk to adjacent workers.

Level of Significance before Mitigation: Impact AQ-3 for cancer risk and hazards would be less than significant.

CO Hotspot Analysis

As discussed below, the project would not result in potentially adverse CO concentrations or hotspots. Further, detailed modeling of project-specific carbon monoxide (CO) hotspots is not needed to reach this conclusion. An adverse CO concentration, known as a hotspot, would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur. At the time of the 1993 Handbook, the basin was designated nonattainment under the California AAQS and National AAQS for CO.

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for

passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SoCAB is now designated as attainment, as previously noted in Table 5.2-2. Also, CO concentrations in the project vicinity have steadily declined, as indicated by historical emissions data in Table 2-3 of the Air Quality Study, "Project Area Air Quality Monitoring Summary 2015-2017" (see Appendix C1 of this EIR).

To establish a more accurate record of baseline CO concentrations affecting the basin, a CO hotspot analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This hotspot analysis did not predict any violation of CO standards (see Table 3-15, "CO Model Results," in the Air Quality Study [Appendix C1]).

As identified within SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the basin were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, 8.4 ppm CO concentration measured at the Long Beach Boulevard and Imperial Highway intersection (intersection generating highest CO within the hotspot analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.7 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared. Therefore, even if the traffic volumes for the proposed project were double or even triple the traffic volumes generated at the Long Beach Boulevard / Imperial Highway intersection, coupled with the ongoing improvements in ambient air quality, the project would not be capable of resulting in a CO hotspot at any study area intersections.

Similar considerations are also employed by other air districts when evaluating potential CO concentration impacts. The Bay Area Air Quality Management District concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

Traffic volumes generating the CO concentrations for the hotspot analysis (see Table 3-16 of the Air Quality Study in Appendix C1). The busiest intersection evaluated was Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm; this indicates that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations (4.6 ppm x 4= 18.4 ppm) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).[5] At buildout of the project, the highest daily traffic volumes generated at the roadways within the vicinity of the project are expected to generate less than the highest daily traffic volumes generated at the busiest intersection in the CO hotspot analysis. Therefore, the project would not likely exceed the most stringent 1-hour CO standard.

The proposed project considered herein would not produce the volume of traffic required to generate a CO hotspot either in the context of the 2003 Los Angeles hot spot study (see Appendix C1) or based on

5 Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

representative Bay Area Air Quality Management District CO threshold considerations. Therefore, CO hotspots are not an environmental impact of concern for the proposed project.

Level of Significance before Mitigation: Impact AQ-3 for CO hotspots would be less than significant.

Impact AQ-4: Threshold: Would the project create objectionable odors affecting a substantial number of people?

The potential for the project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Potential sources of operational odors generated by the project would include disposal of miscellaneous commercial refuse. Consistent with City requirements, all project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations, thereby precluding substantial generation of odors due to temporary holding of refuse on-site. Moreover, SCAQMD Rule 402 acts to prevent occurrences of odor nuisances.

Level of Significance before Mitigation: Impact AQ-4 would be less than significant.

5.2.6 Cumulative Impacts

The project area is designated as an extreme non-attainment area for ozone, and a non-attainment area for PM_{10}, $PM_{2.5}$, and lead. SCAQMD has published a report on how to address cumulative impacts from air pollution: "White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution." In this report the AQMD clearly states:

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

> cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts. (p. D-3)

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered cumulatively significant.

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions of those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable.

Construction Impacts

Project construction-source air pollutant emissions would exceed the SCAQMD regional thresholds for emissions of NOx. Per SCAQMD significance guidance, NOx impacts are considered cumulatively significant and would persist over the life of the project. NOx emissions are ozone precursors and would therefore have the potential to contribute considerably to existing ozone non-attainment conditions within the Basin. Therefore, project construction-source emissions would be considered significant on a project-specific and cumulative basis.

Operational Impacts

Project operational-source VOCs, NO_X, and PM_{10} emissions would exceed applicable SCAQMD regional thresholds. Per SCAQMD significance guidance, these impacts at the project level are also considered cumulatively significant and would persist over the life of the project. VOCs and NO_X emissions are ozone precursors and would therefore contribute considerably to existing ozone non-attainment conditions within the Basin. This is a cumulatively significant impact persisting over the life of the project.

Health Impacts

A recent Supreme Court of California decision, *Sierra Club v. County of Fresno (Friant Ranch)*, found an EIR inadequate and states that:

> The EIR should be revised to relate the expected adverse air quality impacts to likely health consequences or explain in meaningful detail why it is not feasible at the time of drafting to provide such an analysis, so that the public may make informed decisions regarding the costs and benefits of the Project.[6]

[6] It should be noted that the EIR for Friant Ranch did not include a health risk assessment report. The project's EIR includes a detailed mobile source health risk assessment that evaluates the project's potential health impacts to sensitive land uses as a result of diesel exhaust generated by the project's ongoing operations.

Given that the analysis for this project identifies a significant and unavoidable project level and cumulative impacts with regard to VOC, NOx, and PM_{10} emissions, the following assessment serves to provide an analysis in conformance with the *Friant Ranch* decision, which further clarifies, amplifies, and augments the air quality analysis already undertaken for the project.

As summarized in the AQIA, the project's construction-source NOx and PM_{10} and operational-source VOC, NOx, and PM_{10} emissions will exceed applicable SCAQMD numeric regional mass daily thresholds. Per SCAQMD significance guidance, these impacts at the project level are also considered cumulatively significant and would persist over the life of the proposed project. VOC and NOx emissions are ozone precursors. Emissions of VOC, NOx, and PM_{10} have the potential to contribute considerably to existing ozone non-attainment conditions within the SoCAB. This is a cumulatively significant impact persisting over the life of the proposed project.

As noted in the "Brief of Amicus Curiae" by the South Coast Air Quality Management District (April 6, 2015, Attachment A in Appendix C1 of the Supplemental Air Quality Analysis), the SCAQMD has acknowledged that for criteria pollutants it would be extremely difficult, if not impossible to quantify health impacts for various reasons, including modeling limitations as well as where in the atmosphere air pollutants interact and form. Furthermore, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Unified Air Pollution Control District (SJVAPCD) (April 13, 2015, Attachment B in Appendix C1 of the Supplemental Air Quality Analysis), SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts (see page 4 of SJVAPCD Brief of Amicus Curiae, Attachment B of the Supplemental Air Quality Analysis). SCAQMD states that based on their own modeling in the SCAQMD's 2012 AQMP, a reduction of 432 tons/864,000 pounds per day of NOx and a reduction of 187 tons/374,000 pounds per day of VOCs would reduce ozone levels at highest monitored site by only 9 parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify ozone-related health impacts caused by NOx or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations (see page 11 of SCAQMD Brief of Amicus Curiae). To underscore this point, the SCAQMD goes on to state that it has only been able to correlate potential health outcomes for very large emissions sources as part of its rulemaking activity—specifically, 6,620 pounds per day of NOx and 89,180 pounds per day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to ozone. The proposed project does not generate anywhere near 6,620 pounds per day of NOx or 89,190 pounds per day of VOC emissions. (The project generates 584.91 pounds per day of NOx and 132.60 pounds per day of VOC emissions.) Therefore, the project's emissions are not high enough to use a regional modeling program to correlate health effects on a basin-wide level. Further, SJVAPCD acknowledges the same: "…the Air District is simply not equipped to analyze and to what extent the criteria pollutant emissions of an individual CEQA project directly impact human health in a particular area…even for projects with relatively high levels of emissions of criteria pollutant precursor emissions" (see page 8 of SJVAPCD Brief of Amicus Curiae).

Although the project is expected to exceed the SCAQMD's numeric regional mass daily emission thresholds, this does not in itself constitute a significant health impact to the population adjacent to the project and within

the SoCAB. As noted in the Supplemental Air Quality Assessment in Appendix C1b, ozone, NOx, VOC, and CO have been decreasing in the Basin since 1975 and are projected to continue to decrease through 2020. These decreases result primarily from motor vehicle controls and reductions in evaporative emissions. Although vehicle miles traveled in the Basin continue to increase, NOx and VOC levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. Ozone levels in the SoCAB have decreased substantially over the last 30 years. Today, the maximum measured concentrations are approximately one-third of concentrations in the late 1970s.

To correlate health effects from project-related criteria air pollutant emissions, SCAQMD developed a methodology to assist lead agencies in analyzing localized air quality impacts from a proposed project as they relate to CO, NOx, $PM_{2.5}$, and PM_{10}. This methodology is collectively referred to as the localized significance thresholds (LSTs). The LSTs differ from the numeric regional mass daily thresholds since the LSTs are based on the amount of emissions generated from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state AAQS, and are based on the ambient concentrations of the pollutant and the relative distance to the nearest sensitive receptor (the SCAQMD performed air dispersion modeling to determine what amount of emissions generated a particular concentration at a particular distance). This analysis is included in Impact AQ-3 for operational activities.

Unfortunately, current scientific, technological, and modeling limitations prevent the relation of expected adverse air quality impacts to likely health consequences. For this reason, the Supplemental Air Quality Assessment in Appendix C1b explains in detail why it is not feasible to provide such an analysis.

5.2.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: AQ-3, and AQ-4.

Without mitigation, these impacts would be **potentially significant**:

- **Impact AQ-1** Operation of the proposed project would conflict with or obstruct implementation of the applicable air quality plan.
- **Impact AQ-2** Construction activities associated with the proposed project could generate short-term emissions in exceedance of SCAQMD'S regional construction significance thresholds for VOC and NO_X. Operation activities associated with the proposed project could generate long-term emissions in exceedance of SCAQMD'S regional construction significance thresholds for VOC, NO_X, and PM_{10}.

5.2.8 Mitigation Measures

Impact AQ-2

Construction Phase

MM AQ-1 For construction equipment greater than 150 horsepower (>150 HP), the Construction Contractor shall use off-road diesel construction equipment that complies with EPA/CARB Tier 3 emissions standards during all construction phases and will ensure that all construction equipment is tuned and maintained in accordance with the manufacturer's specifications.

MM AQ-2 The project shall utilize "Super-Compliant" low-VOC paints that have been reformulated to exceed the regulatory VOC limits of SCAQMD's Rule 1113 (RR-AQ-4). Super-Compliant low VOC paints shall be no more than 10g/L of VOC. Alternatively, the applicant may utilize tilt-up concrete buildings that do not require the use of architectural coatings.

MM AQ-3 Prior to the issuance of any grading permits, the applicant and/or building operators shall submit construction plans and a construction vehicle management plan to the City of Jurupa Valley denoting the proposed schedule and projected equipment use. The construction vehicle management plan shall include such things as: idling time requirements; requiring hour meters on equipment; and documenting the serial number, horsepower, age, and fuel of all onsite equipment. The plan shall include that California state law requires equipment fleets to limit idling to no more than 5 minutes. Construction contractors shall provide evidence that low emission mobile construction equipment will be utilized or that their use was investigated and found to be infeasible for the project as determined by the City.

Operational Phase

MM AQ-4 The project shall place signs that identify CARB anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for trucks drivers to restrict idling to no more than 5 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged; and 3) telephone numbers of the building facilities manager and CARB to report violations.

MM AQ-5 The City shall require operators of the proposed facilities to encourage the vendor trucks to incorporate energy efficiency improvement features through the Carl Moyer Program—including truck modernization, retrofits, and/or aerodynamic kits and low rolling resistance tires—to reduce fuel consumption.

MM AQ-6 All buildings shall be designed to provide infrastructure to support use of electric-powered forklifts and/or other on-site equipment.

5.2.9 Level of Significance After Mitigation

Impact AQ-1

The project has the potential to result in or cause National AAQS or California AAQS violations. Construction-source emissions would exceed the applicable SCAQMD regional thresholds for NO_X. Operational-source emissions would exceed the applicable SCAQMD regional thresholds for NO_X, VOCs, and PM_{10}. Additionally, the project proposes a General Plan Amendment (GPA) to industrial warehousing, and the GPA is not included in the current AQMP. Therefore, the project would have the potential to conflict with the AQMP, and impacts are considered significant and unavoidable.

Impact AQ-2

The estimated maximum daily construction emissions with mitigation are summarized in Table 5.2-14 below. Detailed construction model outputs are presented in Appendix 3.2 of the Air Quality Study (Appendix C1 of this EIR). MM AQ-1 through MM AQ-3 are recommended to reduce the severity of the impacts. After implementation of MM AQ-1 through AQ-3, project construction-source emissions would still potentially exceed the applicable SCAQMD thresholds for VOCs and NO_X due to the potential of construction overlapping. No feasible mitigation measures exist that would reduce these emissions to levels that are less than significant. Moreover, the majority of construction-source NO_X emissions would be generated from the hauling of soil during grading activities from trucks that cannot be mitigated. Since the project does not have regulatory authority to control tailpipe emissions, no feasible mitigation measures exist that would reduce NO_X emissions to levels that are less than significant; thus, these emissions are considered **significant and unavoidable**.

Table 5.2-14 Maximum Daily Peak Construction Emissions Summary (With Mitigation)

	Emissions (pounds per day)					
Year	VOC	NOX	CO	SOX	PM10	PM2.5
2019	7.58	142.83	149.38	0.33	24.57	9.93
2020	83.58	194.20	239.50	0.44	30.80	16.99
2021	105.11	189.07	234.47	0.46	29.69	15.35
2022	42.52	171.77	221.30	0.39	21.41	13.69
2023	12.18	24.96	36.94	0.06	2.22	1.34
Maximum Daily Emissions	**105.11**	**194.20**	**239.50**	**0.46**	**30.80**	**9.93**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: Urban Crossroads 2019a

Impact AQ-2

Alternative 1

Project operational-source emissions with mitigation are summarized on Table 5.2-15. MM AQ-4 through MM AQ-6 are recommended to reduce the severity of the impacts. Even with implementation of MM AQ-4 through MM AQ-6 and PDF-AQ-1 through PDF-AQ-4, project emissions would still exceed regional thresholds of significance established by the SCAQMD for emissions of VOCs, NO_X, and PM_{10}. It is important to note that the majority of VOC emissions are derived from consumer products. For analytical purposes, consumer products include cleaning supplies, aerosols, and other industrial consumer products. Therefore, the project applicant cannot meaningfully control the use of consumer products by future building users via mitigation; thus, VOC emissions are considered significant and unavoidable, as no feasible mitigation measure exists that would reduce this impact to less than significant levels. Additionally, approximately 87 percent of all operational- source emissions (by weight) would be generated by project mobile sources (traffic). Neither the project applicant nor the lead agency (City of Jurupa Valley) can substantively or materially reduce project mobile-source emissions beyond the recommended mitigation measures. Therefore, project operational-source VOCs, NO_X, and PM_{10} emissions exceedances of applicable SCAQMD regional thresholds would be considered **significant and unavoidable**.

Table 5.2-15 Operational Emissions for Alternative 1 (With Mitigation)

Operational Activities	Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer Scenario						
Area Source	100.29	4.32E-03	0.48	3.00E-05	1.68E-03	1.68E-03
Energy Source	0.51	4.60	3.87	0.03	0.35	0.35
Mobile (Passenger Cars)	6.39	9.09	134.32	0.48	56.27	15.11
Mobile (Trucks)	20.12	515.05	146.53	2.74	93.14	29.94
Mobile (Other Uses)[6]	1.69	12.06	20.17	0.08	5.60	1.55
On-site Equipment	2.35	28.59	12.49	0.05	0.94	0.86
Max Daily Operational Emissions	**131.33**	**569.39**	**317.83**	**3.38**	**156.31**	**47.81**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**NO**	**NO**	**YES**	**NO**

Table 5.2-15 Operational Emissions for Alternative 1 (With Mitigation)

Operational Activities	Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Winter Scenario						
Area Source	100.29	4.32E-03	0.48	3.00E-05	1.68E-03	1.68E-03
Energy Source	0.51	4.60	3.87	0.03	0.35	0.35
Mobile (Passenger Cars)	5.04	9.37	107.19	0.43	56.27	15.11
Mobile (Trucks)	20.50	522.61	153.69	2.72	93.16	29.95
Mobile (Other Uses)	1.44	12.10	17.47	0.07	5.60	1.55
On-site Equipment	2.35	28.59	12.49	0.05	0.94	0.86
Max Daily Operational Emissions	**130.13**	**577.28**	**295.17**	**3.29**	**156.33**	**47.83**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**NO**	**NO**	**YES**	**NO**

Source: Urban Crossroads 2019a

Alternative 2

Project operational-source emissions with mitigation are summarized on Table 5.2-16. MM AQ-4 through MM AQ-6 are recommended to reduce the severity of the impacts. Even with implementation of MM AQ-4 through MM AQ-5 and PDF-AQ-1 through PDF-AQ-4, project emissions would still exceed regional thresholds of significance established by the SCAQMD for emissions of VOCs, NO_X, and PM_{10}. It is important to note that the majority of VOC emissions are derived from consumer products. For analytical purposes, consumer products include cleaning supplies, aerosols, and other industrial consumer products. Therefore, the project applicant cannot meaningfully control the use of consumer products by future building users via mitigation; thus, VOC emissions are considered significant and unavoidable, as no feasible mitigation measure exists that would reduce this impact to less than significant levels. Additionally, approximately 87 percent of all operational-source emissions (by weight) would be generated by project mobile sources (traffic). Neither the project applicant nor City of Jurupa Valley can substantively or materially affect reduce project mobile-source emissions beyond the recommended mitigation measures. Therefore, project operational-source VOCs, NO_X, and PM_{10} emissions exceedances of applicable SCAQMD regional thresholds would be considered **significant and unavoidable**.

Table 5.2-16 Operational Emissions for Alternative 2 (With Mitigation)

Operational Activities	Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer Scenario						
Area Source	100.17	4.31E-03	0.47	3.00E-05	1.67E-03	1.67E-03
Energy Source	0.33	3.01	2.52	0.02	0.23	0.23
Mobile (Passenger Cars)	5.26	7.49	110.72	0.39	46.39	12.45
Mobile (Trucks)	18.34	481.16	131.91	2.54	85.21	27.41
Mobile (Other Uses)	8.12	57.29	92.86	0.36	25.45	7.02
On-site Equipment	2.35	28.59	12.49	0.05	0.94	0.86
Max Daily Operational Emissions	**134.58**	**577.54**	**350.98**	**3.36**	**158.21**	**47.98**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**NO**	**NO**	**YES**	**NO**
Winter Scenario						
Area Source	100.17	4.31E-03	0.47	3.00E-05	1.67E-03	1.67E-03
Energy Source	0.33	3.01	2.52	0.02	0.23	0.23
Mobile (Passenger Cars)	4.16	7.72	88.36	0.35	46.39	12.45
Mobile (Trucks)	18.70	488.20	138.67	2.51	85.22	27.42
Mobile (Other Uses)	6.89	57.39	80.89	0.33	25.45	7.03
On-site Equipment	2.35	28.59	12.49	0.05	0.94	0.86
Max Daily Operational Emissions	**132.60**	**584.91**	**323.39**	**3.26**	**158.23**	**48.00**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**NO**	**NO**	**YES**	**NO**

Source: Urban Crossroads 2019a

5.2.10 References

Urban Crossroads. 2018, November 6. Agua Mansa Commerce Park Specific Plan, Diesel Mobile Source Health Risk Assessment, City of Jurupa Valley.

———. 2019a, January 28 (Revised). Agua Mansa Commerce Park Specific Plan, Air Quality Impact Analysis, City of Jurupa Valley.

———. 2019b, January. Aqua Mansa Commerce Park Specific Plan Supplemental Air Quality Assessment.

5.3 BIOLOGICAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Agua Mansa Commerce Park Specific Plan project (proposed project) to impact biological resources.

The following analysis is based in part on information obtained from:

- *General Biological Resources Assessment, Agua Mansa Commerce Park Project Site Jurupa Valley, Riverside County, California*, MIG, November 2018.
- *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis, Aqua Mansa Commerce Park Project Site, Jurupa Valley, Riverside County, California*, MIG, November 2018.
- *Western Riverside County Multiple Species Habitat Conservation Plan Joint Project Review (JPR) Consistency Determination 18-09-24-01*. The Local Identifier is MA 1617/Agua Mansa Commerce Park Specific Plan, RCA, December 2018.

Complete copies of these studies are included in the technical appendices to this DEIR (Volume II, Appendix D).

5.3.1 Environmental Setting

5.3.1.1 REGULATORY BACKGROUND

Federal and State Regulations

Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973, as amended, protects and conserves any species of plant or animal that is endangered or threatened with extinction, as well as the habitats where these species are found. "Take" of endangered species is prohibited under Section 9 of the FESA. "Take" means to "harass, harm, pursue, hunt, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." Section 7 of the FESA requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) on proposed federal actions that may affect any endangered, threatened, or proposed (for listing) species or critical habitat that may support the species. Section 4(a) of the FESA requires that critical habitat be designated by the USFWS "to the maximum extent prudent and determinable, at the time a species is determined to be endangered or threatened." This provides guidance for planners/managers and biologists by indicating locations of suitable habitat and where preservation of a particular species has high priority. Section 10 of the FESA provides the regulatory mechanism for incidental take of a listed species by private interests and nonfederal government agencies during lawful activities. Habitat conservation plans (HCPs) for the impacted species must be developed in support of incidental take permits to minimize impacts to the species and formulate viable mitigation measures.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act was first passed in 1940 to regulate take, possession, sale, purchase, barter, transport, import, and export of any bald or golden eagle or their parts (e.g., nests, eggs, young) unless allowed by permit (16 U.S.C. 668(a); 50 CFR 22). "Take" was broadly defined to include shoot, wound, kill, capture, collect, molest, or disturb. In the 1972 amendments, penalties for violations were raised to a maximum fine of $250,000 for an individual or a maximum of two years in prison for a felony conviction, with a doubling for organizations instead of individuals.

Clean Water Act, Section 404

The United States Army Corps of Engineers (Corps) regulates discharge of dredged or fill material into "Waters of the United States."[1] Any filling or dredging within Waters of the United States requires a permit, which entails assessment of potential adverse impacts to Corps wetlands and jurisdictional waters and any mitigation measures that the Corps requires. Section 7 consultation with USFWS may be required for impacts to a federally listed species. If cultural resources may be present, Section 106 review may also be required. When a Section 404 permit is required, a Section 401 Water Quality Certification is also required from the Regional Water Quality Control Board (RWQCB).

Clean Water Act, Sections 401and 402

Section 401(a)(1) of the Clean Water Act (CWA) specifies that any applicant for a federal license or permit to conduct any activity that may result in any discharge into navigable waters shall provide the federal permitting agency with a certification, issued by the state in which the discharge originates, that any such discharge will comply with the applicable provisions of the CWA. In California, the applicable RWQCB must certify that the project will comply with water quality standards. Permits requiring Section 401 certification include Corps Section 404 permits and National Pollutant Discharge Elimination System (NPDES) permits issued by the Environmental Protection Agency (EPA) under Section 402 of the CWA. NPDES permits are issued by the applicable RWQCB. The City of Jurupa Valley is in the jurisdiction of the Santa Ana RWQCB (Region 8).

California Fish and Game Code, Section 1600

Section 1600 of the California Fish and Game Code requires a project proponent to notify the California Department of Fish and Wildlife (CDFW) of any proposed alteration of streambeds, rivers, and lakes. The intent is to protect habitats that are important to fish and wildlife. CDFW may review and place conditions on the project as part of a Streambed Alteration Agreement that address potentially significant adverse impacts within CDFW's jurisdictional limits.

[1] "Waters of the United States," as applied to the jurisdictional limits of the Corps under the Clean Water Act, includes all waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the tide; all interstate waters, including interstate wetlands; and all other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds whose use, degradation, or destruction could affect interstate or foreign commerce; water impoundments; tributaries of waters; territorial seas; and wetlands adjacent to waters. The terminology used by Section 404 of the Clean Water Act includes "navigable waters," which is defined at Section 502(7) of the act as "waters of the United States, including the territorial seas."

California Endangered Species Act

The California Endangered Species Act (CESA) generally parallels the main provisions of the FESA and is administered by the CDFW. Its intent is to prohibit take and protect state-listed endangered and threatened species of fish, wildlife, and plants. Unlike its federal counterpart, CESA also applies the take prohibitions to species petitioned for listing (state candidates). Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species. Under certain conditions, CESA has provisions for take through a 2081 permit or memorandum of understanding. In addition, some sensitive mammals and birds are protected by the state as "fully protected species." California "species of special concern" are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's California Natural Diversity Database, which maintains a record of known and recorded occurrences of sensitive species. Informally listed taxa are not protected per se but warrant consideration in the preparation of biological resources assessments.

Regional

Western Riverside County Multiple-Species Habitat Conservation Plan

The Western Riverside County Multiple-Species Habitat Conservation Plan (MSHCP) covers 146 species and 14 natural communities within a plan area of about 1.26 million acres, or 1,970 square miles, extending from the western county boundary to the San Jacinto Mountains. Roughly 506,000 acres are planned for conservation. The MSHCP was implemented in 2003 and is administered by the Western Riverside County Regional Conservation Authority (RCA).

The purpose of the MSHCP is to conserve large contiguous blocks of habitat to maintain species richness and density, to ensure population viability, to protect habitats from encroachment, and to reduce nonnative species invasion. The Criteria Area consists of quarter-section (161-acre) criteria cells within the MSHCP planning boundary that will be used to assemble 153,000 acres of new conservation land (the Conservation Area). The MSHCP provides for the assembly of a Reserve consisting of Core Areas and Linkages for the conservation of species covered under the MSHCP (Covered Species) (Riverside 2003). The MSHCP provides an incentive-based program, the Habitat Evaluation and Acquisition Negotiation Strategy, for adding land to the MSHCP. A Core is the largest planning unit, and its extent is large enough to support population of several species. A Linkage is a habitat connection between Cores that is wide and long enough to provide live-in habitat and movement corridors for plants, herbivores, and carnivores. Projects in proximity to the MSHCP Conservation Area may result in edge effects that would adversely affect biological resources within the MSHCP Conservation area. MSHCP Urban/Wildlands Interface Guidelines (MSHCP Section 6.1.4) are intended to reduce such indirect effects.

The MSHCP requires focused surveys for certain plant and animal species for project sites within designated survey areas when potential suitable habitat is present. In addition to species that have designated survey areas, surveys for listed riparian birds are required when suitable riparian habitat is present, and surveys for listed fairy shrimp species are required when vernal pools or other suitable habitat is present.

The MSHCP sets forth conservation goals for each covered species. A development project must either demonstrate that the conservation goals for each covered species which was identified in its project site have been met or prepare a Determination of Biologically Equivalent or Superior Preservation (DBESP) Report enumerating mitigation measures to achieve equivalent or superior preservation for each covered species through deed restriction, conservation easement, or other appropriate method. Mitigation measures may include restoration and/or enhancement of on-site and/or off-site habitat.

The project site is partially within three MSHCP Criteria Cells (21, 22, and 55) and several MSHCP sensitive species survey areas—for burrowing owl, narrow endemic plant species, Delhi Sands flower-loving fly, least Bell's vireo (LBV), and southwestern willow flycatcher.

"Covered species adequately conserved" under the MSHCP means covered species whose species objectives in the MSHCP are met and which are provided take authorization through the Natural Community Conservation Plan Permit and, for animals, through the FESA Section 10(a) Permit issued for the MSHCP.[2]

Habitat Assessment and Negotiation Strategy

Projects within an MSHCP Criteria Cell are subject to a Habitat Acquisition and Negotiation Strategy (HANS) analysis to determine whether all or part of the property is needed/suitable for inclusion in the MSHCP Conservation Area. The affected city, or Riverside County for projects in unincorporated areas, conducts the HANS analysis and gives the applicant a HANS determination.[3] Project applicants prepare a biological resources technical report, DBESP/MSHCP Consistency Analysis, focused surveys, jurisdictional delineation, and conceptual mitigation plan, as required. All those required documents are submitted to the RCA for a Joint Project Review. The RCA makes an MSHCP consistency determination; if the project is found consistent during the Joint Project Review, the determination is sent to the wildlife agencies for review.

Cities and the County may use incentives such as density bonuses or waivers of other local impact fees in return for conservation of a portion of a project site deemed important for MSHCP Reserve Assembly.

MSHCP Mitigation Fees

Developments within the MSHCP Area are charged mitigation fees, which are one of the primary sources of funding for implementing the MSHCP. Mitigation fee amounts in Fiscal Year 2019 are (RCA 2018):

- Residential, density less than 8.0 dwelling units per acre: $2,104 per dwelling unit
- Residential, density between 8.0 and 14.0 dwelling units per acre: $1,347 per dwelling unit
- Residential, density greater than 14.0 dwelling units per acre: $1,094 per dwelling unit
- Commercial/Industrial: $7,164 per acre

[2] Natural Community Conservation Plans (NCCPs) are regional habitat and species conservation plans established under California Fish and Game Code Section 2800 et seq. Each NCCP covers multiple habitats and species. A number of HCPs in California, including the MSHCP, are also NCCPs.

[3] Eighteen cities in the MSCHP plan area, including Jurupa Valley, are member agencies of the MSHCP.

MSHCP Construction Guidelines and Best Management Practices

Project construction activities would be required to comply with construction guidelines in Section 7.5.3 of the MSHCP.

The design and construction of projects developed pursuant to the Specific Plan would be required to comply with MSHCP best management practices (BMPs) in Appendix C of the MSHCP.

City of Jurupa Valley

General Plan Policies

The specific General Plan policies relating to biological resources are listed in Table 5.9-2, *City of Jurupa Valley General Plan Consistency Analysis*.

City of Jurupa Valley Municipal Code

Municipal Code Chapter 3.80, Western Riverside County Multiple Species Habitat Conservation Plan Mitigation Fee Ordinance, requires payment of MSHCP mitigation fees before the City will issue building permits for new development projects.

5.3.1.2 EXISTING CONDITIONS

Vegetation Communities

Vegetation communities onsite are described below and mapped on Figure 5.3-1, *Vegetation Communities*.

Developed (119.45 acres)

The center of the project site is a former cement plant and thus is dominated by paved areas, abandoned buildings, and derelict industrial machinery (see Figure 3-3). Vegetation in these areas consists primarily of nonnative, disturbance-adapted plant species such as wild lettuce (*Lactuca serriola*), tree tobacco (*Nicotiana gluaca*), oleander *(Nerium oleander),* Russian thistle *(Salsola tragus),* white sweet clover (*Melilotus albus*), castor bean (*Ricinus communis*), tamarisk (*Tamarix ramosissima*), summer mustard (*Hirschfeldia incana*), tree of heaven (*Ailanthus altissima*), Mexican fan palm (*Washingtonia robusta*), and African fountain grass (*Pennisetum setaceum*). Native species such as horseweed (*Erigeron canadensis*) are occasionally present.

Disturbed (54.86 acres)

The northern portion of the project site has been frequently disked in recent years and remains sparsely vegetated. Vegetation that does grow in these areas consists primarily of weedy, nonnative, disturbance-adapted, and ruderal plant species such as red brome (*Bromus madritensis ssp. rubens),* ripgut brome (*Bromus diandrus*), wild oat (*Avena fatua*), London rocket (*Sisymbrium irio*), Russian thistle, and tree tobacco (*Nicotiana glauca*).

Brittlebush Scrub Alliance (56.27 acres)

Brittlebush (*Encelia farinosa*) scrub occurs on steep, often vertical, excavated slopes of the Crestmore Quarry in the southern portion of the project site and in scattered patches on excavated spoils covered with concrete rubble and cement slurry in the cement processing operations area. Ruderal species, including London rocket, summer mustard, Russian thistle, wild oat (*Avena barbata*), tocalote (*Centaurea melitensis*), annual ragweed (*Ambrosia artemisiifolia*), and red brome (*Bromus madritensis*), are common associates throughout this community. Occasional co-dominant native shrub and/or succulent species include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), coastal prickly pear (*Opuntia littoralis),* cholla (*Cylindropuntia echinocarpa*), and lanceleaf liveforever (*Dudleya lanceolata*).

Nonnative Grassland (24.67 acres)

Patches of nonnative grassland are scattered throughout the project site. These areas have been disturbed by quarry and cement processing operations and are characterized primarily by nonnative species such as red brome, ripgut brome, wild oat, Russian thistle, jimsonweed (*Datura stramonium*), Peruvian peppertree (*Schinus molle*), fountain grass, and Bermuda grass (*Cynodon dactlyon*). Native species are occasional in this community and include common sunflower (*Helianthus annuus*) and common fiddleneck (*Amsinckia intermedia*).

Eucalyptus Grove (19.20 acres)

Eucalyptus groves have been planted throughout the northern portions of the project site. Based on the tree surveys conducted in September and October 2016, red gum (*Eucalyptus camaldulensis*) and red ironbark (*Eucalyptus sideroxylon*) are the most commonly observed here, although blue gum (*Eucalyptus globulus*) and silver dollar gum (*Eucalyptus polyanthemos*) are occasional. Red gum consisted of 67.8 percent of the total 2,316 trees. The understory of these groves is dominated by nonnative species such as London rocket, Russian thistle, lamb's quarters (*Chenopodium album*), red brome, ripgut brome, and wild oat. Detailed information on all trees mapped onsite can be found in the Tree Survey Report included as an appendix to the General Biological Resources Assessment for the Agua Mansa Commerce Park Project Site, (see Appendix D to this DEIR).

Rock Outcrop (7.79 acres)

Rock outcrops are found around the former cement plant and the large central hill on the project site. These areas are generally devoid of vegetation.

Ornamental (8.15 acres)

Ornamental plants are found primarily along the western portion of the project site near buildings, parking lots, and roads. Ornamental plant species observed include California fan palm (*Washingtonia filifera*), pine trees (*Pinus* sp.), oleander (*Nerium oleander),* silk tree (*Albizia julibrissin*), agapanthus (*Agapanthus africanus*), and English ivy (*Hedera helix*).

Figure 5.3-1 - Vegetation Communities

5. Environmental Analysis

Source: MIG, Inc., LANGAN (Conceptual Site Plan), ParcelQuest (APN layer), ESRI, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.
** Project Site Boundary lines were obtained from APN boundaries (ParcelQuest, May 2018) and do not reflect the boundaries shown in the Agua Mansa Commerce Park Specific Plan, which is based on Tentative Parcel Map No. 37528, revised October 4, 2018 (DRC Engineering). Biological resources and calculations herein are mapped to the extent of APN boundaries. Depending on data used in other maps (e.g. Conceptual Site Plan, Agua Mansa Commerce Park Specific Plan) for the project boundary, discrepancies in acreage calculations may occur.*

Vegetation Communities

- Developed (DEV): 119.44 ac
- Disturbed (DIS): 54.85 ac
- Brittlebush Scrub (BBS): 56.91 ac
- Non-Native Grassland (NNG): 25.25 ac
- Eucalyptus Grove (EUC): 19.20 ac
- Rock Outcrop (RO): 7.79 ac
- Ornamental (ORN): 8.14 ac
- Open Water (OW): 6.30 ac
- Southern Willow Scrub (SWS): 3.30 ac
- Cattails (CAT): 1.53 ac
- Mulefat Stand (MFS): 0.60 ac
- Project Site Boundary (303.34 ac)*

0 300
Scale (Feet)

Source: MIG, 2018

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Open Water (6.30 acres)

The southern portion of the site has a large depression—created by quarry operations and filled with water—that is known as Crestmore Lake, which was excavated to below the groundwater table and is surrounded by steep rock wall. This open water is ringed by intermittent patches of cattails and southern willow scrub vegetation, as described below.

Southern Willow Scrub (3.30 acres)

Southern willow scrub occurs as dense, multilayered stands supported by groundwater in the quarry pit surrounding Crestmore Lake to the south, and in two large borrow areas in the southeast corner of the site. Black willow (*Salix gooddingii*) and yellow willow (*Salix lasiandra*) tend to dominate in these areas, with other common associated tree species, including red willow (*Salix laevigata*) and Fremont cottonwood (*Populus fremontii*). Other common native species in this community include mulefat (*Baccharis salicifolia*), willow baccharis (*Baccharis salicina*), branching phacelia (*Phacelia ramosissima*), willow herb (*Epilobium ciliatum*), California everlasting (*Pseudognaphalium californicum*), and common sunflower. Nonnative species commonly observed in these communities include tree tobacco, summer mustard, castor bean, tocalote, horehound (*Marrubium vulgare*), Mexican fan palm, London rocket, African fountain grass, red gum, bull thistle (*Cirsium vulgare*), and tamarisk. Southern willow scrub is considered a sensitive natural community due to its limited distribution in southern California and would be regulated as riparian habitat by CDFW.

Cattail Alliance (1.53 acres)

Cattail Alliance, dominated by southern cattail (*Typha domingensis*) and occasional broad leaf cattail (*Typha latifolia*), forms pure stands in the wettest low-lying areas, including the fringe of Crestmore Lake, near leaking water control structures, and in the large depression at the southern extent of the project site created by quarry operations.

Mulefat Stands (0.60 acres)

Similar to the Cattail Alliance community, mulefat stands occur in small (2 to 10 individual plants), widely scattered, and isolated monocultures in moderately moist depressions created by spoils in the cement processing facility and adjacent to dirt roads and parking areas.

Trees

A tree survey of the 302-acre project site in September and October 2016 identified 2,316 trees—mostly nonnative, ornamental trees (see Appendix C of the General Biological Resources Assessment in DEIR Appendix D). The survey assumed that trees would be removed from the proposed Industrial Park (190 acres) and three parts of the proposed Business Park site totaling about 34 acres. Approximately 60 percent of the 1,604 trees planned for removal—including 31 native trees and 1,573 nonnative trees—were in poor or very poor health and categorized as potential hazards.

Wildlife

General wildlife species documented onsite or in the vicinity of the project site include but are not limited to western fence lizard (*Sceloporus occidentalis*), American coot (*Fulica americana*), double-crested cormorant (*Phalacrocorax auritus*) , great egret (*Ardea alba*), great blue heron (*Ardea herodias*), osprey (*Pandion haliaetus*) , Cooper's hawk (*Accipiter cooperii)* , red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), white-throated swift (*Aeronautes saxatalis*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's kingbird (*Tyrannus vociferans*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), northern rough-winged swallow (*Stelgidopteryx serripennis*), cliff swallow (*Petrochelidon pyrrhonota*), northern mockingbird (*Mimus polyglottos*), western scrub-jay (*Aphelocoma californica*), bushtit (*Psaltriparus minimus*), European starling (*Sturnus vulgaris),* American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), house sparrow (*Passer domesticus*), California towhee (*Pipilo crissalis*), blue-gray gnatcatcher *(Polioptila caerulea*), lesser goldfinch (*Spinus psaltria*), house finch (*Haemorhous mexicanus*), California ground squirrel (*Otospermophilus beecheyi*), Botta pocket gopher (*Thomomys bottae*), desert cottontail (*Sylvilagus audubonii*), raccoon (*Procyon lotor),* domestic dog (*Canis lupus familiaris*), and coyote (*Canis latrans*).

Sensitive Resources

Sensitive Natural Communities

Sensitive natural communities are natural communities that are considered rare in the region by regulatory agencies (CDFW and California Native Plant Society), are known to provide habitat for sensitive animal or plant species or are known to be important wildlife corridors. Sensitive natural communities identified by CDFW on or in the vicinity of the project site include Riversidean alluvial fan sage scrub, southern cottonwood willow riparian forest, southern riparian scrub, southern riparian forest, southern willow scrub, and southern sycamore alder riparian woodland. One sensitive natural community was identified onsite: Southern willow scrub, which is also jurisdictional to the CDFW as riparian habitat and is described above under *Vegetation Communities*. Southern willow scrub was found in three places onsite: in the quarry pit surrounding Crestmore Lake in the southern part of the site, and within two large borrow areas in the southeastern corner of the site.

Sensitive Plant Species

Special-status plants are defined here to include: (1) plants that are federal- or state-listed as rare, threatened or endangered, (2) federal and state candidates for listing, (3) plants assigned a rank of 1 through 4 by the California Native Plant Society (CNPS) Inventory, and (4) plants that qualify under the definition of "rare" under CEQA Section 15380.[4] The project site is in a predetermined Survey Area for the following Narrow Endemic Plant Species: San Diego Ambrosia (*Ambrosia pumila*), Brand's phacelia (*Phacelia stellaris*), and San Miguel savory (*Clinopodium chandleri*) (MSHCP 2004). An additional 25 sensitive plant species are not expected to occur onsite due to lack of suitable habitat or because they were not observed during field surveys of the site. A table listing

[4] CNPS Rare Plant Ranks: 1A, Presumed extinct in California; 1B, Rare, threatened, or endangered in California and elsewhere; 2, Rare, threatened, or endangered in California, but more common elsewhere; 3, Plants for which more information is needed—a review list; and 4, Plants of limited distribution—a watch list.

the habitat preferences and potential to occur onsite of those 25 species is in the Biological Resources Assessment, included as Appendix D to this DEIR.

***San Diego Ambrosia* (Ambrosia pumila)**

San Diego ambrosia grows in open habitats in coarse soils on floodplain terraces or on the margins of vernal pools. In Riverside County, San Diego ambrosia is associated with open, gently sloped grasslands and is generally associated with alkaline soils. San Diego ambrosia is distributed in widely scattered populations from western Riverside County and western San Diego County south along the west coast of Baja California, Mexico. San Diego ambrosia is designated as a Group 3 species in the MSHCP, a federally listed endangered species, and a CNPS Rank 1B species. There are no floodplain terraces, vernal pools, vernal pool conditions, or alkaline conditions in the project site, and this species was not observed during focused surveys of moderately moist undeveloped portions of the project site. Therefore, the project site does not support suitable habitat for San Diego ambrosia, and this species is not expected to be present.

***Brand's Phacelia* (Phacelia stellaris)**

Suitable habitat for this annual herb includes coastal dunes and/or coastal scrub in sandy openings, sandy benches, dunes, sandy washes, or floodplains of rivers and is restricted to clay soils at elevations between 0 and 1,300 feet, usually near the coast. Brand's phacelia historically occurred from Los Angeles, Riverside, and San Diego counties to northern Baja California, Mexico. Within Riverside County, Brand's phacelia is restricted to sandy benches along the Santa Ana River terrace. This species is considered extremely rare—there is only one known extant occurrence in Riverside County. Brand's phacelia is designated a Group 3 species in the MSHCP and a CNPS Rank 1B.1 species. The project site does not contain any suitable habitat, such as sandy washes or river floodplains, and this species was not observed during protocol surveys for noncovered species conducted in all undeveloped portions of the site. Therefore, Brand's phacelia is not expected to occur within the project site.

***San Miguel Savory* (Satureja chandleri)**

Suitable habitat for this perennial herb includes rocky ground in coastal sage scrub, chaparral, cismontane woodland, riparian woodland, and valley and foothill grasslands between 400 and 3,300 feet. In San Diego County and Northern Baja California, this species is associated with open, chamise-dominated slopes. There are no chaparral, foothill woodland, or coastal sage scrub communities in the project site. San Miguel savory was not observed on the project site within undeveloped portions of the site, including brittlebush scrub or nonnative grassland communities in the industrial business park development area, and riparian scrub within the limestone quarry pits in the Open Space District. Therefore, San Miguel savory is not expected to be present within the project site. San Miguel savory is designated as a Group 3 species in the MSHCP and a CNPS Rank 1B.2 species.

Sensitive Animal Species

Special-status wildlife species include those species listed as endangered or threatened under the FESA or CESA; candidates for listing by the USFWS or CDFW; and species of special concern to the CDFW.

Surveys and/or habitat assessments are required onsite for riparian/riverine species (least Bell's vireo and western willow flycatcher), burrowing owl, and Delhi Sands flower-loving fly.

***Burrowing Owl* (Athene cunicularia)**

Burrowing owl, a California Species of Special Concern, inhabits open, dry, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. It is a subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel. Suitable habitat is present onsite in brittlebush scrub, disturbed, developed, and rock outcrop vegetation communities, and burrowing owl is considered to have moderate potential to occur onsite. Burrowing owl was not detected in focused surveys onsite in 2016-17.

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

Least Bell's vireo, listed as federally endangered and state endangered, is a summer resident of southern California in low riparian in the vicinity of water or in dry river bottoms below 2,000 feet. Nests are placed along margins of bushes or on twigs projecting into pathways, usually in willow, mulefat, or mesquite. This species was observed during focused surveys in 2017. Suitable nesting habitat is present on the project site within southern willow scrub and mulefat vegetation communities.

***Southwestern Willow Flycatcher* (Empidonax traillii extimus)**

Southwestern willow flycatcher inhabits riparian and wetland thickets, generally of willow, tamarisk, or both, and sometimes boxelder (*Acer negundo*) or Russian olive (*Elaeagnus angustifolia*). This species was not identified onsite during focused surveys. Suitable habitat is present onsite in southern willow scrub, and southwestern willow flycatcher is considered to have moderate potential to occur onsite.

***Delhi Sands Flower-Loving Fly* (Rhaphiomidas terminates abdominalis)**

Delhi Sands flower-loving fly (DSFLF), listed as federally endangered, is found only in areas of the Delhi Sands formation in southwestern San Bernardino and northwestern Riverside counties. DSFLF requires fine, sandy soils, often with wholly or partly consolidated dunes and sparse vegetation. DSFLF is not expected to occur onsite. Although Delhi Sand soils were mapped onsite, soils suitable for DSFLF were not observed onsite during a focused habitat assessment for DSFLF. The mapped Delhi Sands soils onsite are silty sands, consisting of fine sands with some silt and trace clay, which is indicative of deposition by rivers flowing onto valley floors (alluvial deposition). Soils suitable for DSFLF are fine, wind-deposited sands. Pursuant to the MSHCP, projects within criteria cells 21, 22, and 55 shall not require DSFLF surveys. Instead, 50 acres of additional reserve land shall be acquired.

Jurisdictional Waters and Wetlands

MIG completed a jurisdictional delineation report—attached as Appendix I to the General Biological Resources Assessment dated November 2018—that identified state and federal waters and wetlands potentially subject to regulation by the Corps of Engineers, RWQCB, and CDFW (see Table 5.3-1).

Table 5.3-1 Jurisdictional Wetlands and Waters

Map Letter	Figure No.	Feature	Location in Site	Area, acres	Length feet	Jurisdiction			
						Corps	RWQCB	CDFW	MSHCP
Wetlands									
A	6e	Riparian Wetland	Southeast part of site; Portion of quarry surrounding Wetland B	1.536	NA		X	X	
B	6e	Freshwater emergent wetland	Southeast part of site; base of limestone quarry pit	1.005	NA		X	X	
C, D, E, F	6d	Freshwater emergent-riparian fringe wetlands	Southwest part of site; around the perimeter of Crestmore Lake	1.796	NA		X	X	
			Total	**4.337**					
Non-wetland Riparian Habitat									
K	6e	Riparian woodland	Southeast part of site in quarry pit	0.332	NA		X	X	
			Total	**0.332**	**NA**				
Lake									
G	6d	Lake	Southwest part of site	6.304	NA		X	X	
			Total	**6.304**	**NA**				
Total Jurisdictional Areas by Agency						**0 acre**	**10.973 acres**	**10.973 acres**	**0 acre**

Source: MIG 2018.

Lake and Riparian Habitat Jurisdictional to CDFW

The CDFW has jurisdiction over any proposed activity that may substantially modify a river, stream, or lake. CDFW jurisdiction extends to the limit of riparian vegetation along rivers and streams and next to lakes.

Riparian Habitat

The riparian habitat areas total 4.669 acres:

- **Wetland A,** 1.536 acres in the southeast part of the site in part of Crestmore Quarry (see Figure 5.3-2, *Jurisdictional Areas, Southeast Part of Project Site*), consists of riparian vegetation and seasonal surface water in an excavated depression that does not have a well-defined bed and bank but provides important habitat for wildlife, including least Bell's vireo. This area is not proposed for development and would remain untouched.

- **Wetland B,** 1.005 acres in the southeast part of the site in part of the Crestmore Quarry (see Figure 5.3-2), supports a predominance of riparian vegetation with an emergent wetland vegetation understory. This area would not be disturbed.

- **Wetlands C, D, E, and F,** totaling 1.796 acres in the south part of the site on the banks of Crestmore Lake (see Figures 5.3-2 and 5.3-3, *Jurisdictional Areas, Southwest Part of Project Site*), support vegetation similar to Wetland B and would remain undisturbed.

- **Riparian Habitat Feature K** is a small non-wetland riparian woodland (0.332 acre) in the bottom of the quarry pit in the southeast part of the site (see Figure 5.3-2). This feature is not associated with a streambed or lake; however, it does provide habitat for least Bell's vireo, a riparian bird species. This area would be disturbed.

Lake

Crestmore Lake (G), in the southwest part of the site (see Figure 5.3-3), is 6.304 acres in area and would remain undisturbed.

Waters and Wetlands Jurisdictional to the Corps

Waters of the U.S. include waters that are or have been used or could be used in interstate or foreign commerce; interstate waters, including interstate wetlands; tributaries of those categories of waters; territorial seas; and wetlands adjacent to those categories of waters. It was determined that no wetland or water features meet the definition of Waters of the U.S. according to an Approved Jurisdictional Determination issued for this project site by the Corps on July 18, 2019 (Army Corps 2019a, 2019b).

Waters and Wetlands Jurisdictional to the RWQCB

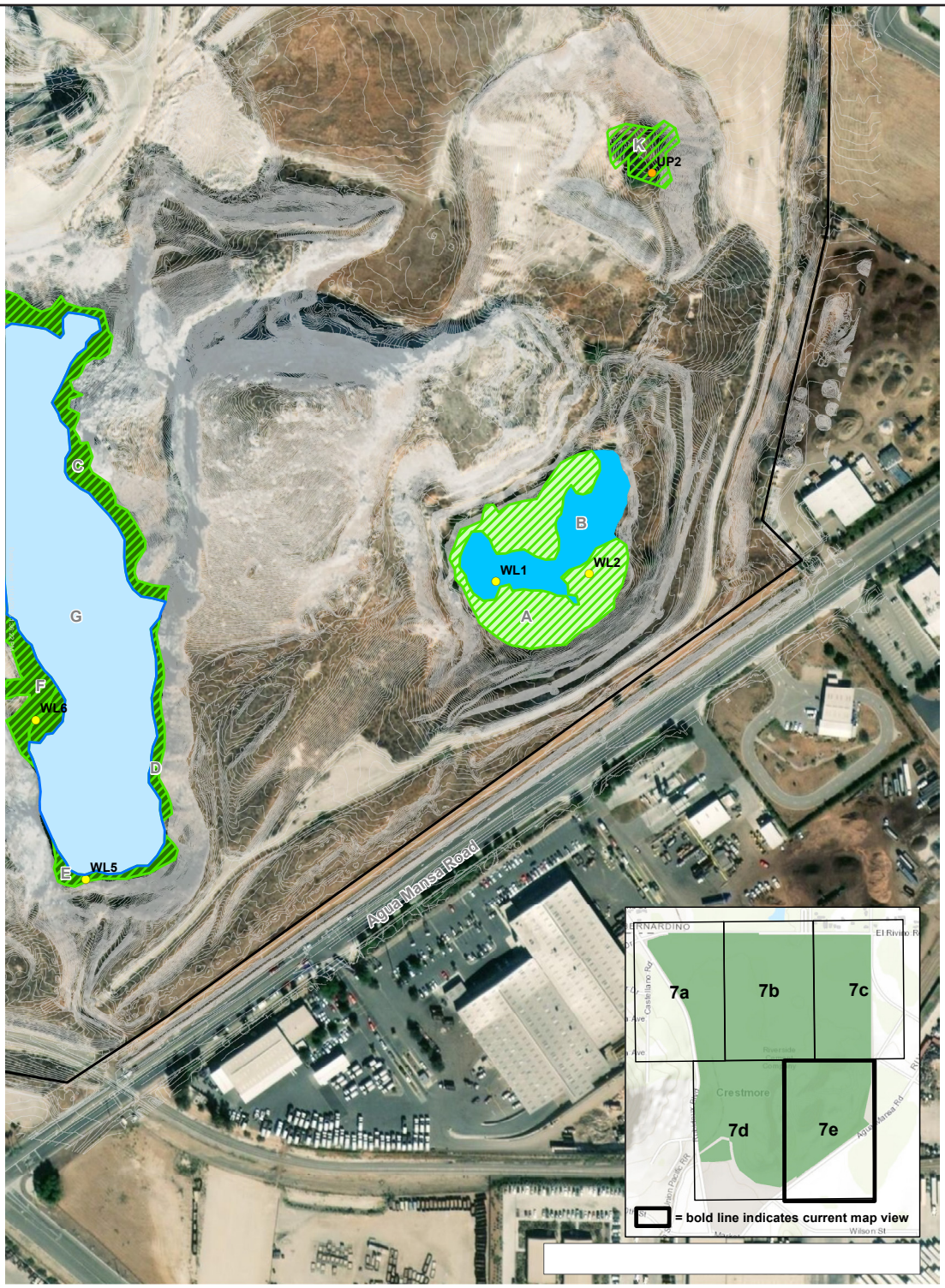
The riparian and emergent wetlands and non-wetland riparian habitat (A, B, C, D, E, F, and K) and Crestmore Lake (G)—totaling 10.973 acres—are all potentially jurisdictional to the RWQCB.

MSHCP Riparian/Riverine Habitat

There are no MSHCP Riparian/Riverine resources on the project site. All wetland, riparian, and open water features were artificially created through development and excavation related to the cement plant operations. The southeastern commercial quarry borrow area (Wetlands A and B), Crestmore Lake (G), and associated wetlands (C through F) were created as a result of mining and mineral extraction activities. Crestmore Lake was formed when excavations encountered unanticipated groundwater. Furthermore, these features have no hydrologic or other physical connection with downstream conservation area resources associated with the Santa Ana River.

Figure 5.3-2 - Jurisdictional Areas, Southeast Part of Project Site

5. Environmental Analysis



Source: MIG, Inc., LANGAN (Conceptual Site Plan), ParcelQuest (APN layer), ESRI, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.
* The project boundary is based on a combination of Riverside County APN parcel boundaries and the project engineers' geodetic survey data. Slight discrepancies in the project boundary acreage of less than 1 acre may occur.

- Project Site Boundary* (302.12 ac)
- Ordinary High Water Mark (OHWM)
- Wetland Sample Point (WL1-WL6)
- Upland Sample Point (UP1-UP2)

CDFW Jurisdiction (10.97 ac)
- CDFW Riparian (4.67 ac)
- CDFW Lake (Crestmore Lake) (6.30 ac)

Non-Jurisdictional Features (0.42 ac)
- Artificially Created Freshwater Emergent Wetland (0.42 ac)

Isolated from Section 404 Jurisdiction (10.64 ac)
- Freshwater Emergent Wetland (1.01 ac)
- Freshwater Emergent-Riparian Lacustrine Fringe Wetland (1.80 ac)
- Perennial Other Waters (Crestmore Lake) (6.30 ac)
- Riparian Wetland (1.54 ac)

0 350
Scale (Feet)

Source: MIG, 2018

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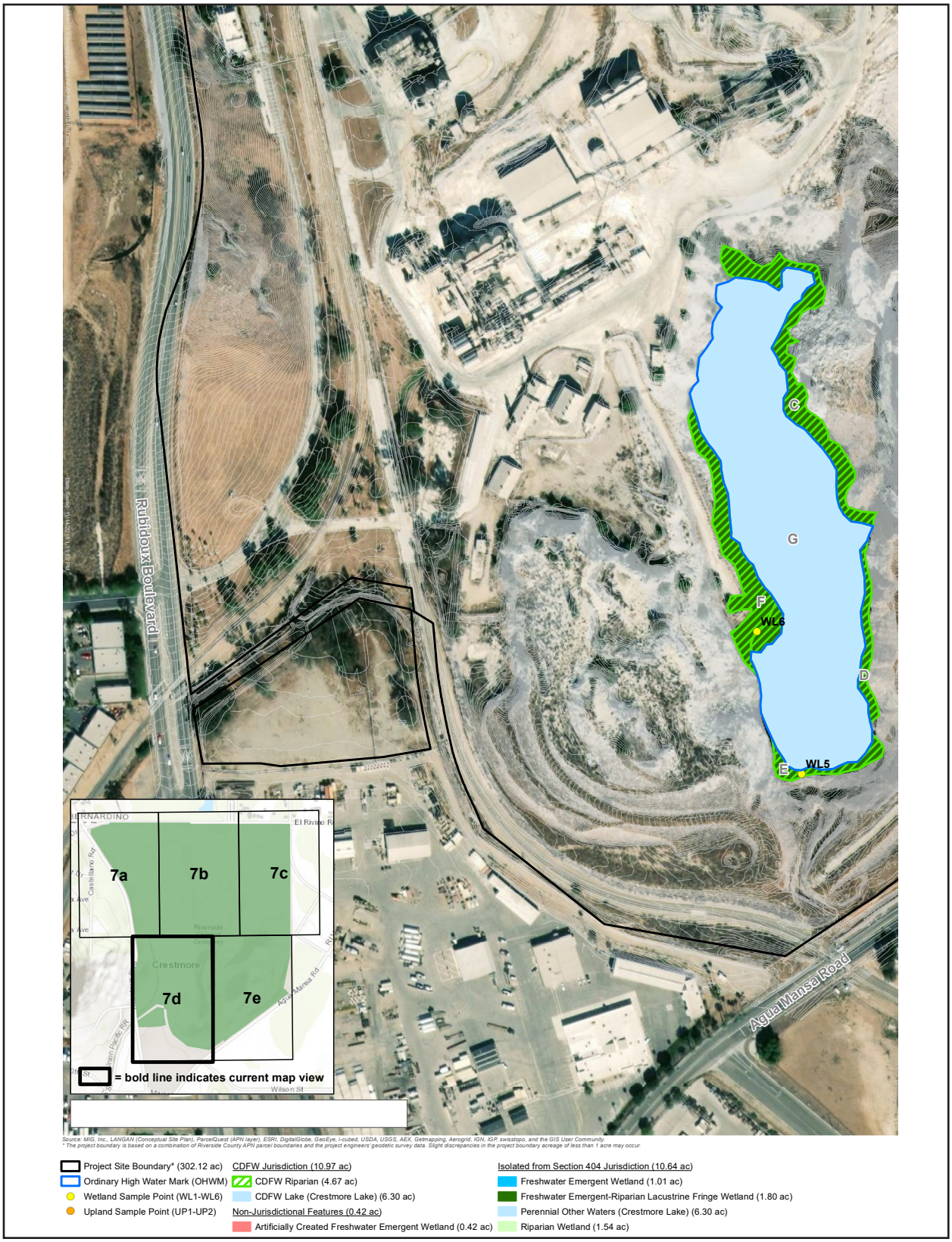
Figure 5.3-3 - Jurisdictional Areas, Southwest Part of Project Site

5. Environmental Analysis



Source: MIG, 2018

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Wildlife Movement Corridors

Wildlife corridors connect fragmented patches of habitat, facilitating movement of plants and animals through dispersal and migration. The project site is not available for regional overland wildlife movement because it is bounded to the east, west, and south by residential, commercial, and industrial land uses. In addition, the entire site is fenced with an eight-foot-high chain-link fence. Limited, infrequent wildlife movement may occur between the site and vacant land to the southeast; however, such movement would be limited to relatively small animals passing through holes in the fence.

Vegetation Usable as Nesting Habitat

Onsite vegetation communities represent suitable nesting habitat for common and special-status resident and migratory bird/raptor species with the potential to occur within the project site. Typically, migratory birds and raptors nest within trees and other vegetation in areas that are removed from human disturbance; however, some species, such as great horned owl (*Bubo virginianus*) and red-tailed hawk, are known to nest in and adjacent to developed areas where there is nearby undeveloped land supporting an abundance of prey. The project site provides potential foraging and/or nesting habitat for migratory birds and raptors, including northern harrier (*Circus cyaneus*), prairie falcon (*Falco mexicanus*), red-tailed hawk, sharp- shinned hawk (*Accipiter striatus*), yellow warbler (*Dendroica petechia*), and rufous-crowned sparrow (*Aimophila ruficeps*). Several inactive raptor and songbird nests were observed during a tree survey of parts of the site in June 2017.

5.3.2 Notice of Preparation / Scoping Comments

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. The comments from the NOP review that will be addressed in the biological resources section are in Table 5.3-2.

Table 5.3-2 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
Western Riverside County Regional Conservation Authority (RCA) Charles Landry	8/14/17	• State that the project site is located in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) criteria cells 21, 22 and 55 which are designated specifically for conservation of the endangered Delhi Sands flower-loving fly (DSFLF) • Projects within criteria cells 21, 22 and 55 shall not require DSFLF surveys. Instead, 50 acres of additional reserve land shall be acquired. • The DEIR should address the project's consistency with the MSHCP's required 50-acre conservation area for projects in criteria cells 21, 22 and 55. • A Joint Project Review for MSHCP consistency is also required and should be completed prior to the DEIR completion and public review.	• Section 5.3, *Biological Resources* • Appendix D, Biological Resources Assessment and MSHCP Consistency Analysis

5. Environmental Analysis
BIOLOGICAL RESOURCES

Table 5.3-2 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
California Department of Fish and Wildlife (CDFW) – Inland Deserts Region Leslie MacNair, Regional Manager	8/16/17	• Acknowledges that the project is a specific plan and future environmental review may be forthcoming, but recommends as much specificity as possible related to each of the four project phases and that biological surveys be completed over the entirety of the Specific Plan area with results included in the DEIR • The DEIR should include the following: – Habitat assessment and vegetation map – Biological inventory of fish, amphibian, reptile, bird, and mammal species present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the project – A complete, recent inventory of rare, threatened, endangered, and other sensitive species within the project footprint and offsite areas with the potential to be affected – Focused species-specific/MSHCP surveys – A thorough, recent floristic-based assessment of special-status plants and natural communities – Information on regional setting – Discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions, including project-related changes on drainage patterns and water quality – Discussion of potential indirect impacts on biological resources (e.g., nearby public lands, open space, adjacent natural habitat, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands) – Evaluation of impacts to adjacent open space lands from construction and operational activities – Cumulative effects analysis for direct and indirect impacts – Mitigation measures that avoid, minimize, or mitigate impacts to sensitive plant communities with statewide rankings of S-1, S-2, S-3, and S-4 • State that mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, onsite habitat restoration and /or enhancement should be evaluated and discussed; if not viable, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. • Provides details regarding habitat revegetation/ restoration plans if the project's impacts lead to requiring preparation of such plans	• Section 5.3, *Biological Resources* • Appendix D, *Biological Resources Study* • *Appendix D, Joint Project Review*

Table 5.3-2 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
		• Provides details regarding the Migratory Bird Treaty Act • Recommends a qualified biologist be retained onsite prior to and during all ground- and habitat-disturbing activities to move out of harm's way special status species or other wildlife • States that CDFW generally does not support the use of relocation, salvage, and/or transplantation as mitigation for species • The project site is located within the Delhi Sands Area Subunit of the Jurupa Area Plan and within MSHCP Criteria Cells 21, 22 and 55 • States that the project is subject to a Joint Project Review process through the Western Riverside County RCA and will require preparation of a Determination of Biologically Equivalent or Superior Preservation to the RCA, USFWS, and CDFW • If the proposed project will divert or obstruct the natural flow, or change the bed, channel or bank of a river of stream, a Lake and Streambed Alteration Agreement will be required • Recommends incorporating water-wise concepts in project landscape design plans (e.g., native landscaping and water-efficient and targeted irrigation systems)	
US Fish and Wildlife Services (USFWS) – Palm Springs Office Kennon A. Corey, Assistant Field Supervisor	8/17/17	• Acknowledges that the project is a Specific Plan, and that additional environmental review may be forthcoming on a project-by-project basis, but recommends as much specificity as possible related to each of the four project phases and that biological surveys be completed over the entirety of the Specific Plan area with results included in the DEIR • States that recent biological survey data are needed to adequately analyze the direct, indirect, and cumulative project impacts • Requests the DEIR describe the threshold that will be relied on for requiring additional environmental review for each phase and sub-project tiering off of the Specific Plan • States that a project consistency analysis with the MSHCP is required • The project site is located within the Delhi Sands Area Subunit of the MSHCP's Jurupa Area Plan and falls inside MSHCP Criteria Cells 21, 22, and 55 – No DSF focused surveys shall be required. Instead, 50 acres of additional reserve lands shall be acquired within the geographic areas identified as appropriate in the MSHCP • The undeveloped northernmost part of the project site is the only remaining area within the Jurupa	• Section 5.3, *Biological Resources* • Appendix D, *Biological Resources Study* • *Appendix D, Joint Project Review*

Table 5.3-2 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
		Area Plan for the MSHCP to meet the 50-acre DSFLF habitat conservation objective. The Riverside County soil map prepared by the U.S. Natural Resources Conservation Service indicates that there are 39 to 55 acres of undeveloped DSFLF suitable habitat in the northern quarter of the site. • Recommends the project's conceptual land use plan be revised to shift commercial land uses out of DSF suitable habitat in the northernmost part of the project site (Industrial and Business Park Districts) and move them south into the Open Space District. • States that surveys for narrow endemic plants and burrowing owls should follow MSHCP/CDFW requirements – Recommends the DEIR include a mitigation measure stating that if three or fewer pairs of burrowing owls are found onsite, the project applicant will notify the USFWS and CDFW within three working days of discovering the owls, and will subsequently submit a Burrowing Owl Protection and Relocation Plan to the USFWS, CDFW, and Western Riverside County RCA for their review and approval • States that a Joint Project Review process for MSHCP consistency is required since the project site is within an MSHCP Criteria Area and that the review should be completed prior to circulation of the DEIR	
Santa Ana Regional Water Quality Control Board (RWQCB) Terri S. Reeder, Chief, Basin Planning Coastal Waters Section	8/18/17	RWQCB requests: • A discussion in the DEIR with regards to jurisdictional delineations and any actual impacted acreage	• Section 5.3, *Biological Resources* • Appendix D, *Biological Resources Study*

All comments are organized based on date received.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.3.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to biological resources are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

BIO-1 Have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

BIO-2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

BIO-3 Have a substantial adverse effect on state or federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

BIO-4 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

BIO-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

BIO-6 Conflict with the provisions of an adopted habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.3.4 Applicable Policies and Design Features

5.3.4.1 PLANS, POLICIES, AND PROGRAMS

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to biological resources. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP BIO-1 The project is required to pay mitigation fees pursuant to the Western Riverside County Multiple Species Habitat Conservation Plan.

PPP BIO-4 The Proposed Project shall be implemented in compliance with the following City of Jurupa Valley General Plan Conservation Element policies:

- Policy 1.2: Protection of Significant Trees
- Policy 1.3: Other Significant Vegetation
- Policy 1.7: Conservation of Riparian Areas

PPP HYD-3 As required by Municipal Code Chapter 6.05.050, *Storm Water/Urban Runoff Management and Discharge Controls*, *Section C*, new development or redevelopment projects shall control storm water runoff so as to prevent any deterioration of water quality that would impair subsequent

or competing uses of the water. The City Engineer shall identify the BMPs that may be implemented to prevent such deterioration and shall identify the manner of implementation. Documentation on the effectiveness of BMPs implemented to reduce the discharge of pollutants to the MS4 shall be required when requested by the City Engineer. The BMPs may include, but are not limited to, the following and may, among other things, require new developments or redevelopments to do any of the following:

(1) Increase permeable areas by leaving highly porous soil and low lying area undisturbed by:

(a) Incorporating landscaping, green roofs and open space into the project design;

(b) Using porous materials for or near driveways, drive aisles, parking stalls and low volume roads and walkways; and

(c) Incorporating detention ponds and infiltration pits into the project design.

(2) Direct runoff to permeable areas by orienting it away from impermeable areas to swales, berms, green strip filters, gravel beds, rain gardens, pervious pavement or other approved green infrastructure and French drains by:

(a) Installing rain-gutters oriented towards permeable areas;

(b) Modifying the grade of the property to divert flow to permeable areas and minimize the amount of storm water runoff leaving the property; and

c) Designing curbs, berms or other structures such that they do not isolate permeable or landscaped areas.

(3) Maximize storm water storage for reuse by using retention structures, subsurface areas, cisterns, or other structures to store storm water runoff for reuse or slow release.

(4) Rain gardens may be proposed in-lieu of a water quality basin when applicable and approved by the City Engineer.

PPP HYD-4 As required by Municipal Code Chapter 6.05.050, *Storm Water/Urban Runoff Management and Discharge Controls*, *Section E*, any person or entity that owns or operates a commercial and/or industrial facility(s) shall comply with the provisions of this chapter. All such facilities shall be subject to a regular program of inspection as required by this chapter, any NPDES permit issued by the State Water Resource Control Board, Santa Ana Regional Water Quality Control Board, Porter-Cologne Water Quality Control Act (Wat. Code Section 13000 et seq.), Title 33 U.S.C. Section 1251 et seq. (Clean Water Act), any applicable state or federal regulations promulgated thereto, and any related administrative orders or permits issued in connection therewith.

5.3.4.2 PROJECT DESIGN FEATURES

There are no project design features that apply to biological resources.

5.3.5 Environmental Impacts

Project development would involve clearance of approximately 212.65 acres of the site—the entire proposed Industrial Park (190 acres), and three portions of the proposed Business Park site totaling about 34 acres.

Impact BIO-1: Threshold: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

MSHCP-Covered Species

Burrowing Owl

Suitable habitat is present onsite in brittlebush scrub, disturbed, developed, and rock outcrop vegetation communities, and burrowing owl is considered to have moderate potential to occur onsite. Burrowing owl was not detected in focused surveys onsite in 2016-17 but could colonize the site before construction.

Level of Significance before Mitigation: Potentially significant.

Mitigation Measure BIO-1 requires a 30-day preconstruction survey and is required in order to reduce impacts to less than significant.

Least Bell's Vireo

Least Bell's vireo was observed onsite during focused surveys in 2017. A total of 3.90 acres of suitable nesting habitat is present on the project site within southern willow scrub and mulefat vegetation communities in the proposed Open Space District and in the southeast part of the proposed Industrial Park (see Figure 5.3-1).

Level of Significance before Mitigation: Potentially significant.

Mitigation Measure BIO-2 is required in order to reduce impacts to less than significant.

Delhi Sands Flower-Loving Fly

DSFLF is not expected to occur onsite. A soil gradation analysis by the project geotechnical consultant in April 2017 determined that Delhi Sands soils are not present on the project site, and thus DSFLF can be presumed absent from the site. As stated by the RCA:

> The applicant shall implement Mitigation Measures (MM) Bio-1b (DSF Mitigation Options) as described in the *Assessment* [MIG, General Biological Resources Assessment, 2018]. Of the two options, the applicant will implement Option 1 – Acquire DSF Habitat: "RCA will purchase 50 acres of DSF mitigation credits from the existing Colton Dunes Conservation Bank ('DSF Habitat'). RCA and the

applicant entered into the agreement for funding and acquisition dated September 10, 2018, or as amended, that established the terms and conditions for the applicant to contribute toward the purchase price of the DSF mitigation credits. Payment by the applicant to the RCA to acquire the DSF mitigation credits would represent the Project's compliance and consistency with the MSHCP goals for DSF habitat conservation." (RCA JPR 2018).

Level of Significance before Mitigation: Potentially significant.

Mitigation Measure BIO-3 is required in order to reduce impacts to less than significant.

Southwestern Willow Flycatcher

Suitable habitat for southwest willow flycatcher is present onsite in southern willow scrub, but biologists did not detect flycatchers during protocol-level surveys in 2017. Although they are known to occasionally occur at the project site and immediate vicinity during migration, they are not known to nest on the site. Therefore, the proposed project is not expected to impact southwestern willow flycatcher, and no additional surveys or impact mitigation measures would be required for this species.

Level of Significance before Mitigation: Less than significant.

Species Not Covered by MSHCP

Silvery Legless Lizard

Though not covered by the MSHCP, the silvery legless lizard is a California Species of Special Concern. This species is often found under or near rocks, boards, logs, and compacted woodrat nests. The silvery legless lizard is dependent on soils with relatively high moisture content. Due to the presence of 56.27 acres of marginally suitable desert scrub (brittlebush) habitat, gravelly loam substrate in the quarry pit and borrow areas, and a reported occurrence within 3.8 miles south of the site, this species is considered to have a moderate potential to occur in the undeveloped portions of the project site. Potential direct impacts to this species may result from project construction and post-construction activities.

Level of Significance before Mitigation: Potentially significant.

Mitigation Measure BIO-4 is required in order to reduce impacts to less than significant.

Western Mastiff Bat

The western mastiff bat is designated a California Species of Concern and identified as a high priority species by the Western Bat Working Group (WBWG). Suitable habitat for western mastiff bat is present onsite in eucalyptus grove, brittlebush scrub, developed, rock outcrop, and nonnative grassland vegetation communities totaling about 227 acres. There are recent occurrence records for western mastiff bat in the vicinity of the site (approximately 2.7 miles northeast).

Level of Significance before Mitigation: Potentially significant.

Mitigation Measure BIO-7 is required in order to reduce impacts to less than significant.

Western Yellow Bat

The western yellow bat is designated a California Species of Concern and identified as a high priority species by the WBWG. The project site has palm trees and eucalyptus trees that have the potential to support roosting western yellow bat. This species may also roost in the riparian fringe surrounding Crestmore Lake. There are recent records of occurrence in the vicinity of the project site (approximately 2.8 miles east).

Level of Significance before Mitigation: Potentially significant.

Mitigation Measure BIO-7 is required in order to reduce impacts to less than significant.

Pocketed Free-Tailed Bat

Suitable habitat for pocketed free-tailed bat is present on the project site within rock outcrop and brittlebush scrub communities totaling 64.07 acres. Suitable roost habitat is present on the project site in abandoned buildings and rock crevices on vertical quarry walls that are not accessible by humans. There are recent records of occurrence in the vicinity of the project site (approximately 2.5 miles northeast).

Level of Significance before Mitigation: Potentially significant.

Mitigation Measure BIO-7 is required in order to reduce impacts to less than significant.

Southern Grasshopper Mouse

The southern grasshopper mouse is designated a California Species of Concern. The southern grasshopper mouse has the potential to occur on-site in marginally suitable nonnative grassland and brittlebush scrub communities. However, not all portions of these communities are suitable to support rodent burrows due to a lack of friable soils for digging. The placement of fill, pavement, and cement slurry from cement processing activities has substantially altered native soil composition and texture. According to the burrowing owl survey report, 15.29 acres of small mammal burrow complexes provide potentially suitable habitat for southern grasshopper mouse. There are recent records of occurrence in the vicinity of the project site (approximately 4.5 miles east).

Level of Significance before Mitigation: Potentially significant.

Mitigation Measure BIO-6 is required in order to reduce impacts to less than significant.

American Badger

The American badger is a designated California Species of Concern. Although evidence of American badgers (observations, tracks, and active and potential den sites) was not observed on the project site, suitable habitat is present, including brittlebush scrub, eucalyptus grove, and southern willow scrub. There are recent records of occurrence in the vicinity of the project site (approximately 5 miles east).

Level of Significance before Mitigation: Potentially significant.

Mitigation Measure BIO-5 is required in order to reduce impacts to less than significant.

Plant Species

The project site was systematically examined for 28 special status plant species with potential to occupy the site based on a review of nearby species occurrence records, which include the three narrow endemic plant species. Site coverage consisted of slowly walking parallel transects over undeveloped portions of the site where intact vegetation was present to allow accurate identification of plants detectable at that time. The focused surveys did not identify sensitive plant species on-site, and those species are not expected to occur on-site due to lack of suitable habitat. Project development would not have substantial impacts on sensitive plant species.

Level of Significance before Mitigation: Less than significant.

Level of Significance before Mitigation: Although impacts to plant species would be less than significant, impacts to several sensitive animal species are potentially significant. Mitigation Measures BIO-1 to BIO-7 are required to reduce Impact BIO-1 to less than significant.

Impact BIO-2 Threshold: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Project development would involve the removal of southern willow scrub, which is classified as a sensitive natural community and regulated as riparian habitat by CDFW. The 0.332 acre of impacted riparian habitat (K) is in a quarry pit in the southeast part of the site in the proposed Industrial Park.

Level of Significance before Mitigation: Potentially significant.

Mitigation Measure BIO-8 is required to reduce Impact BIO-2 to less than significant.

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

Project development would involve the removal of riparian habitat (K), which is regulated as Waters of the State by the RWQCB.

Level of Significance before Mitigation: Potentially Significant.

Mitigation Measure BIO-9 is required to reduce Impact BIO-3 to less than significant.

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

The project site provides potential nesting and/or foraging habitat for migratory birds and raptors, including northern harrier (*Circus cyaneus*), prairie falcon (*Falco mexicanus*), red-tailed hawk, sharp- shinned hawk (*Accipiter striatus*), yellow warbler (*Dendroica petechia*), and rufous-crowned sparrow. Several inactive raptor and songbird nests were observed during a tree survey of parts of the site in June 2017. The impact to these species is potentially significant.

The project site is not available for regional overland wildlife movement; it is bounded to the east, west, and south by residential, commercial, and industrial land uses and is surrounded by an eight-foot chain-link fence.

Level of Significance before Mitigation: Potentially Significant.

Mitigation Measure BIO-10 is required to reduce Impact BIO-4 to less than significant.

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

The General Biological Resources Assessment evaluated the proposed project for consistency with all applicable local and regional policies of the 2017 City of Jurupa Valley General Plan Conservation and Open Space Element, including COS 1.2, Protection of Significant Trees. "Protect and preserve significant trees, as determined by the City Council upon the recommendation of the Planning Commission. Significant trees are those trees that make substantial contributions to natural habitat or to the urban landscape due to their species, size, or rarity. In particular, California native trees should be protected" (see Table 5.9-2, *City of Jurupa Valley General Plan Consistency Analysis*).

A tree survey was completed by MIG biologists in June 2017 and an analysis of tree removal impacts was conducted by MIG in August 2017. The impact analysis considered whether trees planned for removal are native or nonnative and evaluated the overall condition of trees to be removed.

Project development would result in the loss of 31 native trees and 1,573 nonnative trees planted around existing buildings and parking lots of the decommissioned cement plant. The tree impact analysis concluded that over 60 percent of trees planned for removal are currently in overall poor condition (i.e., dead or dying potential hazard trees) and over 99 percent are nonnative, ornamental plantings. Although most trees identified onsite are not native to the region and were planted for landscaping purposes, removal of an estimated 1,604 trees would constitute a potentially significant environmental impact due to the ecosystem services that these trees currently provide.

Level of Significance before Mitigation: Potentially significant.

Mitigation Measures BIO-7, -8, -9, -10, and -11 are required to reduce Impact BIO-5 to less than significant.

Impact BIO-6 Threshold: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Criteria Cells

The project site is within the MSHCP Jurupa Area Plan. The project site contains three Criteria Cells (21, 22, and 55) and one Area Plan Sub Unit, SU3-Delhi Sands Area. Areas to be conserved under the plan are to include suitable dispersal habitat and/or movement habitat and interconnecting linkages within Core Areas or that are contiguous to areas that have already been conserved within and outside the Plan Area, including locations outside the Criteria Area or within San Bernardino County. Conservation value is measured by such factors as occupation by DSFLF and opportunities for connectivity to other areas conserved for the species.

Based on the results of a focused assessment conducted in potential suitable habitat areas, DSFLF is presumed absent from the project site because of the lack of Delhi Sands. The project site does not provide dispersal habitat or serve as an interconnected habitat linkage to conservation areas for DSFLF.

The project is required to comply with all applicable Non-contiguous Habitat-3 (NCH-3)/Agua Mansa mitigation requirements, as defined by the MSHCP. However, due to the lack of onsite DSFLF habitat and the need to remediate hexavalent chromium and other heavy metals at the project site, on-site mitigation is not feasible, and off-site mitigation is the only feasible alternative. On March 15, 2018, the applicant met with the RCA, the USFWS, and the City of Jurupa Valley to discuss potential mitigation scenarios. The MSHCP does not require mitigation to occur solely within Riverside County, and the area of allowed mitigation extends into San Bernardino County. Originally, the USFWS and the RCA have identified approximately 472 acres of land in San Bernardino County that are feasible mitigation sites. The land includes both contiguous and non-contiguous DSFLF habitat within existing DSFLF mitigation banks, public land, and private land. On September 10, 2018, the RCA Board of Directors approved a funding agreement with Crestmore Redevelopment, LLC (the project applicant). The fee agreement established the funding mechanisms to be used to purchase 50 conservation credits from a DSFLF conservation bank located in the City of Colton. An amendment to the agreement in April 2019 updated the funding mechanisms for the conservation credit purchase (RCA 2019) and may be amended further. Payment of these fees would address the continued applicability of the conservation goal to the project site and ensure consistency with MSHCP objectives for the long-term conservation of DSFLF.

Required Surveys

Narrow Endemic Plant Species Survey Area

The project site is in a predetermined survey area for certain narrow endemic plant species: San Diego ambrosia (April-October), Brand's star phacelia (March–June), and San Miguel savory (March–July). A habitat assessment for those species in July 2016 determined that suitable habitat for the three species is absent from the site. Focused surveys for 25 sensitive plant species not covered by the MSHCP did not identify any of those species onsite. No additional action is required to be consistent with MSHCP goals respecting special-status plant species.

Burrowing Owl Survey Area

The project site is in a predetermined burrowing owl survey area. A July 2016 habitat assessment identified suitable burrowing owl habitat onsite. Although this species was not observed during protocol level surveys, suitable habitat was determined to be present on-site in several vegetation communities. There is potential for burrowing owl to colonize the site prior to construction. Therefore, in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (Riverside County 2006), a 30-day preconstruction survey would be conducted prior to the initiation of construction to ensure protection for this species.

Riparian/Riverine Resources

The MSHCP defines riparian/riverine areas as natural "…lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year." The MSHCP further asserts, "…areas demonstrating characteristics as described above which are artificially created are not included" in the above definitions. There are no riparian/riverine resources on or adjacent to the project site. All on-site wetland features were artificially created through development and excavation related to cement plant operations. The southeastern depression and Crestmore Lake were pits created for mining and mineral extraction that ended up encountering unanticipated groundwater. Three of the wetlands in the northern part of the site consist of depressions created by disturbed soil conditions. These features are wholly supported by nuisance flows originating from leaking water infrastructure associated with the cement processing facility. These features would revert to uplands in the absence of this artificial water source. Furthermore, these water features are not confluent (i.e., no surface flow connection) with downstream conservation area resources associated with the Santa Ana River. Therefore, these water features do not meet the definition of an MSHCP Riparian/Riverine Resource. The RCA and regulatory agencies concurred with this finding at a joint meeting with MIG and Viridian Partners on March 15, 2018. A DBESP is not required.

Urban/Wildlands Interface

The project site is not within or adjacent to an MSHCP Linkage or Constrained Linkage. The project site contains a small portion of Existing Core A and Proposed Non-Contiguous Habitat Blocks 1, 2, and 3. Project construction in proximity to the MSHCP Conservation Area has the potential to result in indirect effects to natural communities. Therefore, an Urban/Wildland Interface analysis pursuant to Section 6.1.4 was required for compliance with MSHCP and is discussed under Mitigation Measure BIO-12.

Criteria Area Species Survey

The project site is not in a survey area for criteria area plant species. No MSHCP focused surveys or mitigation are required or proposed.

Amphibian Species Survey Area

The project site is not in a predetermined amphibian species survey area. No MSHCP focused surveys or mitigation are required or proposed.

Mammal Species Survey Area

The project site is not in a predetermined mammal species survey area. No MSHCP focused surveys or mitigation are required or proposed.

Habitat Assessment and Negotiation Strategy/Joint Project Review

The project applicant submitted a Habitat Assessment and Negotiation Strategy analysis application to the City of Jurupa Valley and RCA on 10/27/2018. A Joint Project Review (JPR) application was submitted to RCA on 12/7/18. The RCA issued a JPR on December 7, 2018, concluding that "The project is consistent with both the Criteria and other Plan Requirements" (RCA JPR 2018).

Level of Significance before Mitigation: Potentially significant. Mitigation Measures BIO-1, -2, -3, and -12 are required to reduce Impact BIO-6 to less than significant.

5.3.6 Cumulative Impacts

The area considered for cumulative impacts is the MSHCP Plan Area. Impacts to MSHCP-covered species are considered less than significant for projects complying with MSHCP requirements. See further discussion of the MSHCP and MSHCP compliance above in Section 5.3-1 and Impact BIO-6.

5.3.7 Level of Significance Before Mitigation

Without mitigation, these impacts would be **potentially significant**:

- **Impact BIO-1:** Project development could impact several sensitive animal species.
- **Impact BIO-2:** Project development would impact 0.332 acre of southern willow scrub that is regulated as a riparian habitat by CDFW.
- **Impact BIO-3:** Development of the proposed project would impact 0.332 acre of non-wetland riparian habitat regulated as Waters of the State by RWQCB.
- **Impact BIO-4:** Development of the proposed project would impact vegetation that could be used by nesting birds.
- **Impact BIO-5:** Project development could conflict with City of Jurupa Valley General Plan policies protecting riparian habitats, significant trees, and other vegetation.
- **Impact BIO-6:** Project development could conflict with the provisions of the Western Riverside County Multiple-Species Habitat Conservation Plan.

5.3.8 Mitigation Measures

Impact BIO-1

MM BIO-1 **Preconstruction burrowing owl survey.** Within 30 calendar days prior to grading, a qualified biologist shall implement focused preconstruction surveys. Surveys shall be conducted by a CDFW-approved biologist prior to the initiation of ground disturbance (including, but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading). In conformance with Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (2006) and California Burrowing Owl Consortium's 1993 protocols (which are recommended by the CDFW), the surveys will consist of a minimum of three site visits. A brief biological technical report will be prepared and submitted to the City and RCA that describes the results of the preconstruction survey. The report shall be reviewed by the City of Jurupa Valley Planning Department prior to the issuance of a grading permit. If the preconstruction survey does not identify burrowing owls in the impact area, a grading permit may be issued without restriction. If it is determined that burrowing owls have colonized the project site prior to the initiation of construction, the project proponent shall immediately inform RCA, USFWS, and CDFW and will be required to prepare a Burrowing Owl Protection and Relocation Plan for approval by RCA USFWS, and CDFW prior to initiating ground disturbance. If burrowing owls are determined to be present in areas proposed for ground disturbance, the following avoidance measures will be implemented:

a. Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through noninvasive methods that either the birds have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Owls on-site after February 1 will be assumed to be nesting unless evidence indicates otherwise. This nest protection buffer will be maintained until August 31 or, based on monitoring evidence, until the young owls are foraging independently or the nest is no longer active.

   Unless otherwise authorized by CDFW and/or the RCA, a 250-foot buffer, within which no activity will be permissible, will be maintained between project activities and nesting burrowing owls during the nesting season. This protected area will remain in effect until August 31 or, based upon monitoring evidence, until the young owls are foraging independently. For burrowing owls present during the nonbreeding season (generally September 1 to January 31), a 150-foot buffer zone will be maintained around the occupied burrow(s).

b. If there is any possibility that owls will be injured or killed as a result of construction activities, the birds may be passively relocated during the nonbreeding season in coordination with the City, RCA, and CDFW. Relocation of owls will be performed by a

qualified biologist using one-way doors, which should be installed in all burrows within the impact area and left in place for at least two nights. Immediately prior to the initiation of grading, these one-way doors will be removed and the burrows backfilled. To avoid the potential for owls evicted from a burrow to occupy other burrows in the impact area, one-way doors will be placed in all potentially suitable burrows in the impact area when eviction occurs.

c. Preparation of a Burrowing Owl Protection and Relocation Plan may be required if active and/or passive relocation is necessary. The relocation plan will outline the basic process and provides options for avoidance and mitigation. The relocation plan will be approved by the RCA, USFWS, and CDFW prior to implementation.

MM BIO-2 **Least Bell's vireo.** Prior to the issuance of a grading permit, the Planning Department shall verify that construction activities are scheduled (to the extent feasible) to commence outside of the least Bell's vireo nesting season (approximately mid-March until September), depending on when the birds arrive from and depart to wintering areas or whenever nesting birds are present, as determined by a biological monitor with demonstrated LBV experience.

a) Any construction activities that commence during the least Bell's vireo nesting season shall require preconstruction surveys for nesting LBV. Such surveys shall be conducted within three business days prior to construction by a qualified biologist that is experienced with accurately identifying LBV and possesses knowledge of the species' biology and life history. The survey area shall consist of the impact area and a 500-foot buffer around Crestmore Lake and the commercial quarry.

b) If any active LBV nests are detected within the survey area, a nest protection buffer of 500 feet around the nest shall be delineated, flagged, and avoided until the nesting cycle is complete. The avoidance buffer may be modified and/or other recommendations proposed to minimize impacts, as determined appropriate by a full-time biological monitor. Supporting documentation shall be prepared and submitted to the RCA and wildlife agencies prior to construction to outline any proposed LBV monitoring activities. In addition, the following measures shall be taken to minimize potential indirect impacts to active LBV nests:

- Prior to construction, a training program shall be developed and implemented by the project biologist to inform all construction personnel about the federal- and state-listed LBV, the location of suitable habitat in relation to the work area, and the importance of complying with species avoidance and impact minimization measures pursuant to FESA and CESA.
- Construction contractors shall stage equipment in areas that will create the greatest distance (minimum of 500 feet) between construction noise sources and LBV-suitable habitat.

- All construction work within 500 feet of LBV habitat shall occur during daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours determined by the City. Construction contractors shall install properly operating and maintained mufflers on all construction equipment, fixed or mobile, to reduce construction equipment noise. Mufflers shall be installed consistent with manufacturers' standards. Construction contractors shall orient stationary construction equipment so that emitted noise is directed away from any occupied LBV habitat.
- Any construction-related activities that could occur within 500 feet of an active LBV nest will require daily noise monitoring. A qualified biologist who possesses experience monitoring LBV nesting behavior will establish a baseline of hourly ambient noise levels by collecting measurements at several noise monitoring stations using an RCA-approved sound monitoring device (e.g., Mastech MS6700 digital sound level meter or equivalent). Noise monitoring stations will be located 1) adjacent to construction areas within 500 feet of suitable LBV habitat and 2) along the edge of suitable LBV habitat area where access is feasible. The exact location and number of noise monitoring stations will be determined by the qualified biologist. Baseline noise measurements will be collected at the established monitoring stations prior to the nesting season and prior to construction (if feasible). On a daily basis during construction, the qualified biologist shall collect hourly noise measurements at the monitoring stations using the RCA-approved noise monitoring device. If the qualified biologist determines that nesting activities are being disturbed at any time during construction, the noise level that triggered the disturbance to nesting LBV will be recorded and identified as the "disturbance threshold," and the qualified biologist will issue a stop work order to the contractor immediately. All construction activities within the 500-foot nest protection buffer will cease until the noise levels can be reduced below the disturbance threshold. To do this, the qualified biologist shall direct the contractor to make operational changes, utilize technology to reduce construction noise such as mufflers, and/or install a barrier to alleviate noise levels during the breeding season. Installation of noise barriers and any other corrective actions taken to mitigate noise during the construction period shall be completed prior to the LBV nesting season and would be done in coordination with the RCA, CDFW, and USFWS.
- Daily noise monitoring will continue following implementation of the corrective actions to ensure that the disturbance threshold for nesting LBV is not exceeded and that no further disturbance to nesting LBV occurs. The results of daily noise monitoring measurements will be tabulated, and a summary of all monitoring activities and corrective actions will be recorded in daily monitoring reports. These reports will be compiled and submitted to the RCA and wildlife agencies on a monthly basis.

- If, after all corrective actions are implemented, the monitoring biologist determines that the normal expected breeding behavior of birds is still being affected, work shall again cease, and the RCA and wildlife agencies shall be contacted to discuss the appropriate course of action.

Any activities in the Open Space District—including remediation or if a recreational use is proposed in the future—shall avoid direct and indirect impacts to LBV habitat, and the applicant will be responsible for implementing the following avoidance and minimization measures, which will be included in project plans, to safeguard long-term conservation and sustainability of the species:

a) The Open Space District will be fenced and will restrict all access, except for areas that are required to undergo remediation or construction pursuant to approved plans. Prior to any public access into the Open Space District and the City's issuance of a Certificate of Occupancy or equivalent documentation for the completion of recreation facilities in the Open Space District, the applicant shall execute and record a deed restriction, conservation easement, or other instrument in a form acceptable to the Riverside Conservation Authority that provides for the permanent protection of the occupied least Bell's vireo habitat, as depicted on Figure 9, Proposed Fencing and Protection Areas, in the General Biological Resources Assessment in Appendix D of this DEIR. The instrument shall clearly indicate that the restricted area shall be preserved and no development within the restricted area is allowed other than environmental remediation and routine property maintenance activities, which may occur under the guidance of a qualified biologist.

b) A fencing plan that uses both geographic site features and fencing will be implemented to prevent access to the protected least Bell's vireo habitat within the proposed restricted area. A draft fence alignment and proposed feasible buffer are illustrated on Figure 9 of the GBRA, included as Appendix D to this DEIR. The locations of the restricted area, proposed fencing, and any buffer areas are subject to review and approval by the resource agencies party to the MSHCP as well as the DTSC.

MM BIO-3 **Delhi sands flower-loving fly.** Prior to the issuance of a grading permit for the area impacted by the Delhi sands flower-loving fly, RCA will purchase 50 acres of DSFLF mitigation credits from the existing Colton Dunes Conservation Bank. The applicant entered into the agreement with RCA for funding and acquisition dated September 10, 2018, amended April 1, 2019. The agreement establishes the terms and conditions for the applicant to contribute to the purchase price of the DSFLF mitigation credits. Payment by the applicant to the RCA to acquire the DSFLF mitigation credits would represent the project's compliance and consistency with the MSHCP goals for DSFLF habitat conservation. If the agreement to purchase the Colton Dunes Conservation Bank DSFLF mitigation credits cannot be consummated, the project applicant may acquire 43 acres of DSFLF habitat within Riverside County or San Bernardino County subject to approval by the RCA and the wildlife agencies and provided the property has long-term conservation value for the species and will be managed in perpetuity.

MM BIO-4 **Silvery legless lizard.** Within 30 days prior to ground-disturbing activities associated with project construction, the applicant shall retain a qualified biologist to conduct focused silvery legless lizard surveys within areas of suitable habitat, to be determined by the biologist. The qualified biologist will be familiar with legless lizard ecology and survey methods and will have approval from CDFW to relocate this species. The scope of the survey shall be determined by the qualified biologist in consultation with CDFW and shall be sufficient to determine presence or absence in the areas of disturbance. If the focused survey results are negative, a letter report shall be submitted to the City, RCA, and CDFW, and no further action shall be required.

If the silvery legless lizard is found during the preconstruction surveys in the proposed work areas during any phase of the project, the following steps shall be taken:

- Silvery legless lizards shall be captured by hand by the qualified biologist and relocated to nearby suitable protected habitat at a preapproved location outside of the project site. This may include areas in the proposed Open Space District or on public lands in the vicinity if approved by the landholding agency.
- Construction monitoring shall be required for all new ground-breaking activities within silvery legless lizard habitat. Construction monitors shall capture and relocate lizards as specified above.
- A letter report shall be submitted to the City, RCA, and CDFW within 30 days of legless lizard relocation, or as directed by CDFW. The report will document trapping and relocation methods and results and identify any mortality that occurred during the relocation event. This report shall be submitted to the City, RCA, and CDFW no more than 14 days following the last day of each phase of project construction.

MM BIO-5 **American badger.** No more than 30 days prior to the commencement of industrial business park construction activities, the applicant shall retain a CDFW-approved biologist to conduct preconstruction surveys for American badger within suitable habitat on the project site in brittlebush scrub, eucalyptus grove, and southern willow scrub where friable soils are present. If present, occupied badger dens shall be flagged, and ground-disturbing activities avoided within 50 feet of the occupied den. Maternity dens shall be avoided during pup-rearing season (February 15 through July 1), and a minimum 200-foot protection buffer established. The extent of buffers shall be flagged in the field utilizing a method highly visible by construction crews. Buffers may be modified with the concurrence of CDFW and/or RCA. Maternity dens shall be flagged for avoidance and identified on construction maps, and a biological monitor shall be present during construction to monitor for adequate protection of all identified dens and to ensure that all flagging is kept in good working order.

If avoidance of a nonmaternity den (impacts to maternity dens are not allowed) is not feasible, badgers shall be relocated by slowly excavating the burrow (either by hand or mechanized

equipment under the direct supervision of the biologist, removing no more than 4 inches at a time) before or after the rearing season (15 February through 1 July). Any passive relocation of badgers shall occur only after consultation with CDFW and the biological monitor.

Prior to the final CDFW or RCA inspection or occupancy, whichever comes first, a written report documenting all badger-related activities (den flagging, monitoring, badger removal, etc.) shall be provided to the City, RCA, and CDFW.

MM BIO-6 **Southern grasshopper mouse.** Prior to initiation of ground-disturbing activities (i.e., vegetation removal, grubbing, and grading) during any time of the year, the applicant shall retain a CDFW-approved biologist to conduct preconstruction surveys for southern grasshopper mouse. Surveys shall focus on all areas of suitable burrow habitat within nonnative grassland and brittlebush scrub communities. If this species is observed within the project site during preconstruction surveys, it will be relocated with the approval of the City, RCA, and CDFW, to an approved site with suitable habitat for this species. Surveys and relocation of southern grasshopper mouse may occur prior to construction; however, focused surveys must occur within 30 days prior to construction to ensure that no special-status wildlife is present within the project site during construction. Survey and relocation methods shall be approved by CDFW prior to commencement of grading.

MM BIO-7 **Special Status Bat Species**

a. Maternity colony surveys for special-status bat species shall be conducted during the maternity season (March 1 to July 31). If no active roosts are found, then no further action is required. If the biologist detects the presence of active maternity roost or hibernacula (i.e., a non-maternity roost), then MM BIO-7b, -7c, and -7d will be implemented, as appropriate. Additionally, no more than 30 days prior to the removal of trees or structures, the applicant shall retain a biologist holding a CDFW collection permit and a Memorandum of Understanding with CDFW allowing the biologist to handle bats, to conduct preconstruction surveys for sensitive bats within 50 feet of project activities.

b. If active maternity roosts or hibernacula are found in a structure or tree scheduled for demolition/removal, the biologist shall survey (through the use of radio telemetry or other CDFW-approved methods) for nearby alternative maternity colony sites. If the biologist determines in consultation with the CDFW and/or RCA that there are alternative roost sites used by the maternity colony and young are not present, then bat eviction procedures as outlined in MM BIO-7d would apply. However, if there are no alternative roost sites used by the maternity colony nearby, MM BIO-7c (providing substitute maternity roost nearby) would be required. If active maternity roosts are absent, but a hibernaculum is present, then MM BIO-7c would not be necessary, but MM BIO-7d would be required.

c. If a maternity roost will be impacted by the project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony shall be

provided on, or in close proximity to, the project site no less than three months prior to the eviction of the colony. Eviction procedures are outlined in MM BIO-7d. Alternative roost sites will be constructed in accordance with the specific bat's requirements in coordination with CDFW. By making the roosting habitat available prior to eviction (MM BIO-7d), the colony will have a better chance of finding and using the roost. Alternative roost sites must be of comparable size and proximal in location to the impacted colony. The CDFW shall also be notified of any hibernacula or active nurseries within the construction zone.

d. If nonbreeding bat hibernacula are found in structures or trees scheduled to be removed, the individuals shall be safely evicted under the direction of a qualified biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (e.g., installation of one-way doors). In situations requiring one-way doors, a minimum of one week shall pass after doors are installed and temperatures should be sufficiently warm for bats to exit the roost, because bats do not typically leave their roost daily during winter months in southern coastal California. This action should allow all bats to leave during the course of one week. Roosts that need to be removed in situations where the use of one-way doors is not necessary in the judgment of the qualified biologist shall first be disturbed by various means at the direction of the bat biologist at dusk to allow bats to escape during the darker hours, and the roost tree shall be removed or the grading shall occur the next day (i.e., there shall be no less or more than one night between initial disturbance and the grading or tree removal).

If an active maternity roost is in an area that will be impacted by the project and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (i.e., prior to 1 March) or after young are flying (i.e., after July 31) using the exclusion techniques described above.

Impact BIO-2

MM BIO-8 Prior to remediation of the mining pit and subsequent construction of the industrial business park, the project proponent shall obtain a Lake and Streambed Alteration Agreement (LSAA) from CDFW to authorize permanent impacts to 0.332 acre of riparian habitat (K). The project applicant will be responsible for complying with all permit conditions. Such conditions may include, but are not limited to, implementation of best management practices (i.e., erosion and sediment control measures) and seasonal work restrictions, as appropriate. In addition, CDFW is expected to require compensatory mitigation for impacts to jurisdictional riparian habitat. The amount of required compensatory habitat acreage will be based on the functions and values of impacted features. Habitat compensation will be provided at a ratio of up to 3:1 of created to filled or disturbed in-kind habitat, pending coordination with CDFW. This ratio may be reduced through the permit process if CDFW find that a different ratio is sufficient to mitigate impacts to jurisdictional riparian habitat. Riparian habitat K shall not be removed until the LSAA is received from CDFW or correspondence is received from CDFW indicating no permit is needed.

Impact BIO-3

MM BIO-9 The US Army Corps of Engineers considers the project site outside of its regulatory jurisdiction, and no federal permit is required. However, 0.332 acre of state jurisdictional riparian habitat (K) would be removed during implementation of the project. The applicant will be required to submit a Notice of Intent to the Santa Ana Regional Water Quality Control Board (RWQCB) to receive Waste Discharge Requirements (WDRs), and all conditions will be agreed upon prior to project construction. The project applicant will be responsible for complying with all conditions of the WDRs.

The applicant may be required to prepare a habitat mitigation monitoring plan to be submitted with the agency permit applications, including an agreed-upon replacement ratio of wetlands with the RWQCB. Compensatory mitigation may include in-kind restoration at a minimum 3:1 ratio of created to filled wetlands. If the ratio is increased by the RWQCB, then the more conservative ratio will be used. The amount of compensatory wetland acreage will be based on the functions and values of impacted features. As an alternative to wetland restoration, equivalent mitigation credits may be purchased at a mitigation bank, or the applicant may enter into an in-lieu fee agreement to offset impacts to jurisdictional features. Purchase of mitigation credits shall be subject to approval and verification by the RWQCB. A qualified biologist shall prepare a mitigation plan that provides detailed information about the bank or in-lieu fee agreement and how this approach will result in no net loss of wetlands. The plan shall be prepared pursuant to and through consultation with the RWQCB. As conditions of permit approval, impact minimization measures may also be required and could include implementation of best management practices (e.g., erosion and sediment control measures) and seasonal work restrictions, as appropriate.

State jurisdictional features shall not be removed until the permit is received from the RWQCB or correspondence is received indicating that a permit is not required.

Impact BIO-4

MM BIO-10 **Nesting Bird Survey**

a. To avoid impacts to nesting birds associated with development of the industrial business park, construction activities and construction noise should occur outside the avian nesting season (prior to February 1 or after September 1). If construction and construction noise occur within the avian nesting season (during the period from February 1 to September 1), all suitable habitats within 100 feet of the project site shall be thoroughly surveyed for the presence of nests by a qualified biologist no more than five days before commencement of any vegetation removal. If it is determined that the project site is occupied by nesting birds, Mitigation Measure BIO-10b shall apply.

b. If pre-construction nesting bird surveys result in the location of active nests, no grading, vegetation removal, or heavy equipment activity shall take place within 300 feet of non-

raptor nests and 500 feet of raptor nests, or as determined by a qualified biologist and subject to review and approval by the Planning Department. Protective measures (e.g., sampling) shall be required to ensure compliance with the MBTA and California Fish and Game Code. The qualified biologist shall serve as a construction monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts occur. A report of the findings, prepared by a qualified biologist, shall be submitted to the City and RCA prior to construction-related activities that have the potential to disturb any active nests during the nesting season. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, and no vegetation clearing or ground disturbance shall commence within the fenced area until the qualified biologist and Planning Department verify that the nests are no longer occupied and the juvenile birds can survive independently from the nests.

Impact BIO-5

MM BIO-7, MM BIO-8, MM BIO-9, and MM BIO-10 apply to Impact BIO-5 in addition to the following mitigation measure:

MM BIO-11 A tree replacement planting program shall be implemented to mitigate for the loss of 1,604 trees as a result of the business park development. A project-specific tree mitigation ratio was developed to offset this impact and is based upon whether trees planned for removal are native or non-native and their overall health and condition. A detailed methodology for determining tree mitigation requirements is included in the Tree Removal Impact Analysis and Mitigation Determination memorandum (Appendix K). To compensate for the loss of 31 native trees and 1,573 non-native trees, the Applicant will be required to plant a minimum of 61 native trees and 507 native or non-native trees. Trees shall be selected that provide similar habitat functions and values as the trees planned for removal. Native replacement trees will be 1- to 5-gallon size, or as deemed appropriate by a qualified biologist or arborist. In addition to individual trees, several trees shall be planted in groupings of 10 trees or more, subject to availability of space and where site conditions permit (i.e., topography and soils). These groupings will provide optimal structure and cover to support potential nesting birds and roosting bats. The identification of suitable replacement trees shall be determined by a qualified biologist in coordination with an arborist and/or landscape architect and will be subject to approval by the City's Planning Department. In accordance with MSHCP provisions, the replacement trees shall not include invasive, nonnative species in the portions of the development that are adjacent to the Open Space District, which contains sensitive habitats. Invasive plants that should be avoided are included in Section 6.1 of the MSHCP, Table 6-2, "Plants That Should Be Avoided Adjacent to the MSHCP Conservation Area."

Replacement trees may be planted at entry points, common areas, adjacent to roadways, between buildings, along the perimeters of parking lots, and within landscape screening/buffer areas. All replacement trees shall be planted within the development area and buffer areas

between the development area and the proposed Open Space District. Replacement tree stands shall be mostly concentrated within the development area north of the proposed Open Space District and within buffer/screening areas along El Rivino Road.

Tree mitigation performance standards shall be incorporated into the landscape plan to ensure the successful establishment and survivorship of replacement tree plantings. The landscape and planting plans shall be developed in accordance with the City of Jurupa Valley's Ordinance Number 2015-17, Chapter 9.50, related to implementing the City's Water Efficient Landscape Design Requirements. The applicant shall be required to maintain the replacement trees on the project site for no less than five years from the date of planting and shall replace any trees that die during this period; this exceeds the City's landscape maintenance requirement of one year per Ordinance Number 2015-17.

Impact BIO-6

MM BIO-1, MM BIO-2, and MM BIO-3 apply to Impact BIO-6 in addition to the following mitigation measure:

MM BIO-12 **MSHCP Urban Wildland Interface Guidelines.** Prior to the issuance of a grading permit, the Planning Department shall verify that the following MSHCP Urban Wildland Interface Guidelines are incorporated into the project plans and implemented as conditions of approval for the project:

- **Lighting.** Night lighting associated with the proposed development that is adjacent to existing or proposed Conservation Areas shall be directed away to reduce potential indirect impacts to wildlife species, including LBV.
- **Noise.** Proposed noise-generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms, or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards. The applicant shall verify that the noise impact analysis to be prepared for the proposed project will include a noise assessment and require mitigation measures to reduce noise impacts from the construction and operation of the project.
- **Fuels Management.** The fuels management guidelines in Section 6.4 of the MSHCP address brush management activities around new development within or adjacent to MSHCP Conservation Areas. The final project design will ensure that no fuel modification will extend into adjacent preserved Open Space lands and least Bell's vireo habitat areas.
- **Invasive Species.** The landscape plans for the project shall not include invasive, nonnative species for the portions of the development areas adjacent to the

Open Space District. Invasive plants that shall be avoided are in Section 6.1 of the MSHCP, Table 6-2, "Plants That Should Be Avoided Adjacent to the MSHCP Conservation Area."

The above measures would serve to minimize adverse project effects on conservation configurations and would minimize management challenges that can arise during development located adjacent to preserved least Bell's vireo and/or conservation habitat areas. The project design and BMPs incorporated into the proposed project design will address and minimize edge effects associated with the urban-wildlands interface.

5.3.9 Level of Significance After Mitigation

Impact BIO-1

Impact BIO-1 (impacts to sensitive animal species) would be reduced to less than significant through implementation of mitigation measure (MM) BIO-1 through MM BIO-7.

Impact BIO-2

Impact BIO-2 (impacts to sensitive vegetation communities and riparian habitat) would be reduced to less than significant through implementation of MM BIO-8, requiring the securing of a Lake and Streambed Alteration Agreement (LSAA) from CDFW.

Impact BIO-3

Impact BIO-3 (impacts to state jurisdictional waters and wetlands) would be reduced to less than significant by implementation of MM BIO-9 requiring regulatory permits from the RWQCB.

Impact BIO-4

Impact BIO-4 (impacts to nesting birds) would be reduced to less than significant by implementation of MM BIO-10 requiring nesting bird surveys and avoidance of active nests.

Impact BIO-5

Impact BIO-5 (protecting riparian habitats, significant trees, and other vegetation) would be reduced to less than significant by implementation of MM BIO-7, MM BIO-8, MM BIO-9, MM BIO-10, and MM BIO-11.

Impact BIO-6

Impact BIO-6 (impacts respecting MSHCP requirements) would be reduced to less than significant by implementation of MM BIO-1, MM BIO-2, MM BIO-3, and MM BIO-12.

5.3.10 References

Riverside, County of (Riverside). 2003, June 17. Final Western Riverside County Multiple Species Habitat Conservation Plan. http://wrc-rca.org/about-rca/multiple-species-habitat-conservation-plan/.

U.S. Army Corps of Engineer (Army Corps). 2019a, July 22. Approved Jurisdictional Determination.

———. 2019b, July 18. Determination of Need for Department of the Army Permit.

Western Riverside County Regional Conservation Authority (RCA). 2018, July 1. Western Riverside County Multiple Species Habitat Conservation Plan Local Development Mitigation Fee Schedule for Fiscal Year 2019. http://www.wrc-rca.org/wp-content/uploads/FY2019_MSHCP_FEES.pdf.

Western Riverside County Regional Conservation Authority (RCA). 2019, April 1. Staff Report, Agenda Item 10. First Amendment to the Agreement for Funding the Acquisition of Conservation Credits Between the Western Riverside County Regional Conservation Authority and Crestmore Redevelopment, LLC.

5.4 CULTURAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Agua Mansa Commerce Park Specific Plan project (proposed project) to impact cultural resources

Cultural resources comprise archaeological and historical resources. Archaeological resources include human artifacts, such as places, objects, and settlements that reflect group or individual religious, cultural, or everyday activities. Historical resources include sites, structures, objects, or places that are at least 50 years old and are significant for their engineering, architecture, cultural use or association, etc. In California, historic resources cover human activities over the past 12,000 years. Cultural resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements.

The following analysis is based in part on information obtained from:

- *Phase I Cultural Resources Assessment of the Proposed Agua Mansa Commerce Park, City of Jurupa Valley, County of Riverside, California*, MIG, November 2019.
- *Archaeological Field Surveys Conducted for the Open Space/Recreation Park Area of the Proposed Agua Mansa Commerce Park Project*, MIG, December 11, 2018.

Complete copies of these documents are in the technical appendices of this DEIR (Volume II, Appendix E).

5.4.1 Environmental Setting

5.4.1.1 REGULATORY BACKGROUND

Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) of 1966 is the primary federal law governing the preservation of cultural and historic resources in the United States. The law establishes a national preservation program and a system of procedural protections that encourage the identification and protection of cultural and historic resources of national, state, tribal, and local significance. Primary components of the NHPA include:

- Articulation of a national policy governing the protection of historic and cultural resources.
- Establishment of a comprehensive program for identifying historic and cultural resources for listing in the National Register of Historic Places.
- Creation of a federal-state/tribal-local partnership for implementing programs established by the act.

- Requirement that under Section 106 (Protection of Historic Properties) of the NHPA, federal agencies take into consideration actions that could adversely affect historic properties listed or eligible for listing on the National Register of Historic Places, known as the Section 106 Review Process.[1]
- Establishment of the Advisory Council on Historic Preservation, which oversees federal agency responsibilities governing the Section 106 Review Process.
- Placement of specific stewardship responsibilities on federal agencies for historic properties owned or within their control (Section 110 of the NHPA).

National Register of Historic Places

The National Register of Historic Places is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation because of their significance in American history, architecture, archeology, engineering, and culture. The National Register recognizes resources of local, state, and national significance that have been documented and evaluated according to uniform standards and criteria. Authorized under the NHPA, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect historic and archeological resources. The National Register is administered by the National Park Service, which is part of the US Department of the Interior.

To be eligible for listing in the National Register, a resource must meet at least one of the following criteria:

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

B. Is associated with the lives of persons significant in our past.

C. Embodies the distinctive characteristics of a type, period or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction.

D. Has yielded, or may be likely to yield, information important in history or prehistory.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that mandates museums and federal agencies to return certain Native American cultural items—such as human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants or culturally affiliated Indian tribes.

[1] Section 106 Review is designed to ensure that historic properties are considered during federal project planning and implementation. The Advisory Council on Historic Preservation, an independent federal agency, administers the review process with assistance from state historic preservation offices.

State

California Register of Historical Resources

In 1992, Governor Wilson signed Assembly Bill 2881 into law establishing the California Register of Historical Resources. The California Register is an authoritative guide used by state and local agencies, private groups, and citizens to identify historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse impacts.

The California Register consists of properties that are listed automatically as well as those that must be nominated through an application and public hearing process. The California Register automatically includes:

- California properties listed in the National Register and those formally Determined Eligible for the National Register.
- California Registered Historical Landmarks from No. 0770 onward.
- California Points of Historical Interest that have been evaluated by the Office of Historic Preservation (OHP) and have been recommended to the State Historical Resources Commission for inclusion on the California Register.

The criteria for eligibility of listing in the California Register are based on the National Register criteria. To be eligible for listing in the California Register, a property must be at least 50 years of age and possess significance at the local, state, or national level under one or more of four criteria:

A. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

B. It is associated with the lives of persons important to local, California, or national history.

C. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values.

D. It has yielded, or has the potential to yield, information important in the prehistory or history of the local area, California, or the nation.

Additionally, a historic resource eligible for listing in the California Register must meet one or more of the criteria of significance described above and retain enough of its historic character or appearance to be recognizable as a historic resource and to convey the reasons for its significance. Historic resources that have been rehabilitated or restored may be evaluated for listing. Integrity is evaluated with regard to the retention of seven aspects of integrity similar to the National Register (location, design, setting, materials, workmanship, feeling, and association). Also like the National Register, it must also be judged with reference to the particular criteria under which a resource is proposed for eligibility. Alterations over time to a resource or historic changes in its use may themselves have historical, cultural, or architectural significance. It is possible that historic resources may not retain sufficient integrity to meet the criteria for listing in the National Register, but they may

still be eligible for listing in the California Register. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data.

Historical resources eligible for listing in the California Register may include buildings, sites, structures, objects, and historic districts. Resources less than 50 years of age may be eligible if it can be demonstrated that sufficient time has passed to understand their historical importance. Although the enabling legislation for the California Register is less rigorous with regard to the issue of integrity, properties are expected to reflect their appearance during their period of significance, as stipulated in Public Resources Code Section 4852.

The California Register may also include properties identified during historical resource surveys. However, in accordance with Public Resources Code Section 5024.1, the survey must meet all of the following criteria:

- The survey has been or will be included in the State Historical Resources Inventory.
- The survey and the survey documentation were prepared in accordance with OHP procedures and requirements.
- The resource is evaluated and determined by OHP to have a significance rating of Category 1 to 5 on a Department of Parks and Recreation (DPR) Form 523.

If the survey is five or more years old at the time of the resource's nomination for the California Register, the survey is updated to identify historical resources that have become eligible or ineligible due to changed circumstances or further documentation and those that have been demolished or altered in a manner that substantially diminishes the significance of the resource.

California Points of Historic Interest

California Points of Historical Interest (CPHI) are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. CPHI designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the California Register.

To be eligible for designation as a CPHI, a resource must meet at least one of the following criteria:

- The first, last, only, or most significant of its type within the local geographic region (City or County).
- Associated with an individual or group having a profound influence on the history of the local area.
- A prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in the local region of a pioneer architect, designer or master builder.

California Public Resources Code

Archaeological, paleontological, and historical sites are protected pursuant to a wide variety of state policies and regulations enumerated under the California Public Resources Code. In addition, cultural and paleontological resources are recognized as nonrenewable resources and therefore receive protection under the California Public Resources Code and CEQA.

- **California Public Resources Code 5020–5029.5** continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission. The commission oversees the administration of the California Register and is responsible for the designation of State Historical Landmarks and Historical Points of Interest.

- **California Public Resources Code 5079–5079.65** defines the functions and duties of the OHP. The OHP is responsible for the administration of federal- and state-mandated historic preservation programs in California and the California Heritage Fund.

- **California Public Resources Code 5097.5** prohibits a person from moving, destroying, injuring, or defacing any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

- **California Public Resources Code 5097.9–5097.991** provides protection to Native American historical and cultural resources, and sacred sites and identifies the powers and duties of the Native American Heritage Commission. It also requires notification of discoveries of Native American human remains to descendants and provides for treatment and disposition of human remains and associated grave goods.

Local

City of Jurupa Valley General Plan Policies

The General Plan policies that are related to cultural resources and apply to the proposed project are listed in Table 5.9-2, *City of Jurupa Valley General Plan Consistency Analysis*.

5.4.1.2 STUDY METHODOLOGY

Cultural Resources Records Search

On August 26, 2016, MIG conducted a records search of the study area and within a one-mile radius of the project boundaries at the California Historical Resources Information System-Eastern Information Center at the California University, Riverside (EIC). The records search included a review of all recorded archaeological and historical resources within a one-mile radius of the study area as well as a review of cultural resource reports and historic topographic maps on file. In addition, MIG reviewed the California Points of Historical Interest, the California Historical Landmarks, the National Register, the California Register, the California State Historic Resources Inventory listings, local registers (Riverside County and the City of Jurupa Valley), historic

topographic maps, and historical aerial photographs. The purpose of the records search was to determine whether or not there are previously recorded archaeological or historical resources in the study area that required evaluation and treatment. The results also provide a basis for assessing the sensitivity of the study area for additional and buried cultural resources.

Historic Resources Survey

A historic resources survey of the project area was conducted on March 27, 2017, by ESA (under contract to MIG). The survey was aimed at identifying historic architectural resources. A reconnaissance, windshield survey with the plant supervisor was completed, followed by an intensive pedestrian survey. The existing conditions of the site, its buildings, structures, and immediate surroundings were documented through digital photography.

Sacred Lands File Search and Native American Consultation

On August 15, 2016, MIG commissioned a Sacred Lands File records search of the study area through the Native American Heritage Commission (NAHC) and conducted follow-up consultation with the 16 Native American groups or individuals (inclusive of Luiseño and Cahuilla groups) identified by the NAHC as having affiliation with the study area vicinity. Each Native American group or individual listed was sent a project notification letter and map and was asked to convey any knowledge regarding prehistoric or Native American resources (archaeological sites, sacred lands, or artifacts) within the study area or surrounding vicinity. The letter included information such as study area location and a brief description of the proposed project. The search and follow-up consultation provided information about the nature and location of additional prehistoric or Native American resources whose records may not be available at the EIC.

Pedestrian Field Survey

On September 12 and 13, 2016, MIG conducted a pedestrian field survey on portions of the study area that were either undeveloped or vacant because these areas are undisturbed by the associated cement plant activities and may exhibit visible ground-surface archaeological (prehistoric and historic) resources. MIG surveyed 100 percent of the undeveloped and vacant land within the study area. The field survey was carried out on foot, and survey transects were spaced no more than 10 meters apart between each interval. All previously recorded and newly identified archaeological or historic materials were examined closely to determine the extent of the cultural deposit (site, structure, or isolate).

5.4.1.3 EXISTING CONDITIONS / ENVIRONMENTAL SETTING

Natural Setting

The project site, formerly the Riverside Cement Plant, comprises office buildings, labs, manufacturing and processing facilities, quarries, a lake, and vacant land; it is east of Rubidoux Boulevard, south of El Rivino Road, west of Hall Avenue, and north of West Riverside Canal in the northeast quadrant of the City of Jurupa Valley, County of Riverside. The elevation within the study area ranges from approximately 700 feet above mean sea level in the north-northeast to 940 feet above mean sea level and is surrounded by gentle slopes to the east and south.

The Jurupa Valley, in which the study area lies, is in the eastern end of the Jurupa Mountains on the south side of the San Bernardino Valley. The Santa Ana River drains the San Bernardino Valley toward the southwest and is approximately one-half mile east of the study area. The project site is a "Brownfield" site due to the existing contamination from the historic operations of the cement plan.

Cultural Setting

Prehistory

Archaic Period (ca. 11,000 to 3,500 ybp)

The earliest Archaic Period life in inland southern California has been given the name San Dieguito tradition, after the San Diego area where it was first identified and studied. Characteristic artifacts include stemmed projectile points, crescents, and leaf-shaped knives, which suggest a continued focus on large game, although not megafauna of the earlier Paleo-Indian period (13,000–11,000 ybp [years before present]). Milling equipment appears in the archaeological record at approximately 7,500 years ago. The artifact assemblage for this period is known as the La Jolla Complex (7,500–3,000 ybp) and includes basin milling stones, unshaped manos, and projectile points. Also in this period, human burials were placed in a flexed position under rock cairns, with cogged stones and grave goods. The transition from San Dieguito life to La Jolla life appears to have been an adaptation to the drying climate after 8,000 ybp, which may have stimulated movements of desert peoples to the coastal regions, bringing milling stone technology with them. Groups in the coastal regions focused on mollusks, and inland groups relied on wild-seed gathering and acorn collecting.

Late Prehistoric Period (ca. 3,500 YBP to A.D. 1769)

Cultural responses to environmental changes around 4,000 to 3,000 ybp included a shift to more land-based gathering practices. This period was characterized by the increasing importance of acorn processing, which supplemented the resources from hunting and gathering. The period after A.D. 1400 is identified as the San Luis Rey complex. San Luis Rey I (A.D. 1400–1750) is associated with bedrock mortars and milling stones, cremations, small triangular projectile points with concave bases, and Olivella beads. The San Luis Rey II period (A.D. 1750–1850) is marked by the addition of pottery, red and black pictographs, cremation urns, steatite arrow straighteners, and nonaboriginal materials.

Ethnographic Context

Information in the California volume of the *Handbook of North American Indians* (1978) shows the study area is near the traditional territory of the Gabrieleno, Serrano, Luiseño, and Cahuilla. These ethnographic groups are described below.

Gabrieleno

The Gabrieleno are Takic-speakers and are descended from Late Prehistoric populations of the region. The name Gabrieleno was given to the local inhabitants by Spanish missionaries who established a mission in Gabrieleno territory in 1771. However, self-identification for the broader group of Native Americans who inhibited the Los Angeles Basin includes the names: Tongva (or Tong-v) and Kizh (Kij or Kichereno); nevertheless, there is evidence that these names initially referred to local collection/gathering areas or smaller

bands of people within the larger group that we now call Gabrieleno. Many present-day descendants of these people have taken on Tongva as a preferred group name because it has a native rather than Spanish origin, and one group of descendants prefers the term Kizh.

Serrano

The Serrano people speak a Takic language similar to dialect spoken by the Luiseno, Cahuilla, and Gabrielino. The name Serrano comes from the Spanish word for "mountaineer" or "highlander" and refers to the indigenous people inhabiting the San Bernardino Mountains east of the Cajon Pass, who may have settled along the Santa Ana River as early as 8,000 B.C. Their territory has been difficult to define, but it can be characterized reliably as extending from the San Bernardino Mountains northeast to the Mojave River region and southeast to the Tejon Creek area. The Yuhaviatam clan is known as the San Manuel Band of Mission Indians, and the Maarenga' yam clan is known as the Morongo Band of Mission Indians, with a further clan division for the Soboba Band of Luiseno Indians. In 1771, the Serranos were subjugated and absorbed into the San Gabriel Mission system that resulted in the loss of their freedom, culture, and customs. In 1891, the United States created the "San Manuel" Indian Reservation, named after Chief Santos Manuel. Since then, the Serrano Indians have been known as the San Manuel Band of Mission Indians.

Luiseño

The Luiseño are a Takic-speaking people that are usually associated with coastal and inland areas of present-day Orange and southern Riverside counties, with cultural and social behavioral characteristics similar to the Cahuilla, a tribal group generally linked with areas northeast of the San Jacinto Mountains. In context, the study area is considered a Luiseño area, though there is evidence of a Cahuilla presence. The term Luiseño derives from the Mission San Luis Rey and has been used in the region to refer to the Takic-speaking people associated with that mission. The Luiseño shared boundaries with the Cahuilla, Cupeño, Gabrielino, and Kumeyaay groups on the east, north, and south, respectively. These different bands shared cultural and language traditions with the Luiseño. The Luiseño territory extended from the coast to Agua Hedionda Creek on the south to near Aliso Creek on the northwest. The boundary extended inland to Santiago Peak, then across to the eastern side of Elsinore Fault Valley, southward to the east of Palomar Mountain, and around the southern slope above the valley of San Jose.

Cahuilla

The Cahuilla occupied a large area in the geographic center of southern California that was bisected by the Cocopa-Maricopa Trail in addition to Santa Fe and Yuman Trails. They occupied an area from the summit of the San Bernardino Mountains in the north to Borrego Springs and the Chocolate Mountains in the south, portions of the Colorado Desert west of Orocopia Mountain to the east, and the San Jacinto Plain near Riverside and the eastern slopes of Palomar Mountain to the west.

European Contact

European contact with the Native American groups that inhabited the study area and surrounding region began in 1542 when Spanish explorer, Juan Rodriguez Cabrillo, arrived by sea during his navigation of the California coast. Sebastian Vizcaino arrived in 1602 during his expedition to explore and map the western coast that

Cabrillo had visited 60 years earlier. In 1769, another Spanish explorer, Gaspar de Portola, passed through Luiseño/Kumeyaay territory and interacted with the local indigenous groups. In 1798, Mission San Luis Rey was established by the Spanish and likely integrated the Native Americans from the surrounding region. Multiple epidemics took a great toll on Native American populations between approximately 1800 and the early 1860s, along with the cultural and political upheavals that came with European, Mexican, and American settlement.

In the beginning of the nineteenth century, some Spaniards who had worked at the missions began to set up what would later be known as the "Ranchos." The Rancho era in California history was a period when the entire state was divided into large parcels that equaled thousands of acres each. These large estates were ruled in a semifeudal manner by men who had been deeded the land—first by the Spanish crown, and later by the Mexican government. In 1821 Mexico won independence from Spain and began to dismantle the mission system in California. As the missions began to secularize, they were transformed into small towns, and most Native Americans were later relegated to reservations or absorbed into American society. It was during this time that North Americans began to enter California. Many of these married into the Rancho families, a development that would transform land ownership in Mexican California. By the time the United States annexed California after the Mexican-American War in 1850, much of the Rancho land was already in the hands of Americans.

Local History

Riverside County

Approximately five miles northwest of downtown Riverside, the City of Jurupa Valley lies on a plain between the Santa Ana River to the east and a series of foothills that are known as Rubidoux Mountain, Box Springs Mountain, Jurupa Mountains, Pedley Hill, and Victoria Hill. The City was incorporated in 2011, and for most of its history was an unincorporated part of Riverside County, sharing its developmental history with the adjacent City of Riverside.

Early settlers planted nearly everything typically grown in semitropical regions, including oranges, apples, pears, almonds, olives, figs, and grapes. The soil and climate conditions allowed the citrus industry to grow rapidly. With the completion of the canal system and the beginnings of a railroad infrastructure, Riverside rapidly became an economic boomtown.

The City of Riverside was incorporated in 1883. By the 1880s, several streetcar companies operated in the city, and by 1893, when it became the county seat, public transportation lines connected Riverside to most other communities in southern California.

The agricultural industry continued to drive the Riverside economy throughout this period of development. Riverside played a critical role in the southern California citrus belt—which extended all the way to Pasadena on the west—due to an experiment station operated by the University of California.

Like the rest of southern California, the population in the Riverside area increased significantly during the 1920s. In 1910, the population of Riverside County was 34,696; that number exploded to 81,024 by 1930. Residential development spread north and east of the original town site during this period. In 1953, the *Press*

Enterprise reported that Riverside was the 14th fastest growing city in the United States. Riverside County's population also expanded greatly during the 1950s and 1960s, with 170,046 residents in 1950, 306,191 residents in 1960, and 459,074 residents by 1970.

Riverside Cement Company / Crestmore Plant

The Riverside Cement Company was originally incorporated by William G. Henshaw under the name Southern California Cement Company in 1906 but changed its name to Riverside Portland Cement Company in 1909. The location of the plant included one of the largest limestone deposits in the country, which would become a significant factor in the company's success. Limestone was an essential ingredient in the company's cement production process, and the site was described as "remarkably pure" by the California State Mining Bureau in 1917. The company became increasingly successful due to the rising demand for cement driven by the growth of southern California's population and industry.

After a series of mergers in 1958, the Riverside Cement Company became part of the American Cement Corporation. The American Cement Corporation immediately invested in a new round of expansions to the Crestmore and Oro Grande plants to keep pace with a long period of rapidly growing demand for cement. This expansion of the Crestmore Plant included additional kilns, a new waste-heat power plant, a new laboratory building, bulk loading facilities, and upgraded milling equipment for crushing, blending, and storage. The plant's new laboratory building featured state-of-the-art X-ray diffraction equipment used for testing cement. In the 1960s, the technique was adopted by the American Cement Corporation, replacing traditional wet chemical methods for testing. By the 1970s, the American Cement Corporation was the fifth-largest producer of cement in the United States, with a production capacity exceeding 12,000 barrels of cement per working day.

Archaeological and Historic Resources

Previously Recorded Resources

Results of the records research conducted at the EIC indicate that there are no archaeological resources and two previously recorded historic resources (P-33-013240 and P-33-005044H) in the study area. Additionally, six previously recorded archaeological and historic resources are within a one-mile radius of the study area (see Table 5.4-1, *Previously Recorded Cultural Resources in the Study Area*).

The two previously recorded historic resources in the study area have been identified as P-33-013240, a portion of the Union Pacific Railroad spur, and P-33-005044H, a portion of the West Riverside Canal. Historic site P-33-013240 would not be impacted by the proposed project, but portions of the historic West Riverside Canal System (P-33-005044H) that are within the project site would be impacted. A brief description of the two previously recorded cultural resources are provided in Table 5.4-1.

The six previously recorded cultural resources within a one-mile radius of the study area can be classified as three prehistoric archaeological sites, one prehistoric isolate, one historic transmission line and associated towers, and one historic irrigation system. The four prehistoric resources have been identified as P-33-024750, rock shelter with lithic scatter; P-33-024756, rock shelter with hearth; P-33-024751, bedrock milling feature; and P-33-024772, isolate mano fragment. The two historic sites are identified as P-33-013239, a section of

transmission line and associated tower(s) owned by Southern California Edison, and P-33-016364, irrigation system (see Table 5.4-1).

Table 5.4-1 Previously Recorded Cultural Resources within the Study Area

Resource No.	Resource Type	Date Recorded	Description	National Register Eligibility	California Register Eligibility	Distance from Project Site
P-33-005044H CA-RIV-00504H	Historic Feature	1992 Updated 2009	This historic canal system was constructed in the 1890s by the West Riverside 350-Inch Company and was significant to the development of the region as an agricultural center and citrus capital.	Not Eligible	Not Eligible	Portions of the canal are within the project site
P-33-009684	Historic Site	2017	The historic Riverside Cement Company began operations in 1909 and was a significant economic factor in the development of Riverside County. In 1974, the Riverside Cement Company was listed as California Point of Historical Interest (Plaque No.336) and a Riverside County Historical Landmark (No. 047)	Not Eligible (5SI: Individual property that is listed or designated locally)	Not Eligible (5SI: Individual property that is listed or designated locally)	Within project site
P-33-013239 CA-RIV-007324	Historic Structure	2003, Updated 2015	Pre-World War II power transmission line and associated towers. The line was determined to have been installed between1936-1938. In 2005, the transmission towers and line were relocated and removed from the project site.	Not Evaluated	Not Evaluated	Located north of El Rivino Road and is no longer within the project site.
P-33-013240 CA-RIV-007325	Historic Feature	2003, Updated 2009	This historic rail road spur is part of the Union Pacific Railroad's (UPRR) Los Angeles-Riverside line. The spur was built to serve the Riverside Portland Cement Company and was built in the 1920's.	Not Eligible	Not Eligible	Located within, but not part of the project site.
P-33-016364 CA-RIV-008513	Historic Feature	2006	This historic irrigation system includes an asphalt pavement, a steel tank, large borrow pit, a small borrow pit and a large steel pipe junction that was built circa1954 based on USGS Topographic Quadrangle Map (San Bernardino, California.	Not Evaluated	Not Evaluated	¼ mile to the east
P-33-024750 CA-RIV-012252	Prehistoric Site	2016	This prehistoric resource is a rock shelter, with a small lithic scatter containing a single mano, a quartzite flake tool and debitage, located adjacent to an ephemeral drainage.	Not Evaluated	Not Evaluated	7/8 miles to the southwest

Table 5.4-1 Previously Recorded Cultural Resources within the Study Area

Resource No.	Resource Type	Date Recorded	Description	National Register Eligibility	California Register Eligibility	Distance from Project Site
P-33-024756 CA-RIV-012258	Prehistoric Site	2015	This prehistoric resource is a rock shelter and fire pit.	Not Evaluated	Not Evaluated	½ mile to the northwest
P-33-024751 CA-RIV-012263	Prehistoric Site	2015	This prehistoric resource is a single milling slick.	Not Evaluated	Not Evaluated	5/8 miles to the northwest
P-33-024772 CA-RIV-012280	Prehistoric Isolate	2015	This prehistoric isolate is a single mano fragment	Not Eligible	Not Eligible	¾ miles to the southwest

Source: MIG 2017.

P-33-013240. The historic railroad spur was recorded in 2003 and updated in 2009. The still-functioning pre–World War II standard-gauge railroad spur off of the Los Angeles-Riverside UPRR line (part of a San Pedro, Los Angeles, and Salt Lake City Railroad Company line prior to 1921) was likely constructed to serve the Riverside Portland Cement Company's cement plant established near Crestmore in 1907. It later also served the Ormand quarry, which opened in the mid-1920s. The railroad spur was determined ineligible for listing in National Register or California Register due to track modernization, which affected its historical integrity.

P-33-009684. The historic Riverside Cement Company Plant was recorded in 2017. The Riverside Cement Company began operations in 1909 and was soon the largest producer of white cement in the Western United States. The plant was one of the first cement operations to employ an electrostatic precipitator for cement dust control; it was internationally recognized for its mining and processing of rare minerals and for its large-scale underground room-and-pillar mining methods. The Riverside Cement Company has been credited as a major contributor to the economic development of Riverside County. Although the Riverside Cement Company property retains its integrity of location, feeling, and association, these are not enough to convey its historical significance as an important contributor to the industrial and economic growth of Riverside and its surrounding communities. Therefore, it is not eligible as a historic district under the National Register, California Register, or local criteria.

P-33-005044H. This historic resource was first recorded in 1992 and was later updated in 2009. The historic feature is part of the West Riverside Canal that was constructed in the 1890s by the West Riverside 350-Inch Company. The construction of the canal system has been credited as a significant contributor to the development of the West Riverside/Rubidoux region as an agricultural center because it was the first irrigation system to provide water to the higher Jurupa Plain. However, alterations to the canal, including cement lining, and its deteriorated state over the last couple of decades have denigrated the historical integrity of the canal and make it ineligible for listing in the National Register or California Register.

Archaeological Pedestrian Survey

MIG conducted a pedestrian field survey for the presence of archaeological (prehistoric and historic) and paleontological resources on portions of the study area that were either undeveloped or vacant. No archaeological or paleontological resources were identified during the survey.

The field survey was conducted on the undeveloped areas in the northern, southern, eastern, and western portions of the study area. The northern portion of the field survey encompasses approximately 46 acres and can be characterized as undeveloped land exhibiting shallow plowing/disking in an east-west direction that slopes up approximately five degrees toward the east to the center of the area near Cactus Avenue. The northern portion contained moderate levels of modern man-made trash scattered throughout the area, including car tires, paper and plastic wrappers, various types and sizes of aluminum cans, clothing, and glass bottles. Additionally, the area contained noticeable quantities of mammal bones and carcasses, including goats, horses, cows, and birds, that presumably came from the farms or ranches that surround the property on the northern and eastern boundaries.

The eastern portion of the field survey was approximately 10 acres and was conducted from the intersection of El Rivino Road and Hall Avenue south to the plant's eastern fence line. The eastern portion exhibits similar terrain, soil conditions, and sparse levels of modern trash scatters as the northern portion. There are two fenced-in water substations and an elevated earthen berm that extended along the western boundary of the eastern survey area.

The western portion of the field survey was approximately 3 acres and was conducted from the intersection of Rubidoux Road and El Rivino Road to the plant's entrance and south along Rubidoux Road to the "Change Room." The western portion is undeveloped except for the southern portion, which consists of a covered asphalt yard that was used for a parking lot, a sump pond, and the Change Room. Again, much of the western portion is undeveloped and exhibits similar terrain and soil conditions as the northern and eastern portions. Modern trash levels in the western portion of the study area were sparse and limited.

The CalPortland Company owns the existing administration building, labs, adjoining parking lot, and area of undeveloped land that is referred to as the CalPortland site. The CalPortland site is just east of Rubidoux Road and west of the plant's railroad tracks. Except for the existing structures and parking lot, the area is undeveloped and encompasses approximately one acre. This area is characterized by shallow plowing/disking in a north-south direction, in which the terrain slopes up sharply—approximately 8 to 10 degrees—toward the northwest and slopes downward to the southeast. The area's terrain and soil conditions are similar to the rest of the undeveloped areas within the study area except there was little to no trash observed in this area.

The southern portion of the field survey includes the area designated for the Open Space portion of the proposed project, including the West Riverside Canal, and portions of Sky Blue Hill. The area appeared to be highly distributed, exhibiting a hard-packed, two-track dirt road. The area was free from debris associated with modern trash dumps or scatters and free from construction materials of any kind. The base of Sky Blue Hill, including the southeast section of the hill toward its central plateau, is moderately to highly disturbed, exhibiting foot and other dirt trails that crisscross the hill and its base in multiple directions.

The two previously recorded historic sites in the study area—P-33-013240 (railroad spur) and P-33-005044 (historic canal)—were also confirmed during the pedestrian survey and evaluated to determine changes in their condition since their previous recordation.

Historic Buildings and Structures

As part of the cultural resources assessment prepared by MIG, a historical assessment report was prepared by ESA for the historic buildings and structures onsite related to the Riverside Cement Plant (see Appendix E of the cultural resources assessment in DEIR Appendix E).

Architectural Description

The project site is currently occupied by the Riverside Cement Plant, which was constructed in 1909. From the date of its opening, the plant included a gray cement mill, limestone mine, packing house, and multiple support buildings, including administration offices and machine shops. Currently, the property is occupied by multiple utilitarian buildings built between the plant's original date of construction in 1909 and the mid-1960s when it was modernized with the addition of a new administration building and gray and white cement mills. The multiple buildings and structures that make up the plant are connected by a network of paved and dirt roads as well as railroad tracks. The various buildings and features on the site are depicted in Figure 5.4-1, *Riverside Cement Plant Buildings, Structures, and Features*, and have been grouped into the following features commonly associated with the Cement Plant Property Type:

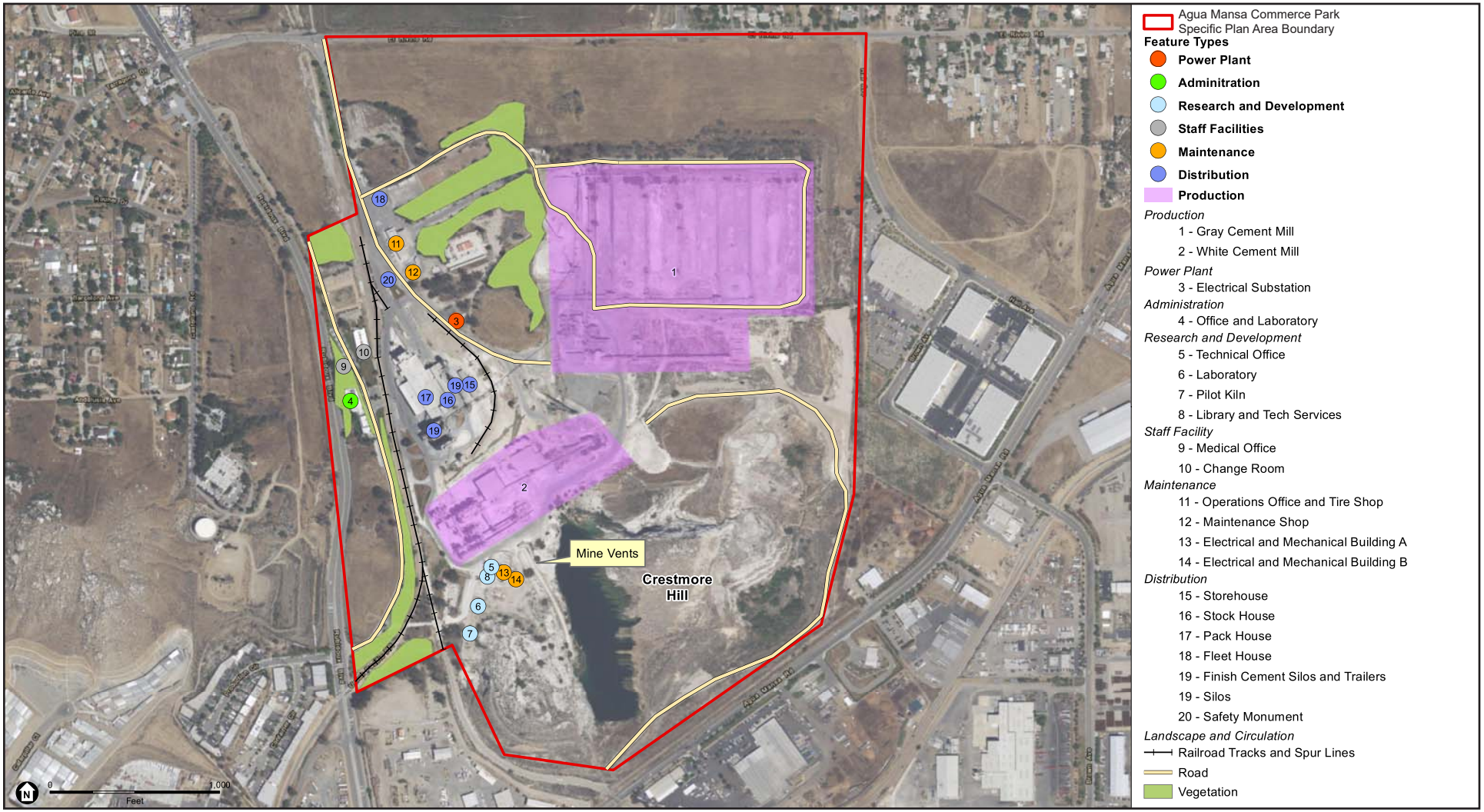
1. Production: Gray Cement Mill; White Cement Mill; Kiln Feed Storage
2. Power Plants: Electrical Substation
3. Administration Buildings: Office and Laboratory
4. Research and Development: Technical Office; Laboratory; Pilot Kiln; Research and Development Center
5. Staff Facilities: Medical Office; Changing Room
6. Maintenance Buildings: Operations Office and Tire Shop; Maintenance Shop and Warehouse; Electrical and Mechanical Building A; Electrical and Mechanical Building B
7. Distribution Warehouses: Storehouse; Stock house; Pack House; Fleet House; Silos; Safety Monuments
8. Landscape and Circulation Patterns: Landscape; Circulation Patterns

Eligibility Assessment

The Riverside Cement Plant and its individual buildings were assessed for their eligibility as a historic resource under National Register and California Register criteria.

The plant was previously designated in 1974 as a Riverside County Landmark and a California Point of Historical Interest. In 1968, the Riverside County Historical Committee considered the plant significant due to cement being one of the county's pioneering industries and for the unique nature of the plant's underground mining activity. The American Cement Corporation agreed with the committee and supported the nomination, and in 1974, the State of California registered the site as a California Point of Historical Interest No. 336 and Riverside County registered the site as Historic Landmark No. 047. The previous evaluation of the plant did not establish a period of significance for the property, identify contributing resources, or include an evaluation of the plant's integrity.

Figure 5.4-1 - Riverside Cement Plant Buildings, Structures, and Features



Source: MIG, 2017

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As part of the cultural resources assessment for the proposed project, the Riverside Cement Plant was evaluated as a potential historic district under the following historic themes: Development of Riverside County (1870–1970); the Cement Industry (1909–1924); and Architectural and Infrastructure Building Material (1910–1965). Based on extensive research, it was determined that the Riverside Cement Company played a key role in the early economic and industrial development of Riverside County. However, the company's impact on the economy began to decrease by the postwar era as the local economy began to diversify. In 1958, the locally based Riverside Cement Company was acquired by the American Cement Corporation and became part of a larger cement manufacturing and distribution network. Furthermore, the 1974 nomination incorrectly stated that the plant's mining practices after 1954, known as "room-and-pillar mining," were unique—room-and-pillar mining was fairly common in the mining industry at that time. It was the earlier mining practice used by the plant prior to 1954, known as "block caving," that was unique. Based on the historic research and significance evaluation, a period of significance was established as 1909 to 1958. The period of significance begins with the completion date of the plant's construction in 1909 and ends as the plant is acquired by the larger American Cement Corporation in 1958.

Although the plant exhibits historical significance, it lacks integrity to convey its period of significance. In 1964 to 1965, the American Cement Corporation built a new modern gray cement mill, replacing the original mill from the period of significance. The old mill was eventually demolished sometime between 1966 and 1968. The plant's economic impact on the surrounding community came from its combination of services, which included production, sales and administration, packaging, and distribution. While the site retains multiple support buildings related to the site's involvement in the cement industry during the period of significance, it lacks the most important features associated with the Cement Plant Property Type, that is, the cement mill and associated features (kilns, crusher mills, storage silos, and baghouses) and the original power plant. Without these production-related features, the plant could not have impacted the local economy the way that it did. Due to the extensive modernization of the plant under the ownership of the American Cement Corporation, the plant no longer reflects its original condition from the period of significance. Today the plant is a common example of a 1960s era cement plant, reflecting a more general trend of modernization that occurred in the industry at that time. Therefore, the plant does not retain the level of integrity necessary for consideration as a historic district and is not eligible for listing on the National Register, California Register, or as a Riverside County Landmark.

In 1960, the plant became one of only three operations in the nation capable of producing white cement. However, white cement and gray cement are the same material in all aspects except color due to the purity of limestone used in the production process. Although the production of white cement is rare, it does not appear to constitute a significant event in national, state, or local history. Furthermore, the plant as a whole did not produce white cement. White cement production was one aspect of the overall operation produced by a specific feature on the property, the White Cement Mill.

A majority of the buildings and structures on the site are simple utilitarian structures that lack individual distinction. Their historical significance is directly tied to the overall use of the property as a cement plant and therefore do not exhibit individual significance and are not eligible for listing on the National Register, California Register, or as a Riverside County Landmark. However, five buildings appeared to possess individual significance warranting further evaluation. Those buildings were the Stock House, Gray Cement Plant, White Cement Mill, and Fleet House. The Office and Laboratory is presently owned by a separate entity and is not a part of the project development; however, it was included in this evaluation due to its historical association with the plant. Of the five buildings, three were found to possess both significance and integrity warranting eligibility for listing on the National Register, California Register, and as a Riverside County Landmark. The eligible buildings include the Stock House, White Cement Mill, and Office and Laboratory, each of which are recommended eligible under National Register Criterion C, California Register Criterion 3, and Riverside County Landmarks Criterion 3.

As a result of the historical operations, the subject property is considered a "brownfield" site and is listed on the federal Comprehensive Environmental Response, Compensation and Liability Information System and the California Department of Toxic Substances Control's (DTSC) EnviroStor, showing involvement by the Regional Water Quality Control Board and the EPA for chemicals of concern, including PCBs and hexavalent chromium. Due to the historical and well-documented hazardous materials, DTSC has stated that the subject property is a threat to public health and has prohibited unrestricted access. In addition, DTSC has required a comprehensive site assessment and remediation of the subject property that will include the demolition of all buildings so the extent of historical contamination can be fully identified and properly remediated.

Based on these findings, it appears that the project would result in significant direct impacts to two potential historical resources because it would require remediation of the Stock House and White Cement Plant by demolition of these contaminated structures and the ground underneath them. The Office and Laboratory are not on the project site and would not be affected by the project. The subject property is a listed California Point of Historical Interest. Under the project, the existing limestone quarry would be retained, and the open space and immediately surrounding areas would be preserved for wildlife habitat. To reduce potentially significant impacts to historical resources, a preservation measure is recommended to be incorporated into the project, as summarized below. The preservation measure would include recordation of the Stock House and White Cement Plant, salvage of selected artifacts, and installation of a permanent, publicly accessible on-site interpretive exhibit. Implementation of the preservation measure would reduce potential impacts to historical resources to a less than significant level because the important historical information about the significance of the site and the activities there would be retained and would be accessible to the public within the context of the site, near the front entrance. With incorporation of the preservation measure and retention of the limestone quarry as an open space and wildlife habitat, the site would retain its current status as California Point of Historical Interest No. 336 after project completion. Although the resource would lose much of its historic character or appearance, one of the most significant features of the site, the limestone quarry, would be retained and would still have sufficient integrity to yield significant scientific or historical information. The plant's historical archives would also be retained, and important historical or scientific information in the archives would be made available for future study. Therefore, the proposed project would result in a less than significant

impact on historical resources with the preservation measure and retention of the limestone quarry incorporated.

5.4.2 Notice of Preparation / Scoping Comments

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. The comments from the NOP review that will be addressed in the cultural resources section are included in Table 5.4-2.

Table 5.4-2 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
Native American Heritage Commission (NAHC) Gayle Totton, M.A., PhD Associate Governmental Program Analyst	7/24/17	• Provides details on Senate Bill 18 (SB 18) and Assembly Bill 52 (AB 52) requirements • Recommends lead agencies consult with all California Native American tribes traditionally and culturally affiliated with the Project area per AB 52 and SB 18 requirements • States that lead agencies should contact appropriate regional California Historical Research Information System Centers for an archaeological records search of the project area; prepare a professional cultural resources assessment report; contact the NAHC for a Sacred Lands File search and Native American Tribal Consultation List • Lead agencies should include mitigation to reduce impacts to potentially inadvertently discovered archaeological resources during project construction, including plans for the disposition of recovered cultural items and human remains.	• Section 5.4, *Cultural Resources* • Section 5.16, *Tribal Cultural Resources*

All comments are organized based on date received.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.4.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to cultural resources are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

CR-1 Cause a substantial adverse change in the significance of an historical resource pursuant to Section 15064.5.

CR-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

CR-3 Disturb any human remains, including those interred outside of dedicated cemeteries.

5.4.4 Applicable Policies and Design Features

5.4.4.1 PLANS, POLICIES, AND PROGRAMS

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to cultural resources. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP CUL-1 The project is required to comply with the applicable provisions of California Health and Safety Code § 7050.5 as well as Public Resources Code § 5097 et seq.

5.4.4.2 PROJECT DESIGN FEATURES

No project design features are applicable to cultural resources impacts of the proposed project.

5.4.5 Environmental Impacts

The following impact analysis addresses thresholds of significance for cultural resources.

Impact CR-1 Threshold: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

As stated above, there are two historic resources from the EIC records that have been previously recorded within the study area, P-33-013240 (railroad spur) and P-33-005044H (historic canal); and two historic resources within a one-mile radius of the project boundaries: P-33-013239 (a section of transmission line and associated tower(s) owned by Southern California Edison) and P-33-016364 (irrigation system).

Given that the historic transmission line and towers and the irrigation system are not within the project site, these historic resources would not be impacted by the proposed project. One of the historic resources within the project site —P-33-013240 (railroad spur)—also would not be impacted by the proposed project. However, the historic canal (P-33-005044H) would be impacted by development of the proposed project. Both historic resources within the project site (P-33-013240 and P-33-005044H) are evaluated in terms of their eligibility for listing in the National Register of Historic Places or the California Register of Historical Resources.

P-33-013240 (Railroad Spur)

This historic resource is a still-functioning, pre–World War II, standard-gauge railroad spur off of the Los Angeles-Riverside UPRR line (part of a San Pedro, Los Angeles, and Salt Lake City Railroad Company line prior to 1921) and was likely constructed to serve the Riverside Portland Cement company's cement plant

established near Crestmore in 1907. It later also served the Ormand quarry to the west, off site, which opened in the mid-1920s.

On September 13, 2016, MIG confirmed the railroad spur and found three separate spurs within the project site. The spurs are west of the plant's production facilities and east of the administration and lab buildings. One spur led into the plant and is no longer in use, but the other three lines are still active and are used as part of a switching yard for the UPRR. Two of the active spurs run north-south around Sky Blue Hill and then cross over Agua Mansa Road heading south. The other spur runs north-southwest around the proposed CalPortland Cement site and then crosses over Rubidoux Boulevard heading west.

MIG found that all four spur lines have been modernized; their original rails and ties have been replaced, impairing their historical integrity despite their association with the historical San Pedro, Los Angeles, and Salt Lake City rail lines and portions of the UPRR, which are eligible. The railroad spurs are therefore ineligible for listing on either the National Register or the California Register; therefore, development of the proposed project would result in a less than significant impact.

P-33-005044H (Historic Canal)

The historic canal is part of the West Riverside Canal that was constructed in the 1890s by the West Riverside 350-Inch Company. The construction of the canal system has been credited as a significant contributor to the development of the West Riverside/Rubidoux region as an agricultural center because it was the first irrigation system to provide water to the higher Jurupa Plain. Portions of the canal are located within the project site and would be impacted by the proposed project.

On September 13, 2016, MIG confirmed portions of the canal located within the project boundaries and found that the canal has been reduced in size and cement lined (channel and embankments) in order to convert the canal into a culvert for rainwater drainage. These alterations to the canal have caused it to lose its historical integrity despite its association with the West Riverside Canal System; therefore, the canal is not eligible for listing in either the National Register or the California Register. Thus, the proposed project would not significantly impact this historic resource; impacts would be less than significant.

The results of the historic site evaluations determined that these historic resources on site or within one mile from the site would not be impacted by the proposed project except for the West Riverside Canal. The West Riverside Canal (P-33-005044H) located within the project site is not eligible for listing in the National Register or the California Register under any of the significance criteria. Therefore, the proposed project would result in no adverse change in the significance of these historical resources.

Potentially Eligible Historic Buildings

Direct Impacts

The project site is currently occupied by multiple buildings associated with the Riverside Cement Plant company. In 1974, the plant was designated a Riverside County Landmark and recognized as a California Point of Historical Interest. However, the nomination did not identify a period of significance, assess the plant's integrity, or identify contributing and noncontributing features. Further analysis provided in the Phase I Cultural

Assessment report (Appendix E of this DEIR) found that the potential district related to the Riverside Cement Company was significant between 1909 and 1958, but lacked the integrity necessary to convey its historical significance due to the demolition of its original cement mill between 1966 and 1968. Although the district is not recommended as eligible, three buildings (two within the project site and one adjacent to the project site) were identified as potentially eligible under National Register Criterion C, California Register Criterion 3, and Riverside County Landmarks Criterion 3 (C/3/3).

The Office and Laboratory constructed in 1958, which is currently adjacent to the project site, was found potentially eligible due to its historical association with the plant and its architectural significance under Criteria C/3/3. It is not a part of the project and is presently owned by a separate entity; thus, the project would have no direct adverse impact on the Office and Laboratory, which would continue in its present use and would retain its eligibility as a historical resource.

The other two buildings within the project site that were identified as potentially eligible are the Stock House constructed between 1906 and 1909, and the White Cement Mill constructed in 1961. Due to the site contamination and threat to public safety the DTSC has required a Site Assessment and remediation that would result in the removal of both potentially eligible resources, resulting in a significant impact to historical resources. Implementation of mitigation measures are required to reduce potential impacts to less than significant.

Indirect Impacts

As stated in the previous section, the Office and Laboratory building is eligible as a historical resource due to its historical association with the plant and its architectural significance under Criteria C/3/3. While the building would not be directly impacted (i.e., demolished), the proposed project would demolish all of the existing buildings within the project boundaries, which would significantly affect the Office and Laboratory building's integrity of setting. Throughout its history, the Office and Laboratory provided support services to the adjacent plant. Removal of buildings associated with the plant would alter the Office and Laboratory building's setting associated with that context. However, the Office and Laboratory building was not identified as significant for its association with the plant or with the general history of the cement industry. The building was identified as an excellent example of Mid-century Modern architecture and the work of a master under National Register Criterion C, California Register Criterion 3, and Riverside County Landmarks Criterion 3. In this case, the building's integrity of design, workmanship, materials, and feeling are more important in conveying its significance as an excellent example of a particular architectural style and the work of a master than its integrity of setting, location, and association. The project would not physically alter the Office and Laboratory building or its surrounding landscape, and it would retain a high level of integrity of design, workmanship, materials, and feeling and remain eligible for the National Register, California Register, and as a Riverside County Landmark. Therefore, the proposed project would not result in any significant indirect impacts to historic resources.

Conclusion

Results of the historic buildings and structure evaluations indicate that the proposed project would result in a direct impact to potential historical resources because it would remove the Stock House and White Cement

Plant, which were found potentially eligible for listing on the National Register, California Register, and as Riverside County Landmarks. Thus, impacts are potentially significant and require mitigation.

Level of Significance before Mitigation: Impact CR-1 would be potentially significant. Mitigation Measures MM CR-1 to MM CR-6 are required to reduce Impact CR-1 to less than significant.

Impact CR-2 Threshold: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

As stated above, no known archaeological resources from the EIC records were recorded within the project site. However, there are three prehistoric archaeological sites and one prehistoric isolate within a one-mile radius of the project site. No archaeological resources were identified during the pedestrian survey. Despite the heavy disturbances of the project site that may have displaced archaeological resources on the surface, it is possible that intact archaeological resources exist at depth. As a result, mitigation measures are provided to reduce potentially significant impacts to previously undiscovered archaeological resources that may be accidentally encountered during project implementation to less than significant levels.

Level of Significance before Mitigation: Impact CR-2 would be potentially significant. Mitigation Measures MM CR-5 to MM CR-6 are required to reduce Impact CR-2 to less than significant.

Impact CR-3 Threshold: Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98 mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. Specifically, California Health and Safety Code Section 7050.5 requires that if human remains are discovered within the project site, disturbance of the site shall remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of death, and made recommendations concerning the treatment and disposition of the human remains to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and if the coroner has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Although soil-disturbing activities associated with the proposed project could result in the discovery of human remains, compliance with existing law would ensure that significant impacts to human remains would not occur.

Level of Significance before Mitigation: Impact CR-3 is less than significant with implementation of PPP CUL-1.

5.4.6 Cumulative Impacts

Implementation of the proposed project in conjunction with other planned projects in the City could result in cumulative impacts to cultural resources. However, other development projects would be required to undergo discretionary review and would be subject to the same resource protection requirements and CEQA review as

the proposed project. For example, other development projects may require some degree of ground-disturbance but would be required to comply with applicable regulations, which would minimize the potential to disturb significant cultural resources. If cultural resources were found, they would be addressed through the necessary testing, archiving, and recovery prior to development of the site. Additionally, the proposed project has incorporated mitigation that would reduce the potential for the project to contribute to cumulative impacts to cultural resources. In consideration of the preceding factors, the project's contribution to cumulative cultural resource impacts would be rendered less than significant; therefore, project impacts would not be cumulatively considerable.

5.4.7 Level of Significance Before Mitigation

Impact CR-3 is less than significant.

Without mitigation, these impacts would be **potentially significant**:

- **Impact CR-1** Eligible historic resources would be impacted by development of the proposed project.
- **Impact CR-2** Potentially undiscovered archaeological resources could be impacted by project development.

5.4.8 Mitigation Measures

Impact CR-1

An Interpretive Exhibit that is open to the public will be developed in the Business Park area. The development of the plant and the important relationship between the cement industry and economic development of the community, and the historical relationship between the plant and agriculture in the area would be explored in the interpretive exhibit. The eligible buildings within the plant, including the Stock House and the White Cement Plant, would be recorded in a Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation report, and their key character-defining features would be identified and assessed for feasibility to salvage in a Salvage Inventory Report. Items appropriate for salvage and interpretation would be utilized in the Interpretive Exhibit or donated to the California Citrus State Historic Park or other entities for educational purposes. All other existing buildings on the project site would be demolished.

MM CR-1 The Interpretative Exhibit shall be open to the public, present a photographic history of the plant, and showcase other information and artifacts that would educate the public about the historical significance of the plant and the cement industry in the region. The construction of the Interpretative Exhibit shall be completed prior to the issuance of the Certificate of Occupancy for the last industrial building of the Specific Plan.

MM CR-2 Prior to issuance of any demolition permit, the Stock House and White Cement Plant shall be recorded in accordance with the Historic American Engineering Record Level III requirements. The recordation document shall be prepared by a qualified architectural

historian or historic preservation professional. The recordation document shall include a historical narrative regarding the architectural and historical importance of each building being salvaged, relocated, or demolished and its contributions to the history of cement production in the region. The document shall also record the existing appearance of each building being salvaged, relocated, or demolished, in professional large-format photographs, including exteriors, representative interior spaces and character-defining features. The property setting and contextual views shall also be documented. All recordation document components shall be completed in accordance with the Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation. Copies of the completed report shall be distributed to the Eastern Information Center at the University of California, Riverside.

MM CR-3 Prior to the issuance of any demolition permit, a qualified architectural historian or historic preservation professional shall prepare an inventory of key character-defining physical features of the eligible buildings appropriate for salvage and interpretation in a Salvage Inventory Report. Artifacts that are unsound, decayed, or contain toxic materials (including asbestos, lead paint, PCBs, hexavalent chromium, etc.) need not be included in the salvage process. A qualified architectural historian should prepare the interpretive materials, including historic and modern photos, for placement on a website that the applicant shall maintain for ten years. It would be appropriate for this to be on the City website or a local historic society website.

MM CR-4 The items identified in the Salvage Inventory Report shall be made available for use in an interpretive exhibit developed for the project or donated for curatorial and/or educational purposes to a local historical society, preservation organization, or the like. Salvage materials that will not be reused for the project shall be offered for donation or advertised for a period of not less than 30 days on historic preservation websites, in the *Press Enterprise* newspaper, posted on the project site itself, and by other means deemed appropriate. The salvage efforts shall be conducted by the project applicant. Salvage efforts shall be documented in writing by summarizing all measures taken to encourage receipt of salvage materials by the public. Copies of notices, evidence of publication of such notices, a summary of results from the publicity efforts, a list of salvage offers (if any) that were made, and an explanation of why the features were not or could not be accepted, shall be included in the appendix of the Salvage Inventory Report. The Salvage Inventory Report shall be filed by the project applicant with the City of Jurupa Valley Planning Department after completion of the salvage.

Impact CR-2

MM CR-5 **Archaeological Monitoring.** A qualified archaeologist shall be retained by the developer prior to the issuance of a grading permit. If unanticipated discoveries are made during construction, all work will halt within 50 feet until the resource can be evaluated by the on-call qualified archaeologist. The project archaeologist will be allowed to make an evaluation of the find. If the resource is significant, Mitigation Measure CR-12 shall apply.

MM CR-6 **Archeological Treatment Plan.** If a significant archaeological resource(s) is discovered on the property, ground-disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor, the project proponent, and the City Planning Department shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary to document the size and content of the discovery such that the resource(s) can be evaluated for significance under CEQA criteria. The research design shall list the sampling procedures appropriate to exhaust the research potential of the archaeological resource(s) in accordance with current professional archaeology standards (typically this sampling level is 2 to 5 percent of the volume of the cultural deposit). At the completion of the laboratory analysis, any recovered archaeological resources shall be processed and curated according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City of Jurupa Valley Planning Department and the Eastern Information Center.

5.4.9 Level of Significance After Mitigation

Impact CR-1

The preservation measure for Impact CR-1, along with associated mitigation measures (MM CR-1 through MM CR-4), would reduce impacts to potentially eligible historic buildings to a level that is less than significant. Therefore, no significant unavoidable adverse impacts to historical resources have been identified.

Impact CR-2

Impacts to archaeological resources would be less than significant after implementation of mitigation measures MM CR-5 and MM CR-6 requiring periodic archaeological monitoring and recovery, identification, and curation of any resources found.

5.4.10 References

MIG. 2019, November. Phase I Cultural Resources Assessment of the Proposed Agua Mansa Commerce Park, City of Jurupa Valley, County of Riverside, California.

5.5 GEOLOGY AND SOILS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Agua Mansa Commerce Park Specific Plan project (proposed project) to impact geological and soil resources.

The following analysis is based in part on information obtained from:

- *Preliminary Geotechnical Investigation Report for Agua Mansa Commerce Park, 1500 Rubidoux Boulevard, Jurupa Valley, California*, Langan Engineer & Environmental Services, April 28, 2017.
- *Preliminary Geologic Evaluation Report Agua Mansa Open Space City of Jurupa Valley, California*, Langan Engineer & Environmental Services, September 10, 2019.
- *Phase I Cultural Resources Assessment of the Proposed Agua Mansa Commerce Park, City of Jurupa Valley, County of Riverside, California*, MIG, December 14, 2017.
- *Mine Deformation Study Finite Element Analysis Report for the Agua Mansa Commerce Park,* Langan Engineer & Environmental Services, August 18, 2017.

Complete copies of these studies are included in the Technical Appendices to this Draft EIR (Volume II, Appendices E and F).

5.5.1 Environmental Setting

5.5.1.1 REGULATORY BACKGROUND

Federal

Clean Water Act

The federal Water Pollution Control Act (also known as the Clean Water Act [CWA]) is the principal statute governing water quality. The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and gives the US Environmental Protection Agency the authority to implement pollution control programs, such as setting wastewater standards for industry. The statute's goal is to end all discharges entirely and to restore, maintain, and preserve the integrity of the nation's waters. The CWA regulates both direct and indirect discharge of pollutants into the nation's waters. It sets water quality standards for all contaminants in surface waters and makes it unlawful to discharge any pollutant from a point source into navigable waters unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges and requires states to establish site-specific water quality standards for navigable bodies of water. The CWA also recognizes the need for planning to address nonpoint sources of pollution.

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act was enacted in 1997 to "reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program." To accomplish this, the act established the National Earthquake Hazard Reduction Program (NEHRP), which refined the description of agency responsibilities, program goals, and objectives. NEHRP's mission includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improvement of building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results. NEHRP designates the Federal Emergency Management Agency as the lead agency of the program and assigns it several planning, coordinating, and reporting responsibilities. Programs under NEHRP help inform and guide planning and building code requirements such as emergency evacuation responsibilities and seismic code standards.

State

California Alquist-Priolo Earthquake Fault Zoning Act

The California Alquist-Priolo Earthquake Fault Zoning Act was signed into state law in 1972, and amended, with its primary purpose being to mitigate the hazard of fault rupture by prohibiting the location of structures for human occupancy across the trace of an active fault. This act (or state law) was a direct result of the 1971 San Fernando Earthquake, which was associated with extensive surface fault ruptures that damaged numerous homes, commercial buildings, and other structures. The act requires the State Geologist (head of the California Geologic Survey [CGS]) to delineate regulatory zones known as "earthquake fault zones" along faults that are "sufficiently active" and "well defined" and to issue and distribute appropriate maps to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Pursuant to this act and as stipulated in Section 3603(a) of the California Code of Regulations, structures for human occupancy are not permitted to be placed across the trace of an active fault. The act also prohibits structures for human occupancy within 50 feet of the trace of an active fault, unless proven by an appropriate geotechnical investigation and report that the development site is not underlain by active branches of the active fault, as stipulated in Section 3603(a) of the California Code or Regulations. Furthermore, the act requires that cities and counties withhold development permits for sites within an earthquake fault zone until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting, as stipulated in Section 3603(d) of the California Code of Regulations.

Seismic Hazard Mapping Act

The Seismic Hazard Mapping Act was adopted by the state in 1990 for the purpose of protecting the public from the effects of nonsurface fault rupture earthquake hazards, including strong ground shaking, liquefaction, seismically induced landslides, or other ground failure caused by earthquakes. The goal of the act is to minimize loss of life and property by identifying and mitigating seismic hazards. The CGS prepares and provides local governments with seismic hazard zones maps that identify areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures.

California Building Code

Current law states that every local agency enforcing building regulations, such as cities and counties, must adopt the provisions of the California Building Code (CBC) within 180 days of its publication. The publication date of the CBC is established by the California Building Standards Commission, and the code is also known as Title 24, Part 2, of the California Code of Regulations. It provides minimum standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the strength of ground shaking with a specified probability at a site. The 2016 CBC took effect on January 1, 2017.

Requirements for Geotechnical Investigations

Requirements for geotechnical investigations for subdivisions requiring tentative and final maps and for other specified types of structures are detailed in California Health and Safety Code Sections 17953 to 17955 and in Section 1802 of the CBC. Testing of samples from subsurface investigations is required, such as from borings or test pits. Studies must be done as needed to evaluate slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on load-bearing capacity, compressibility, liquefaction, differential settlement, and expansive potential of the soils.

Storm Water Pollution Prevention Plans

Pursuant to the CWA, in 2012, the State Water Resources Control Board issued a statewide general National Pollutant Discharge Elimination System (NPDES) Permit for stormwater discharges from construction sites (No. CAS000002). Under this Statewide Construction General Permit (CGP), discharges of stormwater from construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for stormwater discharges or be covered by the CGP. Coverage by the CGP is accomplished by completing and filing a Notice of Intent with the State Water Resources Control Board and developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). Each applicant under the CGP must ensure that a SWPPP is prepared prior to grading and is implemented during construction. The SWPPP must list best management practices (BMPs) implemented on the construction site to protect stormwater runoff and must contain a visual monitoring program, a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs, and a monitoring plan if the site discharges directly to a water body listed on the state's 303(d) list of impaired waters.

Local

Riverside County MS4 Permit (Santa Ana Region)

Whereas the General Industrial Permit and General Construction Permit (GCP) are issued statewide, MS4 permits are issued by the local Regional Water Quality Control Board (RWQCB) in order to provide the permits with the means to address stormwater quality issues specific to the local watershed or region. As a result, MS4 permits are a more prescriptive level of regulation, requiring permittees to develop and implement a stormwater-management program with the goal of reducing the discharge of pollutants to the maximum extent

practicable. This is a more stringent performance standard than for either the General Industrial Permit or GCP. The stormwater management program or drainage area management plan, as it is referred to in the Riverside County MS4 Permit, must specify RWQCB-approved BMPs.

The MS4 permit for the part of Riverside County in the Santa Ana RWQCB's jurisdiction, Order No. R8-2010-0033 (NPED No. CAS 618033), was issued by the Santa Ana RWQCB in 2010. The principal permittee of the MS4 NPDES permit is the Riverside County Flood Control and Water Conservation District, and the City of Jurupa Valley is one of 15 co-permittees.

City of Jurupa Valley General Plan Policies

The specific policies outlined in the City's General Plan Conservation and Open Space Element that are related to geology and soils and that apply to the proposed project are listed in Table 5.9-2, City of Jurupa Valley General Plan Consistency Analysis.

5.5.1.2 EXISTING CONDITIONS/ENVIRONMENTAL SETTING

Regional Geologic Setting

Jurupa Valley is in the fault-bounded, northwest-southeast trending Perris Block in the Peninsular Ranges geomorphic province of California. The Perris Block is bounded in the east by the San Jacinto Fault Zone, the north by Cucamonga Fault Zone, and the west by Elsinore Fault Zone. According to United States Geological Survey (USGS) maps, the Perris Block is underlain by diverse metasedimentary rocks[1] intruded by igneous or volcanic rocks.[2] Erosional depositional surfaces are developed on the Perris Block, and thin to relatively thick sections of nonmarine sediments discontinuously cover the basement rock.

Geologically, the study area is in the Peninsular Ranges Province of Southern California, dominated by granitic rocks of Mesozoic age that intruded preexisting sedimentary strata. A tertiary stratum was deposited west of the eroded granitic rocks, and as the area was uplifted, some of these strata formed upland coastal plains. The study area is east of the coastal plains in an area dominated by granitic rocks that are mainly quartz diorite. It was developed for mining activities because of two steeply dipping limestone formations approximately 200 to 300 feet thick at the south end of the study area. The limestone formations are roughly parallel with an upper and lower formation; the upper formation is known as Sky Blue Hill, and the lower formation is known as Chino Limestone. Thin, poorly developed soils and minor sedimentary strata locally cover the bedrock on the study area.

Regional Faulting

The closest known fault to the project site is the Rialto-Colton Fault, approximately four miles northeast. The closest active fault is the San Jacinto Fault, approximately five miles northeast of the site. An inferred fault near

[1] Metasedimentary rock was originally sedimentary, but became metamorphic after undergoing heat, pressure, or other natural forces. Sedimentary rock formed through the deposition and solidification of sediment transported by, e.g., water, ice, or wind.
[2] Igneous rocks are formed when molten materials cool and solidify. Volcanic rock is igneous rock of volcanic origin.

Fontana is approximately six miles northwest of the site. Due to the project site's proximity to active faults, moderate to strong ground shaking could occur from an earthquake on any of the nearby faults.

Regional Seismicity

A search of the CGS earthquake catalog (updated through December 2016) found that 82 earthquakes with magnitudes greater than 5.0 have occurred within a 100-kilometer radius of the site since 1800. In addition, a search of the USGS ANSS Comprehensive Earthquake Catalog (updated through August 15, 2016) found that 48 earthquakes with magnitudes greater than 5.0 have occurred within a 100-kilometer radius of the project site since 1900.

Local Geologic Setting

The project site is in the eastern end of the Jurupa Mountains on the south side of the San Bernardino Valley. The Santa Ana River drains the San Bernardino Valley toward the southwest and is approximately one mile east of the project site.

The site is underlain by a variety of geologic units consisting of unconsolidated, gray to tan, massive, fine grained sand forming stabilized dunes; the northern portion of the site is underlain by young alluvial fan deposits consisting of unconsolidated, gray, cobbley and bouldery alluvium of Lytle Creek fan; the western, southern, and eastern portions of the site are underlain by two geologic units consisting of artificial fill and intermixed tonalite marble and schist. The artificial fill consists of uncompacted and undocumented fill from mining operations, cement kiln dust, and unconsolidated talus deposits.

Quarrying and subsurface mining activities were initiated in 1906 to mine the limestone within the southern portion of the site. Prior to quarrying, the limestone was present as two generally irregular, roughly parallel, lenticular limestone bodies dipping primarily east-northeast. The upper (shallower) and lower (deeper) limestone bodies are referred to as Sky Blue and Chino Limestones, respectively. The limestone is coarsely crystalline, associated with metamorphosed sediments, enveloped and cut by intrusive igneous rocks and contact metamorphic minerals.

Onsite Quarries

The existing Riverside Cement Plant consists of the cement plant, four quarries (Wet Weather Quarry, Lonestar Quarry, Commercial Quarry, and Chino Quarry), the Crestmore Mine, and various support buildings. The former quarries and mine were used for the mining of limestone minerals for cement production. Shallow below-grade chambers associated with the former cement plant and deeper below-grade chambers associated with former mining operations are present below portions of the site.

The Wet Weather Quarry is in the southeast portion of the Project site, and elevations within the quarry vary between 835 to 945 feet above mean sea level (amsl). The slopes within the Wet Weather Quarry have a maximum height of approximately 110 feet and have an approximate inclination of 3:4 (horizontal to vertical) or flatter.

The Lonestar Quarry was west and adjacent to the Wet Weather Quarry, but the Lonestar Quarry was filled in prior to 1976, as interpreted from stereographic photographs.

The Commercial Quarry is in the southeast end of the site and was mined in the 1960s and early 1970s. The Commercial Quarry was filled in the mid-1970s, but the fill material was mined in the late 1970s, and the majority was removed and recovered by the late 1980s for mill or kiln feed supplement. Elevations within the Commercial Quarry vary between 810 to 900 feet amsl.

The Chino Quarry is at the south end of the site and is flooded to an elevation of approximately 815 feet amsl. The ground surface elevation at the southern end of the site, adjacent to the Chino Quarry, is approximately 915 feet amsl. The 100-foot high slope between the southern end of the site and the Chino Quarry has an approximate slope of 1:1 (horizontal to vertical) or flatter. Underground mining below the Chino Quarry started in 1930 and was designated as Crestmore Mine. Underground mining ceased in 1986, and Crestmore Mine was allowed to flood.

Based on the various Riverside Cement Company maps that were reviewed, the shallowest mine level is at an elevation of 572 feet amsl.

Geologic Hazards

Surface Rupture

The City of Jurupa Valley's 2017 General Plan states that there are no known active faults in Jurupa Valley.

Liquefaction

The Jurupa Valley General Plan (2017) shows the eastern portion of the site in an area with low liquefaction susceptibility, and the western portion in an area with medium liquefaction susceptibility.

However, information from the Department of Water Resources Water Data Library shows State Well Number 03S03W03A001S less than 100 feet north of the project site. Groundwater data was collected from 2012 to 2016, and the groundwater elevation was reported at approximately 825 feet amsl (depth of 137 feet). In 2016, groundwater levels were also measured at two onsite wells, identified as Monitoring Well (at the northern boundary of the site) and Well MW-3 (at the eastern boundary). The groundwater elevation at the Monitoring Well was approximately 818 feet amsl (approximate depth of 134 feet) and at Well MW-3 the groundwater elevation was approximately 806 feet amsl (approximate depth of 84 feet).

The potential for soil liquefaction at the project site is anticipated to be low under the design earthquake.

Lateral Spreading

Lateral spreading is a phenomenon in which surface sediment moves downslope due to liquefaction in a subsurface layer. The potential for liquefaction is anticipated to be low and therefore the potential for lateral spreading is considered low.

Seismic-Induced Ground Failure

Seismic-induced ground failure includes ground settlement due to liquefaction of saturated cohesionless soils and compaction of unsaturated sands and gravels caused by earthquakes. The potential for liquefaction under the design earthquake is anticipated to be low; however, according to the geologic conditions of the project site, seismic-induced ground deformations induced by dry seismic settlement of artificial fill, young alluvial fan deposits and eolian[3] deposits could occur.

Earthquake-Induced Landslide Areas

Based on the City of Jurupa Valley General Plan, the site is not located within an earthquake-induced landslide area. Documented evidence of historic landslides was also not observed at the site.

Subsidence

Land subsidence may be induced from withdrawal of oil, gas, or water from wells. Based on a search of the Division of Oil, Gas & Geothermal Resources Well Finder online tool, the project site is not within a state-designated oil field. In addition, no active oil, gas, or geothermal wells are identified within the project site. Existing groundwater production wells on site will be closed and properly abandoned by the completion of Site development activities and associated improvements. Thus, the likelihood of land subsidence caused by oil, gas, or water withdrawal from wells is not expected.

Furthermore, the USGS "Areas of Land Subsidence in California" map indicates that the project site is not susceptible to subsidence (USGS 2019).

Collapsible Soils

Collapsible soils are geologically young, unconsolidated, low-density, loose, dry soils commonly present in arid to semiarid regions, such as Southern California. These soils generally occur within wind-deposited sands or silts, alluvial fans, colluvial soils,[4] stream banks, or residual mudflow soils. Collapsible soils have a porous structure. Once water is introduced, the porous structure collapses and the granular particles are rearranged (i.e., hydroconsolidation). A rise in groundwater or increase in surface-water infiltration, combined with the weight of a structure or fill, can cause rapid settlement that can crack foundations and walls. Based on the reported geologic conditions and subsurface information reviewed for the site, soils potentially susceptible to significant hydroconsolidation are anticipated at the site. These soils will be removed from areas of proposed structures during the grading phase of site preparation.

Expansive Soils

Expansive soils occur when the moisture content in the soil causes swelling or shrinking as a result of cyclic wet/dry weather cycles, installation of irrigation systems, change in landscape plantings, or changes in grading. Swelling and shrinking soils can result in differential movement of structures, including floor slabs and

[3] Eolian = windblown.
[4] Colluvial soil is a general name for loose, unconsolidated sediments that have been deposited at the base of hillslopes by rainwash, sheetwash, slow continuous downslope creep, or a combination of these processes.

foundations, and site work including hardscape, utilities, and sidewalks. Portions of the site are underlain by alluvial soils, which could have expansive clays, although expansive clays have not been identified on the site yet.

Paleontological Resources

On August 15, 2016, MIG commissioned a paleontological resources records search through the Division of Geological Sciences at the National History Museum of Los Angeles County, Vertebrate Paleontology Section (NHMLAC). This institution maintains files of regional paleontological site records as well as supporting maps and documents. This records search entailed an examination of current geologic maps and known fossil localities inside and within a one-mile radius of the study area. The objective of the records search was to determine the geological formations underlying the study area, whether any paleontological localities have previously been identified within the study area or in the same or similar formations near the study area, and the potential for excavations associated with the study area to encounter paleontological resources. The results also provide a basis for assessing the sensitivity of the study area for additional buried paleontological resources.

On September 12 and 13, 2016, MIG conducted a pedestrian field survey on portions of the study area that were either undeveloped or vacant because these areas are undisturbed by the associated cement plant activities and may exhibit visible ground-surface paleontological resources. MIG surveyed 100 percent of the undeveloped and vacant land within the study area. The field survey was carried out on foot, and survey transects were spaced no more than 10 meters apart between each interval.

Results of the paleontological resources records search through Natural History Museum of Los Angeles County (NHMLAC) indicate that no vertebrate fossil localities from the NHMLAC records have been previously recorded within the study area or within a one-mile radius. The County of Riverside General Plan shows the study area mapped as having a low potential for paleontological resources. Moreover, no paleontological resources were identified by MIG during the pedestrian survey. Nevertheless, the results of the literature review and the search at the NHMLAC indicate that the western portion of the study area is composed of younger Quaternary Alluvium derived as alluvial fan deposits from the elevated terrain adjacent to the west and also contains surface deposits of younger Quaternary drift sands. Both of these younger Quaternary deposits are unlikely to contain significant vertebrate fossils in the uppermost layers. At relatively shallow depths between six and eight feet there may be older Quaternary deposits that may well contain significant fossil vertebrate remains. Excavations in these older Quaternary deposits may have a potential to impact paleontological resources.

5.5.2 Notice of Preparation (NOP)/Scoping Comments

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of geology and soils.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.5.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to geology and soils are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

GEO-1 Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42.)

ii) Strong seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction.

iv) Landslides.

GEO-2 Result in substantial soil erosion or the loss of topsoil.

GEO-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

GEO-4 Be located on expansive soil, as defined in Table 18-1B of the Uniform building Code (1994), creating substantial risks to life or property.

GEO-5 Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

GEO-6 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

5.5.4 Applicable Policies and Design Features

5.5.4.1 PLANS, POLICIES, AND PROGRAMS

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to geology and soils. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP GEO-1 As required by Municipal Code Section 8.05.010, the Project is required to comply with the most recent edition of the California Building Code to preclude significant adverse effects associated with seismic hazards. In accordance with Section 1803.2 of the 2016 CBC, a

geotechnical investigation is required that must evaluate soil classification, slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on soil-bearing capacity, compressibility, liquefaction, and expansiveness, as necessary, determined by the City building official. The geotechnical investigation must be prepared by registered professionals (i.e., California Registered Civil Engineer or Certified Engineering Geologist). Recommendations of the report pertaining to structural design and construction recommendations for earthwork, grading, slopes, foundations, pavements, and other necessary geologic and seismic considerations must be incorporated into the design and construction of the proposed project.

PPP HYD-1 As required by Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls, Section B (1), any person performing construction work in the city shall comply with the provisions of this chapter, and shall control stormwater runoff so as to prevent any likelihood of adversely affecting human health or the environment. The City Engineer shall identify the BMPs that may be implemented to prevent such deterioration and shall identify the manner of implementation. Documentation on the effectiveness of BMPs implemented to reduce the discharge of pollutants to the MS4 shall be required when requested by the City Engineer.

PPP HYD-2 As required by Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls, Section B (2), any person performing construction work in the city shall be regulated by the State Water Resources Control Board in a manner pursuant to and consistent with applicable requirements contained in the General Permit No. CAS000002, State Water Resources Control Board Order Number 2009-0009-DWQ. The city may notify the State Board of any person performing construction work that has a noncompliant construction site per the General Permit.

PPP HYD-3 As required by Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls, Section C, new development or redevelopment projects shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. The City Engineer shall identify the BMPs that may be implemented to prevent such deterioration and shall identify the manner of implementation. Documentation on the effectiveness of BMPs implemented to reduce the discharge of pollutants to the MS4 shall be required when requested by the City Engineer. The BMPs may include, but are not limited to, the following and may, among other things, require new developments or redevelopments to do any of the following:

(1) Increase permeable areas by leaving highly porous soil and low lying area undisturbed by:

(a) Incorporating landscaping, green roofs and open space into the project design;

(b) Using porous materials for or near driveways, drive aisles, parking stalls and low volume roads and walkways; and

(c) Incorporating detention ponds and infiltration pits into the project design.

(2) Direct runoff to permeable areas by orienting it away from impermeable areas to swales, berms, green strip filters, gravel beds, rain gardens, pervious pavement or other approved green infrastructure and French drains by:

(a) Installing rain-gutters oriented towards permeable areas;

(b) Modifying the grade of the property to divert flow to permeable areas and minimize the amount of storm water runoff leaving the property; and

c) Designing curbs, berms or other structures such that they do not isolate permeable or landscaped areas.

(3) Maximize storm water storage for reuse by using retention structures, subsurface areas, cisterns, or other structures to store storm water runoff for reuse or slow release.

(4) Rain gardens may be proposed in-lieu of a water quality basin when applicable and approved by the City Engineer.

PPP HYD-4 As required by Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls, Section E, any person or entity that owns or operates a commercial and/or industrial facility(s) shall comply with the provisions of this chapter. All such facilities shall be subject to a regular program of inspection as required by this chapter; any NPDES permit issued by the State Water Resource Control Board, Santa Ana Regional Water Quality Control Board, Porter-Cologne Water Quality Control Act (Wat. Code Section 13000 et seq.), Title 33 U.S.C. Section 1251 et seq. (Clean Water Act); any applicable state or federal regulations promulgated thereto; and any related administrative orders or permits issued in connection therewith.

5.5.4.2 PROJECT DESIGN FEATURES

There are no project design features that apply to geology and soils.

5.5.5 Environmental Impacts

The following impact analysis addresses thresholds of significance for geology and soils.

Impact GEO-1(i) Threshold: 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, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)

Alquist-Priolo Earthquake Fault Zones are regulatory zones established by the California Geological Survey (CGS) around active faults with the potential to cause surface rupture. The zones vary in width, but the average

is approximately one-quarter mile wide. The CGS has not published any Alquist-Priolo map containing the project site. The City of Jurupa Valley General Plan states that there are no known active faults within the city (Jurupa Valley 2017b).

Level of Significance before Mitigation: Impact GEO-1(i) would cause no impact.

Impact GEO-1(ii),(iii),(iv) Threshold: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking, seismic-related ground failure including liquefaction, or landslides?

Ground Shaking

Although the proposed project would introduce new buildings and associated workers and visitors, the project itself would not exacerbate ground shaking onsite. The southern California region regularly experiences seismic activity, and there are several nearby active faults that could cause moderate to strong ground shaking. Nearby active or known faults include the Rialto-Colton Fault about four miles northeast and the San Jacinto Fault approximately five miles northeast of the site.

However, the project site is not in an Alquist-Priolo earthquake fault zone, and there are no active faults onsite that could subject the site to surface ground rupture. Additionally, future development in accordance with the Specific Plan would be designed and constructed to comply with seismic design parameters in the geotechnical report and the 2016 CBC, which would minimize potential for building collapse and general building damage during seismic ground shaking. Adherence to the seismic design parameters and the 2016 CBC would be confirmed at plan check and building design review with the City of Jurupa Valley.

For the Open Space District, the geotechnical investigation concluded that adverse impacts from seismic hazards are primarily due to rockfall. Rockfall is common in this portion of the site, but mainly concentrated in areas that have been disturbed by blasting, quarry operations, and project site grading. Rock slopes that have been left very steep by quarrying activities are particularly susceptible. However, since the Open Space District would be undeveloped and does not include human occupation, rockfall hazards would not be significant.

The City has a local hazard mitigation plan (2017) that provides a framework for planning for major natural hazards, including earthquakes that have the potential to impact Jurupa Valley. It identifies the City's hazards, reviews and assesses past disaster occurrences, estimates the probability of future occurrences, and sets a framework to reduce or eliminate hazardous risks to people and property from natural and man-made hazards (Jurupa Valley 2017a).

Seismic Related Ground Failure Including Liquefaction

The City of Jurupa Valley General Plan shows the east portion of the site in an area with low liquefaction susceptibility and the western portion in an area with medium liquefaction susceptibility.

Groundwater data was collected from 2012 to 2016 at a well about 100 feet from the site, and the groundwater elevation was reported at approximately 825 feet amsl (depth of 137 feet). In 2016, groundwater levels were also measured at two onsite wells, identified as Monitoring Well and Well MW-3. The groundwater elevation at

the Monitoring Well was approximately 818 feet amsl (approximate depth of 134 feet) and at Well MW-3 the groundwater elevation was approximately 806 feet amsl (approximate depth of 84 feet).

The site is in the San Bernardino Valley on the eastern part of the Chino Hydrologic Basin. Published hydrogeologic studies by the US Geological Survey indicate that the historic groundwater levels in this part of the Chino Basin are influenced by the Rialto-Colton Basin and the Santa Ana River. Groundwater level fluctuations in the Chino Basin on the order of 40 to 50 feet have been documented between wet and dry periods.

As stated above, groundwater elevations measured at the site ranged from 806 feet amsl to 818 feet amsl from onsite wells. Based on the preliminary grading plans, proposed building elevations range from approximately 920 to 940 feet amsl. Assuming a wet precipitation period and a 50-foot rise in groundwater elevation, the depth to groundwater would rise to approximately 856 to 868 feet amsl in the two onsite wells. This would still be more than 50 feet below the proposed building pad elevations; thus, liquefaction susceptibility would have a less than significant impact on the proposed development.

Landslides

Based on the County of Riverside General Plan and City of Jurupa Valley General Plan, the site is not in an earthquake-induced landslide area. Documented evidence of historical landslides was not observed at the site.

Level of Significance before Mitigation: With implementation of PPP GEO-1, Impact GEO-1(ii), (iii), (iv) would be less than significant.

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

Project Construction

Site grading and project construction activities would disturb and expose large amounts of soil and could thus accelerate erosion if effective soil erosion measures are not used. Generally, the earthwork plan for the project involves a cut-and-fill grading plan that would involve approximately 2.1 million cubic yards of soil handling. The project site is expected to balance; however, as a conservative measure, it is estimated that up to 20,000 cubic yards of soil may need to be exported offsite.

Construction projects of one acre or more, including the proposed project, are regulated under the Statewide CGP, Order No. 2012-0006-DWQ, issued by the State Water Resources Control Board in 2012. Projects obtain coverage by developing and implementing a SWPPP estimating sediment risk from construction activities to receiving waters, and specifying BMPs that would be used by the project to minimize pollution of stormwater. Categories of BMPs used in SWPPPs are described below in Table 5.5-1. Implementation of BMPs would reduce construction impacts on stormwater quality and soil erosion to less than significant levels.

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Table 5.5-1 Construction BMPs

Category	Purpose	Examples
Erosion Controls and Wind Erosion Controls	Consists of using project scheduling and planning to reduce soil or vegetation disturbance (particularly during the rainy season), preventing or reducing erosion potential by diverting or controlling drainage, as well as preparing and stabilizing disturbed soil areas.	Scheduling, preservation of existing vegetation, hydraulic mulch, hydroseeding, soil binders, straw mulch, geotextile and mats, wood mulching, earth dikes and drainage swales, velocity dissipation devices, slope drains, streambank stabilization, compost blankets, soil preparation/roughening, and non-vegetative stabilization
Sediment Controls	Filter out soil particles that have been detached and transported in water.	Silt fence, sediment basin, sediment rrap, check dam, fiber rolls, gravel bag bern, street sweeping and vacuuming, sandbag barrier, straw bale barrier, storm drain inlet protection, manufactured linear sediment controls, compost socks and berms, and biofilter bags
Wind Erosion Controls	Consists of applying water or other dust palliatives to prevent or minimize dust nuisance.	Dust control soil binders, chemical dust suppressants, covering stockpiles, permanent vegetation, mulching, watering, temporary gravel construction, synthetic covers, and minimization of disturbed area
Tracking Controls	Minimize the tracking of soil offsite by vehicles	Stabilized construction roadways and construction entrances/exits, and entrance/outlet tire wash.
Non-storm Water Management Controls	Prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. Conduct various construction operations, including paving, grinding, and concrete curing and finishing, in ways that minimize non-stormwater discharges and contamination of any such discharges.	Water conservation practices, temporary stream crossings, clear water diversions, illicit connection/discharge, potable and irrigation water management, and the proper management of the following operations: paving and grinding, dewatering, vehicle and equipment cleaning, fueling and maintenance, pile driving, concrete curing, concrete finishing, demolition adjacent to water, material over water, and temporary batch plants.
Waste Management and Controls (i.e., good housekeeping practices)	Management of materials and wastes to avoid contamination of stormwater.	Stockpile management, spill prevention and control, solid waste management, hazardous waste management, contaminated soil management, concrete waste management, sanitary/septic waste management, liquid waste management, and management of material delivery storage and use.

Source: CASQA 2012.

Project Operation

In compliance with the NPDES small municipal separate storm sewer system (MS4) permit and Riverside County Drainage Area Management Plan, a water quality management plan was prepared for the proposed project that identifies BMPs to be used onsite to control pollutant runoff (see Appendix H). The BMP measures that would be implemented on site are described in the Hydrology and Water Quality section under impact HYD-1 and include site design measures, source control measures, and stormwater treatment measures. Post-Development water quality impacts would be less than significant with the operation and maintenance of the BMPs specified in the water quality management plan.

Level of Significance before Mitigation: With implementation of PPP HYD-1, PPP HYD-2, PPP HYD-3 and PPP-HYD-4, Impact GEO-2 would be less than significant.

Impact GEO-3 Threshold: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Landslides

As concluded above, the site is not located within an earthquake-induced landslide area, and no evidence of historical landslides was identified (as shown in Figure 8-6 of the City's General Plan). Development of the project would not exacerbate existing landslide hazards.

Lateral Spreading

Lateral spreading occurs when surface soils displace and are transported downslope or in the direction of a slope by earthquake and gravitational forces. As stated above, the potential for liquefaction under the design earthquake is anticipated to be low, and therefore the potential for lateral spreading is also considered low.

Subsidence

The major cause of ground subsidence is excessive withdrawal of groundwater through groundwater pumping. Land subsidence may also be induced from withdrawal of oil. However, the project site is not over a groundwater basin, and significant groundwater pumping would not occur onsite. In addition, no active oil, gas, or geothermal wells are identified within the project site. Thus, ground subsidence is not considered a significant hazard.

Liquefaction

As analyzed under Impact GEO-1(ii), (iii),(iv), the potential for soil liquefaction at the project site is anticipated to be low under the design earthquake.

Collapse

Collapsible soils, or soils susceptible to significant hydroconsolidation, are unconsolidated, low-density, loose, dry soils that have a porous structure, susceptible to collapse when water is introduced. Based on the reported

geologic conditions and subsurface information reviewed for the site, soils potentially susceptible to significant hydroconsolidation are anticipated.

Based on the collapsible soil evaluation conducted on soil samples, the collapse potential varies between 0.2 to 1.5 percent within the upper 20 feet and less than 0.5 percent for samples collected at greater depths. Samples that had a collapse potential greater than 1 percent were located in borings LB-4 and LB-8, approximately in the center of the project site at depths of approximately 5 to 6.5 feet and 15 to 16.5 feet, respectively. Thus, impacts related to collapsible soils are potentially significant and mitigation is required.

Furthermore, the Riverside Cement Plant operations included quarries, and an underground mining operation (i.e., the Crestmore Mine) was used to obtain limestone for use in manufacturing cement. The quarries were located south of the proposed buildings. Underground mining was initially performed beneath the Chino Quarry, which is located about 700 feet south of the proposed development. Mining progressed north and east as successively lower mining levels were excavated. A Mine Deformation Study was performed to estimate potential deformations at the belowground mine chambers and corresponding ground surface deflections due to the proposed project. The document review, literature review, and modeling performed indicated that the presence of the former mine workings would not impact the proposed development. The results of the modeling indicate that a loss of soil support is not anticipated in the proposed new building foundation bearing zone.

Development of the proposed project would not exacerbate existing hazards related to landslides, lateral spreading, subsidence, and liquefaction; however, collapsible soils onsite could be exacerbated during grading and construction of the proposed buildings.

Level of Significance before Mitigation: Impact GEO-3 would be potentially significant. Mitigation Measures GEO-1 and GEO-2 are required to reduce Impact GEO-3 to less than significant.

Impact GEO-4 Threshold: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial director indirect risks to life or property?

Expansive soils occur when the moisture content in the soil causes swelling or shrinking as a result of cyclic wet/dry conditions. Portions of the site are underlain by alluvial soils that could have expansive clays, although expansive clays have not been identified on the site yet. Other expansive soils include cohesive soils (e.g., clays, sandy clays, or silty clays), which are difficult to break up when dry and exhibit significant cohesion when submerged.

As part of the geotechnical report, field investigation was conducted, and cohesive soil was not encountered within the upper 15 feet of borings. Cohesive soils were encountered in boring LB-5 at a depth of 15 to 16.5 feet and, based on laboratory results, the material has a medium expansive potential. Expansive soils can be found in areas underlain by alluvial soils. If not properly planned and executed, grading operations could exacerbate the extent of expansive soils beneath the building pads. Thus, impacts related to expansive soils are potentially significant, and further testing and evaluation should be performed during final design and following rough grading.

Level of Significance before Mitigation: Impact GEO-4 would be potentially significant. Mitigation Measures GEO-1 and GEO-2 are required to reduce Impact GEO-4 to less than significant.

Impact GEO-5 Threshold: Would the proposed 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?

Future development onsite would require infrastructure improvements to connect to existing Rubidoux Community Services District's neighboring sewer lines in Brown Avenue to the east, Rubidoux Boulevard to the west, and in Agua Mansa Road to the south to accommodate additional flows generated by the proposed development. The project would not use alternative wastewater disposal systems such as septic tanks; thus, no impact would occur.

Level of Significance before Mitigation: Impact GEO-5 will cause no impact.

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

Unique Geologic Features

A predominant geologic feature within the site is the large limestone boulder and hill, approximately 985 feet above mean sea level, adjacent to what remains of the flooded Chino Quarry in the southern portion of the site. The limestone boulder and hill will be maintained and there will be no impacts to unique geological features on site.

Paleontological Resources

No known paleontological resources from the NHMLAC records were recorded within the study area or within a one-mile radius, and no resources were identified during the pedestrian survey. The County of Riverside General Plan shows the study area mapped as having a low potential for paleontological resources (Jurupa Valley 2017b). Nevertheless, the results of the literature review and the search at the NHMLAC indicate that the western portion of the study area is composed of younger Quaternary Alluvium derived as alluvial fan deposits from the elevated terrain adjacent to the west and also contains surface deposits of younger Quaternary drift sands. Both of these younger Quaternary deposits are unlikely to contain significant vertebrate fossils in the uppermost layers, but at relatively shallow depths ranging from six to eight feet there may be older Quaternary deposits that contain significant fossil vertebrate remains. Excavations in these older Quaternary deposits may have a potential to impact paleontological resources. As a result, mitigation measures are included to reduce potentially significant impacts to previously undiscovered paleontological resources or unique geological features that may be accidentally encountered during project implementation to a less than significant level.

Level of Significance before Mitigation: Impact GEO-6 would be potentially significant. Mitigation Measures GEO-3 and GEO-4 are required to reduce Impact GEO-6 to less than significant.

5.5.6 Cumulative Impacts

Geology and soils impacts related to the proposed project would be specific to the project site and its users and would not be common or contribute to the impacts (or shared with, in an additive sense) on other sites. Compliance with applicable state and local building regulations would be required of all development in the City. Individual projects would be designed and built in accordance with applicable standards in the CBC and the individual building regulations of local jurisdictions (see PPP GEO-1), including pertinent seismic design criteria. Site-specific geologic hazards would be addressed by the engineering geologic report and/or geotechnical report required for each building. These geologic investigations would identify the specific geologic and seismic characteristics on a site and provide guidelines for engineering design and construction to maintain the structural integrity of proposed structures and infrastructure. Therefore, compliance with applicable state and local building regulations and standard engineering practices related to seismic and geologic hazard reduction would prevent significant cumulative adverse impacts associated with geologic and seismic hazards.

Implementation of the proposed project in conjunction with other planned projects in the City could result in cumulative impacts to paleontological resources. However, other development projects would be required to undergo discretionary review and would be subject to the same resource protection requirements and CEQA review as the proposed project. For example, other development projects may require some degree of ground-disturbance but would be required to comply with applicable regulations, which would minimize the potential to disturb significant paleontological resources. If paleontological resources were found, they would be addressed through the necessary testing, archiving, and recovery prior to development of the site. Additionally, the proposed project has incorporated mitigation that would reduce the potential for the project to contribute to cumulative impacts to paleontological resources. In consideration of the preceding factors, the project's contribution to cumulative paleontological resource impacts would be rendered less than significant; therefore, project impacts would not be cumulatively considerable.

5.5.7 Level of Significance Before Mitigation

Impacts GEO-1(i) and GEO-5 would have no impact.

Upon implementation of PPP GEO-1, Impact GEO-1(ii), (iii), (iv) would be less than significant.

Upon implementation of PPP HYD-1, PPP HYD-2, PPP HYD-3 and PP-HYD-4, Impact GEO-2 would be less than significant. Without mitigation, these impacts would be **potentially significant**:

- **Impact GEO-3** The site contains collapsible soils that may be exacerbated by development of the proposed project.
- **Impact GEO-4** Expansive soils onsite may cause geologic hazards to workers and visitors.
- **Impact GEO-6** Previously undiscovered paleontological resources may be accidentally encountered during project implementation.

5.5.8 Mitigation Measures

Impact GEO-3

MM GEO-1 Prior to commencement of mass excavation and grading, the project applicant shall coordinate with the excavation/grading contractor, civil engineer and geotechnical consultant to provide a detailed work schedule to the City. This team shall be available to meet onsite with the City inspector, if requested, to address schedule details and any issues related to the geotechnical aspects of site grading.

MM GEO-2 Prior to construction, to reduce hazards related to geologic conditions onsite, including the potential for settlement from collapsible soils and foundational damage from expansive soils, remedial grading may include but shall not be limited to the following:

- All vegetation and deleterious materials shall be disposed of offsite prior to initiation of grading operations.
- Soil over-excavation shall extend laterally a distance equal to the depth of removal but no less than five feet beyond the limits of the structures. In addition, within building limits, existing soil shall be removed and replaced as engineered fill (over-excavated) to a depth of at least five feet below the bottom of the building foundations, to the bottom of artificial fill, or five feet below existing grade, whichever is the greater depth. Beyond building limits, existing soil shall be removed and replaced as engineered fill (over-excavated) to a depth of at least two feet below proposed grade. The actual depths of removal shall be evaluated in the field by a representative of the geotechnical consultant based on actual conditions exposed during grading.
- All surficial units consisting of artificial fill, upper five feet of alluvial soils, soil with roots, and loose surficial soil are considered unsuitable for support of the proposed fills and improvements following removal of vegetation and deleterious materials. These materials shall be over-excavated to expose competent soil.
- Environmentally unsuitable soils encountered during the excavation process shall be properly disposed of offsite in accordance with all state and local regulations. Over-excavated soils, free of deleterious and environmentally unsuitable materials, may be reused as compacted fill.
- All over-excavation bottoms shall be observed by the geotechnical consultant prior to fill placement. Prior to placement of fill material, the over-excavation bottom shall be scarified to a depth of at least six inches, moisture conditioned to within one to two percent of optimum moisture content, and proof-rolled.
- The geotechnical consultant shall be provided with appropriate survey staking during grading to verify that depths and locations of recommended over-excavations have been achieved. Observations and detailed geologic mapping of over-excavations should be

performed by the engineering geologist or geotechnical engineer to verify the anticipated conditions.

- Any foundation remnants or construction debris associated with former structures or developments encountered within excavations shall be fully removed, and any void spaces that may be created shall be backfilled with approved compacted structural fill.
- Onsite excavated materials to be used as compacted fill shall be placed in uniform lifts restricted to about six inches in thickness, moisture conditioned to near optimum moisture content, then mechanically compacted. Fill placement shall be subject to controlled engineering inspection by the engineer.
- Fill slopes shall be designed at a slope ratio of 2:1 (horizontal:vertical) or flatter and be overbuilt and subsequently cut back to a compacted core. Fill slopes shall be constructed with keyways, backcuts, and backdrains. Keyways shall be a minimum of 15 feet wide for slopes up to 30 feet high and a minimum of half the slope height for slopes higher than 30 feet. Keyways shall be tilted a minimum 2 percent toward the back of the keyway and embedded a minimum of three feet into competent material at the toe. Backcut benches shall be excavated to expose competent material where fill is placed on slopes steeper than approximately 5:1 (horizontal:vertical).

Notes should be added to the grading plan to indicate these mitigation measures.

Impact GEO-4

Mitigation Measures MM GEO-1 and MM GEO-2 are also applicable to Impact GEO-4.

Impact GEO-6

MM GEO-3 **Paleontological Monitoring.** A qualified paleontologist shall be retained by the developer prior to the issuance of a grading permit. The project paleontologist will be on call to monitor ground-disturbing activities and excavations on the project site following identification of potential paleontological resources by project personnel. If paleontological resources are encountered during implementation of the project, ground-disturbing activities will be temporarily redirected from the vicinity of the find. The project paleontologist will be allowed to temporarily divert or redirect grading or excavation activities in the vicinity in order to make an evaluation of the find. If the resource is significant, Mitigation Measure CR-14 shall apply.

MM GEO-4 **Paleontological Treatment Plan.** If a significant paleontological resource(s) is discovered on the property, the qualified paleontologist shall develop a plan of mitigation in consultation with the project proponent and the City. The plan shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find.

5.5.9 Level of Significance After Mitigation

Impact GEO-3

Implementation of Mitigation Measure MM GEO-3 would require the project applicant to coordinate with the excavation/grading contractor, civil engineer and geotechnical consultant to provide a detailed work schedule to the City. This team shall be available to meet onsite with the City inspector, if requested, to address schedule details and any issues related to the geotechnical aspects of site grading. Compliance with mitigation measure MM GEO-4 would ensure remedial grading occurs prior to construction of the proposed structures. This would involve over-excavating unsuitable soils and replacing them with properly compacted fill materials to ensure onsite soils can adequately support the proposed buildings. Thus, impacts related to collapsible soils would be reduced to less than significant levels upon implementation of the required mitigation.

Impact GEO-4

Similar to Impact GEO-3, implementation of mitigation measures MM GEO-3 and MM GEO-4 would ensure expansive soils are over-excavated and replaced with properly compacted fill that is moisture conditioned to within 1 to 2 percent of optimum moisture content. Thus, geologic impacts related to expansive soils onsite would be reduced to less than significant levels.

Impact GEO-6

Implementation of mitigation measures MM GEO-5 and MM GEO-6 would ensure that no unique paleontological resource or unique geologic feature on site will be directly or indirectly destroyed due to project implementation. Thus, impacts would be reduced to less than significant.

5.5.10 References

California Stormwater Quality Association (CASQA). 2012, July. California Construction Best Management Practices Handbook.

Jurupa Valley, City of. 2017a, May. Local Hazard Mitigation Plan. http://www.jurupavalley.org/Portals/0/Documents/Departments/City%20Manager/Emergency%20Preparedness/JV%202017%20Local%20Hazard%20Mitigation%20Plan%20(LHMP).pdf?ver=2017-09-20-223120-300.

———. 2017b, September. City of Jurupa Valley 2017 General Plan. http://www.jurupavalley.org/Departments/Development-Services/Planning/General-Plan.

MIG. 2017, December 14. Phase I Cultural Resources Assessment of the Proposed Agua Mansa Commerce Park, City of Jurupa Valley, County of Riverside, California.

United States Geological Survey (USGS). 2019, July 3 (accessed). Areas of Land Subsidence in California. https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html.

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5.6 GREENHOUSE GAS EMISSIONS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the proposed project to cumulatively contribute to greenhouse gas (GHG) emissions impacts. The analysis in this section is based on the following technical report:

- Agua Mansa Commerce Park Specific Plan, Greenhouse Gas Analysis, City of Jurupa Valley, prepared by Urban Crossroads on January 28, 2019.

A complete copy of this study is included as technical appendix to this Draft EIR (Appendix C3). An individual project cannot generate enough greenhouse gas emissions to affect a discernible change in global climate. However, the proposed project may participate in the potential for global climate change by its incremental contribution of greenhouse gases combined with the cumulative increase of all other sources of greenhouse gases. Because these changes may have serious environmental consequences, this Section will evaluate the potential for the proposed project to have a significant effect upon the environment as a result of its potential contribution to the greenhouse effect.

The following are definitions for terms used throughout this section.

- **Greenhouse gases (GHG).** Gases in the atmosphere that absorb infrared light, thereby retaining heat in the atmosphere and contributing to a greenhouse effect.
- **Global warming potential (GWP).** Metric used to describe how much heat a molecule of a greenhouse gas absorbs relative to a molecule of carbon dioxide (CO_2) over a given period of time (20, 100, and 500 years). CO_2 has a GWP of 1.
- **Carbon dioxide-equivalent (CO_2e).** The standard unit to measure the amount of greenhouse gases in terms of the amount of CO_2 that would cause the same amount of warming. CO_2e is based on the GWP ratios between the various GHGs relative to CO_2.
- **$MTCO_2e$.** Metric ton of CO_2e.
- **$MMTCO_2e$.** Million metric tons of CO_2e.

5.6.1 Environmental Setting

5.6.1.1 GREENHOUSE GASES AND CLIMATE CHANGE

Global climate change is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. Historical changes to the earth's climate have occurred naturally without human influence, as in the case of an ice age. However, scientific evidence suggests that climate shift since the Industrial Revolution is happening because of greenhouse gases resulting from human activity and industrialization over the past 200 years.

Greenhouse Gases

For the purposes of this analysis, emissions of carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) were evaluated because these gases are the primary contributors to climate change from development projects. Although there are other substances, such as fluorinated gases, that also contribute, fluorinated gases were not evaluated as their sources are not well defined and do not contain accepted emissions factors or methodology to accurately calculate.

- **Carbon Dioxide:** Carbon dioxide (CO_2) is an odorless and colorless GHG. Outdoor levels of carbon dioxide are not high enough to result in negative health effects. Carbon dioxide is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. Carbon dioxide is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks. Since the Industrial Revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggest a corollary increase in levels and concentrations. As an example, prior to the Industrial Revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30 percent. Left unchecked, the concentration of carbon dioxide in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources.

- **Methane:** Methane (CH_4) is an extremely effective absorber of radiation, although its atmospheric concentration is less than carbon dioxide and its lifetime in the atmosphere is brief (10–12 years), compared to other GHGs. Exposure to high levels of methane can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate. Methane has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning.

- **Nitrous Oxide:** Nitrous oxide (N_2O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's lesions (brain damage). Concentrations of nitrous oxide also began to rise at the beginning of the Industrial Revolution. In 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide is produced by microbial processes in soil and water, including reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel–fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, e.g., in whipped cream bottles and in potato chip bags to keep chips fresh. It is also used in rocket engines and in race cars. Nitrous oxide can be transported into the stratosphere, deposited on the earth's surface, and converted to other compounds by chemical reaction.

GHGs have varying GWP values, which represent the potential of a gas to trap heat in the atmosphere. Carbon dioxide is the reference gas for GWP and thus has a GWP of 1.

The atmospheric lifetime and GWP of selected greenhouse gases are summarized at Table 5.6-1. As shown in the table, GWPs for the Second Assessment Report (SAR)—the Intergovernmental Panel on Climate Change's (IPCC) scientific and socioeconomic assessment on climate change—range from 1 for carbon dioxide to 23,900 for sulfur hexafluoride; GWP for the IPCC's 4th Assessment Report (AR4) range from 1 for carbon dioxide to 22,800 for sulfur hexafluoride.

Table 5.6-1 Global Warming Potential and Atmospheric Lifetime of Select GHGs

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)	
		Second Assessment Report (SAR)	4th Assessment Report (AR4)
Carbon Dioxide	50–200	1	1
Methane	12 ±3	21	25
Nitrous Oxide	114	310	298

Source: Urban Crossroads 2019
Notes: Based on Table 2.14 of the IPCC Fourth Assessment Report, 2007.

Effects of Climate Change in California

Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35 percent under the lower warming range (3–5.5°F) to 75 to 85 percent under the medium warming range (5.5–8°F). In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced (Urban Crossroads 2019).

In addition, under the higher warming range scenario (8–10.5°F), there could be up to 100 more days per year with temperatures above 90ºF in Los Angeles and 95ºF in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures,

potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

The state's water supplies are also at risk from rising sea levels. An influx of salt water could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major fresh water supply.

Agriculture

Increased temperatures could cause widespread changes to the agriculture industry, reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25 percent of the water supply they need. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone (O_3) pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts.

In addition, continued global climate change could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued global climate change could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Global climate change has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the

medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. For instance, wildfires in northern California could increase by up to 90 percent due to decreased precipitation.

Moreover, continued global climate change has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of global climate change.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12 to 14 inches.

Human Health Effects

The potential health effects related directly to the emissions of carbon dioxide, methane, and nitrous oxide as they relate to development projects, such as the proposed project, are still being debated in the scientific community. Their cumulative effects to global climate change have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change will likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas. Exhibit 2-A in Appendix C3 presents the potential impacts of global warming.

Specific health effects associated with directly emitted GHG emissions are:

- **Water Vapor:** There are no known direct health effects related to water vapor at this time. It should be noted, however, that some pollutants can enter the human body through water vapor.

- **Carbon Dioxide:** According to the National Institute for Occupational Safety and Health, high concentrations of carbon dioxide can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of carbon dioxide in the earth's atmosphere are estimated at approximately 370 ppm, and the actual level at which adverse health effects typically occur is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek or exposure levels of 30,000 ppm averaged over 15 minutes.

- **Methane:** Methane is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to high levels of methane can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate.

- **Nitrous Oxide:** The health effects associated with exposure to elevated concentrations of nitrous oxide include dizziness, euphoria, slight hallucinations, and, in extreme cases of elevated concentrations nitrous oxide, brain damage.

- **Fluorinated Gases:** High concentrations of fluorinated gases can also result in adverse health effects such as asphyxiation, dizziness, headache, cardiovascular disease, cardiac disorders, and in extreme cases, increased mortality.

- **Aerosols:** The health effects of aerosols are similar to that of other fine particulate matter. Thus, aerosols can cause elevated respiratory and cardiovascular diseases as well as increased mortality.

- **Nitrogen Trifluoride:** Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis.

5.6.1.2 REGULATORY BACKGROUND

Federal

Prior to the last decade, there were no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

GHG Endangerment

In *Massachusetts v. Environmental Protection Agency* (549 U.S. 497 (2007)), decided on April 2, 2007, the Supreme Court found that four GHGs, including carbon dioxide, are air pollutants subject to regulation under Section 202(a)(1) of the Clean Air Act. The Court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator 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 GHGs—carbon dioxide, methane, nitrous oxide,hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—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 GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section "Clean Vehicles," below. After a lengthy legal challenge, the U.S. Supreme Court declined to review an Appeals Court ruling that upheld the EPA Administrator's findings.

Clean Vehicles

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the US. On April 1, 2010, the EPA and the Department of Transportation's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the US.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty passenger vehicles covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. Together, these standards would cut carbon dioxide emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and the National Highway Safety Administration issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025 in August 2012 (EPA 2012c). The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of carbon dioxide (CO_2) in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

The EPA and the US Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses, effective November 14, 2011. For combination tractors, the agencies proposed engine and vehicle standards that began in the 2014 model year and would achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies proposed separate gasoline and diesel truck standards, which phased in starting in the 2014 model year and would achieve up to a 10 percent reduction for gasoline vehicles and a 15 percent reduction for diesel vehicles by the 2018 model year (12 and 17 percent, respectively, if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions from the 2014 to 2018 model years.

As of September 2018, the EPA has proposed amendments to the 2012 light-duty vehicle GHG regulations. This amendment would revise two technical errors related to compliance credit calculations. The first revision addresses how auto manufacturers calculate credits for optional advanced technology incentives, and the second corrects the equation for calculating certain types of off-cycle credits. The proposed

amendments would clarify the calculation methodology in the regulations and would take effect once the final rule becomes effective.

Mandatory Reporting of GHGs

The Consolidated Appropriations Act of 2008, passed in December 2007, required the establishment of mandatory GHG reporting rules. On September 22, 2009, the EPA issued the Final Mandatory Reporting of GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the US and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the EPA.

New Source Review

The EPA issued a final rule on May 13, 2010, that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these Clean Air Act permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Federal Code of Regulations, the EPA states:

> This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the Clean Air Act, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to GHG sources, starting with the largest GHG emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for GHG emissions until at least April 30, 2016.

The EPA estimates that facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

Standards of Performance for GHG Emissions for New Stationary Sources: Electric Utility Generating Units

As required by a settlement agreement, the EPA proposed new performance standards for emissions of carbon dioxide for new, affected, fossil fuel–fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts would be required to meet an output-based standard of 1,000 pounds of carbon dioxide per megawatt-hour, based on the performance of widely used natural gas combined cycle technology. It should be noted that on February 9, 2016, the US Supreme Court issued a stay of this

regulation, pending litigation. Additionally, the current EPA Administrator has signed a measure to repeal the Clean Power Plan, including the CO_2 standards.

National Cap and Trade

Cap and trade refers to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. Successful examples in the US include the Acid Rain Program and the NO_x Budget Trading Program and Clean Air Interstate Rule in the northeast. There is no federal GHG cap and trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap and trade.

The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap and trade system January 1, 2014, and joint offset auctions took place in 2015.

SmartWay Program

The SmartWay Program is a public-private initiative between the EPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both GHG emissions and air pollution) of the goods movement supply chains. SmartWay is comprised of four components:

- **SmartWay Transport Partnership:** A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.
- **SmartWay Technology Program:** A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.
- **SmartWay Vehicles:** A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
- **SmartWay International Interests:** Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay effectively refers to requirements geared toward reducing fuel consumption. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all heavy-duty trucks will have to comply with the CARB GHG Regulation that is designed with the SmartWay Program in mind, to reduce GHG emissions by making them more fuel-efficient. For instance, in 2015, 53-foot or longer dry vans or refrigerated trailers equipped with a combination of SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices would obtain a total of 10 percent or more fuel savings over traditional trailers.

Through the SmartWay Technology Program, the EPA has evaluated the fuel saving benefits of various devices through grants, cooperative agreements, emissions and fuel economy testing, demonstration projects and technical literature review. As a result, the EPA has determined that the following types of technologies provide fuel-saving and/or emission-reducing benefits when used properly in their designed applications, and has verified certain products:

- Idle reduction technologies—i.e., less idling of the engine when it is not needed—would reduce fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- Low rolling resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel will eventually slow down because of this resistance.
- Retrofit technologies include things such as diesel particulate filters, emissions upgrades (to a higher tier), etc. that would reduce emissions.
- Federal excise tax exemptions.

California

Legislative Actions to Reduce GHGs

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark Assembly Bill (AB 32) California Global Warming Solutions Act of 2006, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 and Title 20 energy standards, was originally adopted for other purposes such as energy and water conservation, but also provides GHG reductions. This section describes the major provisions of the legislation.

AB 32

The California State Legislature enacted AB 32, which requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. "GHGs" as defined under AB 32 include carbon dioxide, methane, N_2O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. The California Air Resources Board (CARB) is the state agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

> Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from

> the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

CARB approved the 1990 GHG emissions level of 427 $MMTCO_2e$ on December 6, 2007. Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 $MMTCO_2e$. Emissions in 2020 in a "business as usual" (BAU) scenario were estimated to be 596 $MMTCO_2e$, which do not account for reductions from AB 32 regulations. At that level, a 28.4 percent reduction was required to achieve the 427 million $MTCO_2e$ 1990 inventory. In October 2010, CARB prepared an updated 2020 forecast to account for the recession and slower forecasted growth. The forecasted inventory without the benefits of adopted regulation is now estimated at 545 million $MTCO_2e$. Therefore, under the updated forecast, a 21.7 percent reduction from BAU is required to achieve 1990 levels.

CARB Scoping Plan

CARB's Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the state's emissions to 1990 levels by the year 2020 to comply with AB 32. The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors.

Cap and Trade Program

The Scoping Plan identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to CARB, a cap-and-trade program will help put California on the path to meet its goal of reducing GHG emissions to 1990 levels by the year 2020 and ultimately achieving an 80 percent reduction from 1990 levels by 2050. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap will be able to trade permits to emit GHGs within the overall limit.

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. See Title 17 of the California Code of Regulations (CCR), §§ 95800 to 96023. The Cap-and-Trade Program is designed to reduce GHG emissions from major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32's emission-reduction mandate of returning to 1990 levels of emissions by 2020. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the program's duration.

Covered entities that emit more than 25,000 $MTCO_2e$ per year must comply with the Cap-and-Trade Program. Triggering of the 25,000 $MTCO_2e$ per year "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of GHG Emissions (Mandatory Reporting Rule or "MRR").

As of January 1, 2015, the Cap-and-Trade Program covered approximately 85 percent of California's GHG emissions. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and- Trade Program.

The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. While the Cap-and-Trade Program technically covered fuel suppliers as early as 2012, they did not have a compliance obligation (i.e., they were not fully regulated) until 2015. The Cap-and- Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported. The point of regulation for transportation fuels is when they are "supplied" (i.e., delivered into commerce).

Progress in Achieving AB 32 Targets and Remaining Reduction Required

The State has made steady progress in implementing AB 32 and achieving targets included in Executive Order S-3-05. The progress is shown in updated emission inventories prepared by CARB for 2000 through 2012. The State has achieved the Executive Order S-3-05 target for 2010 of reducing GHG emissions to 2000 levels. As shown below, the 2010 emission inventory achieved this target.

- 1990: 427 million $MTCO_2e$ (AB 32 2020 target)
- 2000: 463 million $MTCO_2e$ (an average 8 percent reduction needed to achieve 1990 base)
- 2010: 450 million $MTCO_2e$ (an average 5 percent reduction needed to achieve 1990 base)

CARB has also made substantial progress in achieving its goal of achieving 1990 emissions levels by 2020. As described earlier in this section, CARB revised the 2020 BAU inventory forecast to account for new lower growth projections, which resulted in a new lower reduction from BAU to achieve the 1990 base. The previous reduction from 2020 BAU needed to achieve 1990 levels was 28.4 percent and the latest reduction from 2020 BAU is 21.7 percent.

- 2020: 545 million $MTCO_2e$ BAU (an average 21.7 percent reduction from BAU needed to achieve 1990 base)

Senate Bill 32

On September 8, 2016, Governor Jerry Brown signed the Senate Bill (SB) 32 and its companion bill, Assembly Bill (AB) 197. SB 32 requires the state to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80 percent below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature.

2017 Climate Change Scoping Plan Update

In November 2017, CARB released the final 2017 Scoping Plan Update, which identifies the State's post-2020 reduction strategy. The 2017 Scoping Plan Update reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by Senate Bill 32 (SB 32). Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation; the Low Carbon Fuel Standard; much cleaner cars, trucks, and freight movement; and utilizing cleaner, renewable energy, and strategies to reduce methane emissions from agricultural and other wastes. The 2017 Scoping Plan establishes a new emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030.

California's climate strategy will require contributions from all sectors of the economy, including the land base, and will include enhanced focus on zero- and near-zero-emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries will further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZE buses and trucks.
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementing SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near- zero emissions technology, and deployment of ZE trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing methane and hydrofluorocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Continued implementation of SB 375.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20 percent reduction in GHG emissions from refineries by 2030.

- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

In addition to the statewide strategies listed above, the 2017 Scoping Plan also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of 6 $MTCO_2e$ or less per capita by 2030 and 2 $MTCO_2e$ or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidenced-based bright-line numeric thresholds—consistent with the Scoping Plan and the State's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and mitigation measures that avoid or minimize project emissions to the degree feasible, or a performance-based metric using a climate action plan or other plan to reduce GHG emissions is appropriate.

According to research conducted by the Lawrence Berkeley National Laboratory and supported by CARB, California, under its existing and proposed GHG reduction policies, is on track to meet the 2020 reduction targets under AB 32 and could achieve the 2030 goals under SB 32.

SB 375: The Sustainable Communities and Climate Protection Act of 2008

Passing the Senate on August 30, 2008, SB 375 was signed by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, emitting over 40 percent of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

- Is in an area with an approved sustainable communities strategy or an alternative planning strategy that the CARB accepts as achieving the GHG emission reduction targets.
- Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
- Incorporates the mitigation measures required by an applicable prior environmental document.

AB 1493 Pavley Regulations and Fuel Efficiency Standards

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently

granted the requested waiver in 2009, which was upheld by the US District Court for the District of Columbia in 2011.

The standards phased in during the 2009 through 2016 model years. When fully phased in, the standards result in about a 30 percent reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program, referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero- emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.

SB 350: Clean Energy and Pollution Reduction Act of 2015

In October 2015, the legislature approved, and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Provisions for a 50 percent reduction in the use of petroleum statewide were removed from the bill because of opposition and concern that it would prevent the bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 35 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the California Energy Commission (CEC), and local, publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the state and guide the actions of state agencies.

Executive Order S-3-05

Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07: Low Carbon Fuel Standard

The Governor signed Executive Order S- 01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the Executive Order established a Low Carbon Fuel Standard and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, the CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan for alternative fuels (State Alternative Fuels Plan adopted by California Energy Commission on December 24, 2007) and was submitted to CARB for consideration as an "early action" item under AB 32. The CARB adopted the Low Carbon Fuel Standard on April 23, 2009, but was challenged in court.

To address the final ruling, the proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon intensity (low-CI) fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. On November 16, 2015, the Office of Administrative Law (OAL) approved the Final Rulemaking Package. The new LCFS regulation became effective on January 1, 2016.

Executive Order S-13-08

Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the Order, the 2009 California Climate Adaptation Strategy (California Natural Resources Agency 2009) was adopted, which is the ". . . first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued an executive order to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The governor's executive order aligns California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris late 2015. The order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO_2 equivalent ($MMCO_2e$). The order also requires the state's climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable for local governments and the private sector.

Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Standards

California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601 to 1608, Appliance Efficiency Regulations, regulate the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances, and 23 categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.

Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations Title 24 Part 6, California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2016 version of Title 24 was adopted by the California Energy Commission (CEC) and became effective on January 1, 2017 and is applicable to the project.

The CEC indicates that the 2016 Title 24 standards will reduce energy consumption by 5 percent for nonresidential buildings above that achieved by the 2013 Title 24.

California Code of Regulations, Title 24, Part 11, California Green Building Standards Code (CALGreen), is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2011, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent update consisting of the 2016 California Green Building Code Standards that became effective January 1, 2017. Local jurisdictions are permitted to adopt more stringent requirements, as state law provides methods for local enhancements. CALGreen recognizes that many jurisdictions have developed existing construction and demolition ordinances and defers to them as the ruling guidance provided they establish a minimum 65 percent diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. The State Building Code provides the minimum standard that buildings must meet in order to be certified for occupancy, which is generally enforced by the local building official. CALGreen requires:

- **Short-term bicycle parking.** If a commercial project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- **Long-term bicycle parking**. For new buildings with 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of tenant-occupied motorized vehicle parking capacity, with a minimum of one space (5.106.4.1.2).
- **Designated parking.** Provide designated parking in commercial projects for any combination of low- emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- **Recycling by Occupants.** Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling (5.410.1).
- **Construction waste**. A minimum 65 percent diversion of construction and demolition waste from landfills, increasing voluntarily to 80 percent for new homes and commercial projects (5.408.1, A5.408.3.1 [nonresidential], A5.408.3.1 [residential]). All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled (5.408.3).
- **Wastewater reduction.** Each building shall reduce the generation of wastewater by one of the following methods:
  - The installation of water-conserving fixtures (5.303.3) or
  - Using nonpotable water systems (5.303.4).
- **Water use savings.** 20 percent mandatory reduction of indoor water use with voluntary goal standards for 30, 35, and 40 percent reductions (5.303.2, A5303.2.3 [nonresidential]).
- **Water meters.** Separate water meters for buildings in excess of 50,000 square feet or buildings projected to consume more than 1,000 gallons per day (5.303.1).
- **Irrigation efficiency.** Moisture-sensing irrigation systems for larger landscaped areas (5.304.3).

- **Materials pollution control.** Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particleboard (5.404).
- **Building commissioning.** Mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies (5.410.2).

Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance (Ordinance) was required by AB 1881, the Water Conservation Act. The bill required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with (SBX- 7-7) 2020 mandate are expected upon compliance with the ordinance. Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed Department of Water Resources (DWR) to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015 effective December 15, 2015. New development projects that include landscape areas of 500 square feet or more are subject to the Ordinance. The update requires:

- More efficient irrigation systems
- Incentives for graywater usage
- Improvements in on-site stormwater capture
- Limiting the portion of landscapes that can be planted with high water use plants
- Reporting requirements for local agencies

CARB Refrigerant Management Program

CARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in sections 95380 to 95398 of Title 17, California Code of Regulations. The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

Tractor-Trailer GHG Regulation

The tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers, or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. Sleeper cab tractors model year 2011 and later must be SmartWay certified. All other tractors

must use SmartWay verified low rolling resistance tires. There are also requirements for trailers to have low rolling resistance tires and aerodynamic devices.

Phase I and 2 Heavy-Duty Vehicle GHG Standards

CARB has adopted a new regulation for GHG emissions from heavy-duty trucks and engines sold in California. It establishes GHG emission limits on truck and engine manufacturers and harmonizes with the EPA rule for new trucks and engines nationally. Existing heavy-duty vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy-Duty Tractor-Trailer Greenhouse Gas Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation.

In September 2011, the EPA adopted their new rule for heavy-duty trucks and engines. The EPA rule has compliance requirements for new compression and spark ignition engines, as well as trucks from Class 2b through Class 8. Compliance requirements begin with model year (MY) 2014 with stringency levels increasing through MY 2018. The rule organizes truck compliance into three groupings, which include a) heavy-duty pickups and vans; b) vocational vehicles; and c) combination tractors. The EPA rule does not regulate trailers.

CARB staff has worked jointly with the EPA and the National Highway Traffic Safety Administration (NHTSA) on the next phase of federal GHG emission standards for medium- and heavy-duty vehicles, called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later model year heavy-duty vehicles, including trailers.

The EPA and NHTSA issued a Notice of Proposed Rulemaking for Phase 2 in June 2015 and published the final rule in October 2016. On February 8, 2018 the Board approved the proposed Phase 2 standards, with direction to staff to make additional 15-day changes.

SB 97 and the CEQA Guidelines Update

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states:

> (a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption.
>
> (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a).

Section 21097 was also added to the Public Resources Code. It provided CEQA protection until January 1, 2010, for transportation projects funded by the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 or projects funded by the Disaster Preparedness and Flood Prevention Bond Act of 2006, in stating that the failure to analyze adequately the effects of GHGs would not violate CEQA.

On April 13, 2009, the Office of Planning and Research submitted to the Secretary for Natural Resources its recommended amendments to the CEQA Guidelines for addressing GHG emissions. On July 3, 2009, the Natural Resources Agency commenced the Administrative Procedure Act rulemaking process for certifying and adopting these amendments pursuant to Public Resources Code section 21083.05. Following a 55-day public comment period and two public hearings, the Natural Resources Agency proposed revisions to the text of the proposed Guidelines amendments. The Natural Resources Agency transmitted the adopted amendments and the entire rulemaking file to the Office of Administrative Law on December 31, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing CEQA Guidelines to reference climate change.

A new section, CEQA Guidelines Section 15064.4, was added to assist agencies in determining the significance of GHG emissions. The new section allows agencies the discretion to determine whether a quantitative or qualitative analysis is best for a particular project. However, little guidance is offered on the crucial next step in this assessment process—how to determine whether the project's estimated GHG emissions are significant or cumulatively considerable.

Also amended were CEQA Guidelines Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts, respectively. GHG mitigation measures are referenced in general terms, but no specific measures are championed. The revision to the cumulative impact discussion requirement (Section 15130) simply directs agencies to analyze GHG emissions in an EIR when a project's incremental contribution of emissions may be cumulatively considerable; however, it does not answer the question of when emissions are cumulatively considerable.

Section 15183.5 permits programmatic GHG analysis and later project-specific tiering, as well as the preparation of GHG Reduction Plans. Compliance with such plans can support a determination that a project's cumulative effect is not cumulatively considerable, according to Section 15183.5(b).

In addition, the amendments revised Appendix F of the CEQA Guidelines, which focuses on Energy Conservation. The sample environmental checklist in Appendix G was amended to include GHG questions.

Regional and Local

Western Riverside Council of Governments Subregional Climate Action Plan

In 2014, the City of Jurupa Valley was one of 12 cities that collaborated with the Western Riverside Council of Governments (WRCOG) on a Subregional Climate Action Plan (Subregional CAP) that includes 36 measures to guide GHG reduction efforts through 2020. Through the WRCOG Subregional CAP process, the City has committed to a 2020 emissions target of 15 percent below baseline levels through the implementation of all of the 13 state measures and 15 of the 26 local measures identified in the Subregional CAP.

However, the City of Jurupa Valley has not adopted the Subregional CAP because it did not go through formal CEQA review by WRCOG, who intended it to be a framework for cities to implement AB 32 and for cities to develop their own CAPs.

City of Jurupa Valley General Plan Policies

The specific policies outlined in the City's General Plan that are related to GHG emissions and that apply to the proposed project are listed in Table 5.9-2, *City of Jurupa Valley General Plan Consistency Analysis*.

Table 5.6-2 Top GHG Producer Countries and the European Union

Emitting Countries	GHG Emissions (Gg CO_2e)
China	11,895,765
United States	6,511,302
European Union (28 member countries)	4,291,252
India	2,643,817
Russian Federation	2,100,850
Japan	1,304,568
Total	**28,747,554**

Source: Urban Crossroads 2019
Notes: Used http://unfccc.int data for Annex I countries. Consulted the CAIT Climate Data Explorer in http://www.wri.org site to reference Non- Annex I countries such as China and India.

5.6.1.3 GREENHOUSE GAS EMISSIONS INVENTORIES

Global

Worldwide anthropogenic (human) GHG emissions are tracked by the Intergovernmental Panel on Climate Change for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2016. For the Year 2016, the sum of these emissions totaled approximately 28,747,554 Gg CO_2e.[1] The GHG emissions in more recent years may differ from the inventories presented in Table 5.6-2; however, the data is representative of currently available inventory data.

United States

As noted in Table 5.6-2, the United States, as a single country, was the number-two producer of GHG emissions in 2016. The primary GHG emitted by human activities in the United States was CO_2, representing approximately 81.6 percent of total greenhouse gas emissions in the US. Carbon dioxide from fossil fuel

[1] The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries without 2016 data, the UNFCCC data for the most recent year were used. United Nations Framework Convention on Climate Change, "Annex I Parties: GHG total without LULUCF," The most recent GHG emissions for China were taken in 2012, while the most recent GHG emissions for India were taken in 2010.

combustion, the largest source of US greenhouse gas emissions, accounted for approximately 93.5 percent of the CO_2 emissions.

State of California

CARB compiles GHG inventories for the State of California. Based upon the 2018 GHG inventory data (i.e., the latest year for which data are available) for the 2000–2016 greenhouse gas emissions inventory, California emitted 429.4 $MMTCO_2e$ in 2015, including emissions resulting from imported electrical power.

5.6.2 Notice of Preparation (NOP)/Scoping Comments

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. The comments from the NOP review that will be addressed in this section are included in Table 5.6-3.

Table 5.6-3 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
South Coast Air Quality Management District (SCAQMD) Lijin Sun, J.D. Program Supervisor, CEQA IGR, Planning, Rule Development & Area Sources	8/10/17	States that the lead agency should use SCAQMD's CEQA Air Quality Handbook and CalEEMod land use emissions software when preparing its air quality analysis. The EIR should identify any potential adverse air quality impacts (construction and operation) that could occur from all phases of the project and all air pollutant sources related to the project. The EIR should quantify criteria pollutant emissions and localized significance thresholds and compare the results to the regional and localized significant thresholds, respectively. Air quality impacts from all phases (construction and operations) should be calculated. A mobile health risk assessment is recommended if the proposed project generates or attracts substantial vehicular trips, especially heavy-duty diesel-fueled vehicles. All feasible mitigation measures should be utilized for significant adverse air quality impacts. If impacts remain significant, project alternatives shall be considered and discussed to avoid or substantially lessen the air quality and health risk impacts. If the proposed project requires a permit from SCAQMD, SCAQMD should be identified as a responsible agency for the proposed project.	Section 5.2, *Air Quality* Section 5.6, *Greenhouse Gas Emissions*

All comments are organized based on date received.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.6.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to GHG emissions are based on criteria in Appendix G of the CEQA Guidelines and from the South Coast Air Quality Management District. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

GHG-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

GHG-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

South Coast Air Quality Management District

The project is within the Southern California Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD), the agency responsible for air quality planning and regulation in the SoCAB. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SoCAB. The Working Group developed several different options in the "SCAQMD Draft Guidance Document: Interim CEQA GHG Significance Threshold" that could be applied by lead agencies. The Working Group has not provided additional guidance since release of the interim guidance in 2008. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- **Tier 1** consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- **Tier 2** consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- **Tier 3** consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:

- Residential and Commercial land use: 3,000 $MTCO_2e$ per year
- Industrial land use: 10,000 $MTCO_2e$ per year
- Based on land use type: residential: 3,500 $MTCO_2e$ per year; commercial: 1,400 $MTCO_2e$ per year; or mixed use: 3,000 $MTCO_2e$ per year

- Tier 4 has the following options:
  - Option 1: Reduce BAU emissions by a certain percentage; this percentage is currently undefined
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3, 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$/SP/year for projects and 6.6 $MTCO_2e$/SP/year for plans
  - Option 3, 2035 target: 3.0 $MTCO_2e$/SP/year for projects and 4.1 $MTCO_2e$/SP/year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's interim thresholds used the Executive Order S-3-05 year-2050 goal as the basis for the Tier 3 screening level.

Local

The City of Jurupa Valley has not adopted its own numeric threshold for GHG impacts. The SCAQMD screening threshold of 10,000 $MTCO_2e$ per year is used to determine significance.[2]

5.6.4 Applicable Policies and Design Features

5.6.4.1 PLANS, POLICIES, AND PROGRAMS

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to greenhouse gas emissions. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP GHG-1 As required by Municipal Code Section 8.05.010, California Energy Code, prior to issuance of a building permit, the project applicant shall submit showing that the project will be constructed in compliance with the most recently adopted edition of the applicable California Building Code Title 24 requirements.

[2] The GHG technical study (Appendix C3) cites both the 3,000 $MTCO_2e$ for development projects and the 10,000 $MTCO_2e$ for industrial projects as significance thresholds under CEQA. However, the City has identified the 10,000 $MTCO_2e$ as the threshold used for warehouse projects in the City.

PPP GHG-2 As required by Municipal Code Section 9.283.010, Water Efficient Landscape Design Requirements, prior to the approval of landscaping plans, the project proponent shall prepare and submit landscape plans that demonstrate compliance with this section.

PPP GHG-3 As required by Municipal Code Section 8.05.010 (8), the project proponent shall comply with the California Green Building Standards Code.

PPP AIR-9 Shuttle bus and vendor vehicle use will be conducted in compliance with California Code of Regulations (CCR) Section 2485, which requires that non-essential idling for all diesel-fueled commercial motor vehicles must not exceed 5 consecutive minutes at any location.

PPP AIR-10 Construction activities will be conducted in compliance with California Code of Regulations Section 2499, which requires that nonessential idling of construction equipment is restricted to five minutes or less.

5.6.4.2 PROJECT DESIGN FEATURES

The project incorporates the following design features, which include requirements as identified in the Agua Mansa Commerce Park Specific Plan. Because these features are integral to the project, they are not considered mitigation measures.

PDF-GHG-1 **Incorporate Water Conservation and Efficient Measures for Landscaping.** The project will devise a comprehensive water conservation strategy to reduce water use during project operation. The strategy will include the following, plus other innovative measures that may be appropriate.

- Install drought-tolerant plants for landscaping.
- Install water-efficient irrigation systems, such as weather-based and soil-moisture- based irrigation controllers and sensors, for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance.
- Ensure that all landscape and irrigation measures are in compliance with the City's Municipal, Landscaping and Water Conservation requirements.

PDF-GHG-2 **Building Components.** The project will design building shells, building components, such as windows, roof systems and electrical systems to meet 2016 Title 24 Standards, which are 5 percent more stringent than the 2013 Title 24 Standards for nonresidential buildings.

PDF-GHG-3 **Energy Efficiency and Green Building.** Buildings will be designed to provide CALGreen Standards with Leadership in Energy and Environmental Design (LEED) features for potential certification and will employ energy and water conservation measures in accordance with such standards. This includes design considerations related to the building envelope, HVAC, lighting, and power systems. Additionally, the architectural expression such as roofs and windows in the buildings will relate to conserving energy.

PDF-GHG-4: **Electric Service Units.** Require the installation and use of electric service units at truck stops and distribution centers for heating and cooling truck cabs, and particularly for powering refrigeration trucks, in lieu of idling of engines for power.

PDF-GHG-5 **Energy Efficient Lighting.** The project will utilize energy efficient interior and exterior lighting, including: light-emitting diodes, T5 and T8 fluorescent lamps, or other lighting that is at least as efficient. Lighting will incorporate motion sensors that turn them off when not in use.

PDF-GHG-6 **Efficient Building Materials/Equipment.** The project will utilize building materials/methods and heating equipment that are efficient and reduce emissions.

PDF-GHG-7 **Landscaped Parking.** A parking lot shading plan shall be required, which includes a shading calculation table. Within 15 years after establishment of the automobile parking area, the project shall require that a minimum of 50 percent automobile parking area to be shaded by shade trees and covered parking areas including solar panel-covered parking areas.

PDF-GHG-8 **Recycling Program, Operational Sustainability.** The project shall implement a recycling program to ensure that all waste collection will be required to comply with federal, state, and local regulations regarding waste reduction and recycling.

The project incorporates the following air-quality-related design features that would also reduce GHG emissions generated by the project (see Section 5.3, *Air Quality*).

PDF-AQ-1 **Require Equipment to Turn Off When Not in Use**. The project will require building operators to ensure (by contract specifications) that equipment, including heavy-duty equipment, motor vehicles, and portable equipment, will be turned off when not in use for more than five minutes. Truck idling shall not exceed five minutes. All facilities will post signs requiring that trucks shall not be left idling for more than five minutes pursuant to Title 13 of the California Code of Regulations, Section 2485. Nighttime (after 10:00 PM) truck idling would not be permitted.

PDF-AQ-2 **Use of 2010 or Better Model Year Engines**. The project requires contractors and building operators (by contract specifications) using on-road heavy-duty diesel trucks with a gross vehicle weight rating greater than 14,000 pounds to have a 2010 model year engine or newer or be equipped with a particulate matter trap, as available. Pursuant to a phase-in schedule established by the EPA and the California Air Resources Board, all heavy- and heavier-duty diesel-fueled trucks must have a 2010 Model Year engine or newer by 2023. Thus, this measure shall be in effect on the project until 2023. It is recommended that the above options be included as a condition of project approval, and that the building user keep a truck log that would be available to the City or its designee upon request to verify compliance.

PDF-AQ-3 **Ridesharing and Transit Incentives**. The building operator will support and encourage ridesharing and transit incentives for the construction crew by providing crews with the

needed resources to organize rideshares, such as bulletin boards or email announcements. The construction contractor will also fully or partially subsidize transit fares or passes for the construction crew members who can feasibly use transit.

PDF-AQ-4 **Alternative Fueled Outdoor Cargo Handling Equipment.** All on-site outdoor cargo-handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) will be powered by compressed natural gas, propane, or electric engines.

5.6.5 Environmental Impacts

5.6.5.1 METHODOLOGY

Detail methodology of the proposed project GHG analysis is provided in Appendix C1.

5.6.5.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for greenhouse gasses.

Impact GHG-1 Threshold: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Alternative 1

Alternative 1 of the proposed project consists of five high-cube warehouse distribution center buildings totaling 4,216,000 square feet, an approximately 71.3-acre regional park, and 200,000 square feet of light industrial. For Alternative 1, the project site will result in 7,005.76 $MTCO_2e$ per year from construction, area, energy, waste, and water usage. In addition, the project has the potential to result in an additional 56,008.63 $MTCO_2e$ per year from mobile sources if the assumption is made that all of the vehicle trips to and from the project are "new" trips. As shown on Table 5.6-4, the project GHG emissions for Alternative 1 has the potential to result in a total of 63,014.40 $MTCO_2e$ per year. Thus, project GHG emissions would result in a significant cumulatively considerable impact.

Table 5.6-4 Alternative 1 GHG Emissions

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total CO_{2E}
Annual construction-related emissions amortized over 30 years	236.15	0.04	0.00	237.19
Area Source	0.11	3.00E-04	0.00	0.12
Energy Source	3,735.76	0.18	0.05	3,755.59
Mobile (Passenger Cars)	7,225.32	0.13	0.00	7,228.57
Mobile (Trucks)	47,492.72	1.70	0.00	47,535.16
Mobile (Other Uses)[1]	1,243.26	0.07	0.00	1,244.91
On-site Equipment	813.32	0.26	0.00	819.90
Waste	857.03	50.65	0.00	2,123.27
Water Usage	52.47	0.53	0.01	69.69
Total CO_2E (All Sources)	**63,014.40**			
SCAQMD Threshold	10,000			
Threshold Exceeded?	YES			

Source: Urban Crossroads 2019
[1] Mobile-source emissions from Alternative 1 Land Uses (Research & Development and Regional Park)

Alternative 2

In Alternative 2, the 200,000 square feet of light industrial would become 170,000 square feet of business park and 25,000 square feet of commercial retail. For Alternative 2, the project site would result in 6,647.99 $MTCO_2e$ per year from construction, area, energy, waste, and water usage. In addition, the project has the potential to result in an additional 55,641.93 $MTCO_2e$ per year from mobile sources if the assumption is made that all of the vehicle trips to and from the project are "new" trips. As shown on Table 5.6-5, the project GHG emissions for Alternative 2 have the potential to result in a total of 62,289.92 $MTCO_2e$ per year. Thus, project GHG emissions result in a significant cumulatively considerable impact.

Table 5.6-5 Alternative 2 GHG Emissions

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total CO_2E
Annual construction-related emissions amortized over 30 years	236.15	0.04	0.00	237.19
Area Source	0.11	3.00E-04	0.00	0.12
Energy Source	3,411.85	0.18	0.05	3,429.76
Mobile (Passenger Cars)	5,956.13	0.11	0.00	5,958.81
Mobile (Trucks)	43,932.93	1.58	0.00	43,972.41
Mobile (Other Uses)1	5,702.91	0.31	0.00	5,710.71
On-site Equipment	813.32	0.26	0.00	819.90
Waste	844.11	49.89	0.00	2,091.32
Water Usage	52.47	0.53	0.01	69.69
Total CO_2E (All Sources)	**62,289.92**			
SCAQMD Threshold	10,000			
Threshold Exceeded?	YES			

Source: Urban Crossroads 2019
1 Mobile-source emissions from Alternative 2 Land Uses (Business Park, Commercial Retail, Research & Development and Regional Park)

Level of Significance before Mitigation: Even with implementation of PDF GHG-1 through PDF GHG-8 and PDF AQ-1 through PDF AQ-2, Impact GHG-1 would remain potentially significant. Mitigation measures AQ 4, 5, and 6 would also reduce GHG emissions impacts. However, no feasible mitigation measures exist that would reduce these emissions to levels that are less than significant, and Impact GHG-1 would be significant and unavoidable.

Impact GHG-2 Threshold: Would the project conflict with applicable plan, policy, and regulations adopted to reduce GHG emissions?

Impact GHG-2 assesses the project's consistency with the overarching goals of AB 32 and the strategies of CARB's 2008 Scoping Plan as well as the regulatory measures adopted to further AB 32's goals. This section also evaluates the SB 32 requirements and the 2017 Climate Change Scoping Plan Update.

Measures of Plan Consistency or Conflict

Determining project consistency with greenhouse gas plans presents unique challenges because the impact is global and solutions require global and local action. California identified reduction targets for itself in AB 32 that would provide its fair share of reductions regardless of what others do. California through AB 32 set its fair share reduction at the amount required to reduce emissions to 1990 levels by 2020.

The analysis below qualitatively examines the measures in the applicable plans and subsequent adopted regulations and how they interrelate with the project to achieve the state's goals.

Scoping Plan Consistency

The Scoping Plan is the state's overall strategy in the form of measures that apply to emission sectors that comprise the state's greenhouse gas emission inventory. The state's implementation strategy primarily takes the form of source-specific regulations adopted by state agencies such as CARB and the CEC (see Section 5.6.1.1). The Scoping Plan envisions a limited role for local government in implementing the state's GHG reduction strategy, focusing on local government's authority over land use and some transportation projects.

The Scoping Plan includes measures that reduce emissions from the following sectors:

- Transportation
- Electricity and Natural Gas
- Water
- Green Building
- Industry
- Recycling and Waste Management
- Forests
- High Global Warming Potential
- Agriculture

The project's significance with respect to consistency with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions has been evaluated below and addressed for each sector.

Transportation

Approximately 89 percent of the project's horizon year GHG emissions as summarized in Tables 5.6-4 and 5.6-5 are from transportation (mobile sources). Transportation emissions are heavily regulated at the source, including, but not limited to engine emissions standards and fuel requirements. Because these regulations and policies reduce GHG emissions at the source, the project would be subject to and therefore not conflict with these transportation measures.

Adopted regulations that will reduce the project's GHG emissions through engine emission standards and fuel requirements are described in detail in Section 5.6.1.1, above.

California Light-Duty Vehicle Greenhouse Gas Standards

AB 1493/Pavley I and II required CARB to adopt regulations to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 through 2016.

This measure applies to all new passenger vehicles starting with model year 2009. The project is consistent with this measure and its implementation as it would apply to all new passenger vehicles purchased in

California. As such, any passenger vehicles associated with construction and operation of the project would be required to comply with the Pavley emissions standards.

Executive Order S-01-07: Low Carbon Fuel Standard

The LCFS regulation became fully effective in 2010 and will reduce GHG emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. The proposed project will utilize these emissions reductions as they are implemented into 2020 from all operational mobile emissions sources.

This measure applies to transportation fuels utilized by vehicles in California. The project is consistent with this measure and its implementation as motor vehicles associated with construction and operation of the project would utilize low carbon transportation fuels as required under this measure.

Medium/Heavy-Duty Vehicles

As part of the Heavy-Duty Vehicle Greenhouse Gas Regulation, CARB also implemented the Drayage Truck Regulation and Truck and Bus Regulation. These three regulations were collectively adopted to address and reduce emissions from trucks. Since the proposed project has a large truck component, these regulations will aid in reducing GHG emissions from the project.

This measure applies to medium and heavy-duty vehicles that operate in the state, and thus would apply to medium and heavy-duty vehicles that serve the project. The project is consistent with this measure and its implementation as medium and heavy-duty vehicles associated with construction and operation of the project would be required to comply with the requirements of this regulation.

Tractor-Trailer Greenhouse Gas Regulation

The tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers, or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways.

Cap-and-Trade Program

As with stationary source GHG emissions and GHG emissions attributable to electricity use, virtually all of GHG emissions from CEQA projects associated with VMT are covered by the Cap-and-Trade Program.

In September 2013, the SCAQMD adopted two Negative Declarations stating that GHG emissions subject to the CARB Cap-and-Trade Program do not count against the 10,000 MTCO2e significance threshold the SCAQMD applies when acting as a lead agency. In addition, the San Joaquin Valley Air Pollution Control District (SJVAPCD) has recently taken this issue a step further and adopted a policy: "CEQA Determinations of Significance for Projects Subject to CARB's GHG Cap-and-Trade Regulation." This policy applies when the SJVAPCD is the lead agency or a responsible agency. The SJVAPCD "has determined that GHG emissions increases that are covered under CARB's Cap-and-Trade regulation cannot constitute significant increases under CEQA…." The SJVAPCD concludes that GHG emissions associated with vehicle miles traveled (VMT) cannot

constitute significant increases under CEQA. This regulatory conclusion is therefore directly applicable to the proposed project because VMT is by far the largest source of project GHG emissions.

Since the proposed project has a large mobile source component and Cap-and-Trade emission reductions are difficult to calculate on a project-level, the proposed project's mobile source emissions are very conservative, making the total emission calculations conservative. The phase-in of the Cap-and-Trade Program compliance obligations for transportation fuel providers further reduces GHG emissions attributable to mobile sources, beyond the GHG emissions reductions achieved and modeled by the Pavley Standard and LCFS.

Energy

The second largest source, approximately 6 percent, of GHG emissions shown in Tables 5.6-4 and 5.6-5 from the project is energy consumption from electricity and natural gas. Energy-related emissions are also heavily regulated at the source, including, but not limited to energy efficiency standards and renewable energy requirements. Because these regulations and polices reduce GHG emissions at the source, the project will be subject to and therefore implement these energy measures.

Energy Efficiency: Title 24/CalGreen

As discussed in Section 5.6.1.1, the CEC indicates that the 2016 Title 24 standards will reduce energy consumption by 5 percent above that achieved by 2013 Title 24.

The proposed project is also subject to the CalGreen Code Title 24 building energy efficiency requirements that offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

Renewable Portfolio Standard

California's Renewable Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy sources to 33 percent of total retail sales by 2020 as established under SB 1078 and accelerated under SB 107 and SBX1-2. Additionally, SB 1368 prohibits any retail seller of electricity in California from entering into a long-term financial commitment for baseload generation if the GHG emissions are higher than those from a combined-cycle natural gas power plant. As a customer of Southern California Edison, the proposed project will purchase from an increasing supply of renewable energy sources and more efficient baseload generations and thereby reduce GHG emissions.

Million Solar Roofs Program

The Million Solar Roofs Program set a goal to install 3,000 megawatts (MW) of new solar capacity by 2017—moving the state toward a cleaner energy future and helping lower the cost of solar systems for consumers. The Million Solar Roofs Initiative is a ratepayer-financed incentive program aimed at transforming the market for rooftop solar systems by driving down costs over time.

The project is consistent with this scoping plan measure because the project will provide solar ready roofs.

Water

GHG emissions also result from electricity consumption related to water supply, treatment, and distribution, as well as wastewater treatment. As shown in Tables 5.6-4 and 5.6.5, the project's GHG emissions related to water consumption are less than 3 percent of total GHG emissions.

Renewable Portfolio Standard Related to Water Supply and Conveyance

This measure would increase electricity production from eligible renewable power sources to 33 percent by 2020. A reduction in GHG emissions results from replacing natural gas-fired electricity production with zero GHG emitting renewable sources of power. By 2020, this requirement will reduce emissions from electricity used for water supply and conveyance in California by approximately 21.3 $MMTCO_2e$, representing 15.2 percent of emissions from electricity generation (in-state and imports).

As previously discussed, as a customer of Southern California Edison, the proposed project will purchase from an increasing supply of renewable energy sources and more efficient baseload generations consistent with RPS and thereby reduce GHG emissions.

Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance was required by AB 1881, the Water Conservation Act. The bill required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent, consistent with the SBX-7-7 2020 mandate are expected upon compliance with the ordinance. The revised Ordinance, effective December 15, 2015, covers new development projects that include landscape areas of 500 square feet or more.

The project is required to comply with the Ordinance, which will result in a minimum of 20 percent reduced water use for outdoor irrigation. The project is consistent with this measure as it will result in a minimum 20 percent reduced water use pursuant to the project design features.

Waste Diversion

Disposal of solid waste in landfills contributes less than 3 percent of GHG emissions from the project, as shown on Table 5.6-5.

Scoping Plan

The Scoping Plan recommends three measures for reducing emissions from municipal solid waste: 1) landfill methane control; 2) increase the efficiency of landfill methane capture; and 3) high recycling/zero waste. Implementation of the CALGreen code and state measures reduce the amount of solid waste disposed of in landfills. The CalGreen code requires jurisdictions to divert a minimum of 50 percent of their nonhazardous construction and demolition waste from landfills. In addition, SB 341 amended the California Integrated Waste Management Act of 1989 to 75 percent. The proposed project is subject to these regulations as well as SB 341's policy goal and thereby reduces GHG emissions.

Executive Orders S-3-05 and B-30-15

At the state level, Executive Orders S-3-05 and B-30-15 are orders from the State's Executive Branch for the purpose of reducing GHG emissions. The goal of Executive Order S-3-05 is to reduce GHG emissions to 1990 levels by 2020 as codified by the Legislature as the 2006 Global Warming Solutions Act (AB 32). The project, as analyzed above, is consistent with AB 32.

Therefore, the project does not conflict with this component of Executive Order S-3-05. The Executive Orders also establish goals to reduce GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. However, studies have shown that, in order to meet the 2030 and 2050 targets, aggressive technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. In its Climate Change Scoping Plan, CARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail." In the First Scoping Plan Update, however, CARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; largescale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately."

Unlike the 2020 and 2030 reduction targets of AB 32 and SB 32, respectively the 2050 target of Executive Order S-3-05 has not been codified. Accordingly, the 2050 reduction target has not been the subject of any analysis by CARB. For example, CARB has not prepared an update to the aforementioned Scoping Plan that provides guidance to local agencies as to how they may seek to contribute to the achievement of the 2050 reduction target.

In 2017, the California Supreme Court examined the need to use the Executive Order S-3-05 2050 reduction target in Cleveland National Forest Foundation v. San Diego Association of Governments (2017) 3 Cal.5th 497 (Cleveland National). The case arose from SANDAG's adoption of its 2050 Regional Transportation Plan, which included its Sustainable Communities Strategy, as required by SB 375 (discussed above). On review, the Supreme Court held that SANDAG did not violate CEQA by not considering the Executive Order S-3-05 2050 reduction target.

As explained above, the 2050 reduction target of Executive Order S-3-05 has not been codified, unlike the 2020 and 2030 reduction targets of AB 32 and SB 32, respectively. Accordingly, the 2050 reduction target has not been the subject of any analysis by CARB. For example, CARB has not prepared an update to the aforementioned Scoping Plan that provides guidance to local agencies as to how they may seek to contribute to the achievement of the 2050 reduction target.

Further, the project is much smaller in size and scope in comparison to the Regional Transportation Plan examined in *Cleveland National*. In that case, the California Supreme Court held that SANDAG did not violate CEQA by not considering the Executive Order S-3-05 2050 reduction target. Accordingly, there is no information presently available to assess the project's consistency with regard to the 2050 target of Executive Order S-3-05.

The 2017 Scoping Plan builds on the 2008 Scoping Plan in order to achieve the 40 percent reduction from 1990 levels by 2030. Major elements of the 2017 Scoping Plan framework that will achieve the GHG reductions include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks. When adopted, this measure would apply to all trucks accessing the project site, this may include existing trucks or new trucks purchased by the project proponent could be eligible for incentives that expedite the project's implementation of ZEVs.
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030). When adopted, this measure would apply to all fuel purchased and used by the project in the state.
- Implementing SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030. When adopted, this measure would apply when electricity is provided to the project by a utility company.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near- zero emissions technology, and deployment of ZEV trucks. When adopted, this measure would apply to all trucks accessing the project site, this may include existing trucks or new trucks that are part of the statewide goods movement sector.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing methane and hydroflurocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030. When adopted, the project would be required to comply with this measure and reduce SLPS accordingly.
- Continued implementation of SB 375. The project is not within the purview of SB 375 and would therefore not conflict with this measure.
- Post-2020 Cap-and-Trade Program that includes declining caps. When adopted, the project would be required to comply with the Cap-and-Trade Program if it generates emissions from sectors covered by Cap-and-Trade.
- 20 percent reduction in GHG emissions from refineries by 2030. When adopted, the project would be required to comply with this measure if it were to utilize any fuel from refineries.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink. This is a statewide measure that would not apply to the project.

As shown above, the project would not conflict with any of the 2017 Scoping Plan elements as any regulations adopted would apply directly or indirectly to the project.

Further, recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030.

Western Riverside Council of Governments Subregional Climate Action Plan

In 2014, the City of Jurupa Valley was one of 12 cities that collaborated with the Western Riverside Council of Governments (WRCOG) on a Subregional Climate Action Plan (Subregional CAP) that includes 36 measures to guide GHG reduction efforts through 2020. However, the City of Jurupa Valley has not adopted the Subregional CAP because it did not go through formal CEQA review by WRCOG, which intended it to be a framework for cities to implement AB 52 and for cities to develop their own CAPs. The 2017 General Plan contains the following policy relative to a CAP:

AQ 9.1.1. Climate Action Plan. Within 2 years of General Plan adoption, prepare and adapt a Climate Action Plan (CAP) for the City, including a 2030 and 2035 reduction target and local emissions inventory. The CAP will be consistent with the WRCOG Subregional CAP but will identify specific additional measures for the reduction of future GHG emissions. The CAP shall demonstrate how the City will reduce its GHG emissions to 50% below 1990 levels by 2030 and 80% below 1990 levels by 2050, consistent with state law and current guidance on GHG reduction planning. Specific actions that may be included in the City CAP to help keep Citywide emissions below the SCAQMD service population significance threshold include, but not limited to, requiring the installation of electric conduit improvements to support the installation of future roof-mounted photovoltaic solar systems and electric vehicle charging station for individual homes and businesses.

The WRCOG Subregional CAP establishes policies and priorities to enable member jurisdictions, including Jurupa Valley, to implement strategies that successfully address state legislation AB 32 and SB 375. The CAP addresses the overall GHG emissions in Western Riverside County by preparing GHG inventories, identifying emissions reduction targets, and developing and evaluating GHG emissions to 80 percent below 1990 levels by 2050 in accordance with Executive Order S-3-05, AB 52, and SB 375.

Until the City formally adopts a CAP, local development is not required to be consistent on a project-by- project evaluation of GHG emissions identified in the WRCOG Subregional CAP, so the project will be evaluated relative to the goals of AB 32, SB 32, the City's adopted General Plan policies that pertain to GHG emissions, and SCAG's 2016-2040 RTP/SCS.

Conclusion

The project is consistent with all applicable Scoping Plan goals and policies as evaluated herein. Additionally, the project incorporates a number of project design features that go beyond the Scoping Plan requirements that would further minimize GHG emissions. The project promotes the goals of the Scoping Plan through implementation of the design measures that reduce energy consumption, and water consumption, and reduction in vehicle miles traveled. In addition, the project is required to comply with the regulations described in this section that have been adopted to implement the Scoping Plan and to achieve the AB 32 2020 target and the SB 32 2030 target. Therefore, the project does not conflict with any plans to reduce GHG emissions and furthers the State's goals relative to this impact.

Notwithstanding, because the project exceeds the applicable numeric threshold and results in a cumulatively considerable impact with respect to GHG emissions, a significant and unavoidable finding with respect to this criterion is also identified.

Level of Significance before Mitigation: No feasible mitigation measures exist that would reduce emissions to levels that are less than significant and Impact GHG-2 would be significant and unavoidable.

5.6.6 Cumulative Impacts

Climate change is a global phenomenon that is cumulative by nature, the result of combined worldwide contributions of GHGs to the atmosphere over many years. Therefore, significant direct impacts associated with the proposed project, as discussed above, also serve as the proposed project's cumulative impacts.

The proposed project would generate a net increase in GHG emissions and would exceed the SCAQMD Working Group's bright-line threshold of 3,000 $MTCO_2e$ for all land use types. As a result, the proposed project would substantially contribute to GHG emissions impacts in California. GHG emissions impacts would be cumulatively considerable.

5.6.7 Level of Significance Before Mitigation

Without mitigation, these impacts would be **potentially significant**:

- **Impact GHG-1** The proposed project would generate a net increase in GHG emissions that would have a significant impact on the environment.
- **Impact GHG-2** The proposed project would conflict with applicable plan, policy, and regulations adopted to reduce GHG emissions.

5.6.8 Mitigation Measures

Impact GHG-1

The following air quality-related mitigation measures would also reduce GHG emissions impacts of the project (see Section 5.3, *Air Quality*)

AQ-4 The project shall place signs that identify CARB anti-idling regulations prior to the issuance of a Certificate of Occupancy for each industrial building. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for trucks drivers to restrict idling to no more than 5 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged; and 3) telephone numbers of the building facilities manager and CARB to report violations. The applicant shall submit plans (1) identifying the location of the signs, (2) required details of the signs that meets this mitigation measure, and (3) dimensions of the sign prior to the issuance of any building permit for each industrial building.

AQ-5 The City shall require operators of the proposed facilities to encourage the vendor trucks (e.g., commercial deliveries) to incorporate energy efficiency improvement features through the Carl Moyer Program — including truck modernization, retrofits, and/or aerodynamic kits and low rolling resistance tires—to reduce fuel consumption.

AQ-6 All buildings shall be designed to provide infrastructure to support use of electric powered forklifts and/or other on-site equipment and shall be verified by the City prior to the issuance of the building permit for each building.

The project also includes PDF-GHG-1 through PDF-GHG-8 as well as PDF-AQ-1 through PDF-AQ-2 that would reduce GHG emissions to the extent feasible. No feasible mitigation measures exist that would reduce these emissions to levels that are less than significant.

Impact GHG-2

No feasible mitigation measures exist that would reduce these emissions to levels that are less than significant.

5.6.9 Level of Significance After Mitigation

Impact GHG-1

The project includes PDF-GHG-1 through PDF-GHG-8 as well as PDF-AQ-1 through PDF-AQ-2 that would reduce GHG emissions to the extent feasible. Specifically, PDF-GHG-2 would require use of 2010 or new trucks. Air quality mitigation measures MM AQ-1 through MM AQ-4 would also help to reduce GHG emissions. No feasible mitigation measures exist that would reduce these emissions to levels that are less than significant. Moreover, more than 89 percent of all operational-source emissions (by weight) would be generated by project mobile sources (traffic). Neither the project applicant nor the lead agency (City of Jurupa Valley) can substantively or materially affect reductions in project mobile-source emissions beyond the regulatory requirements. Impact GHG-1 is **significant and unavoidable**.

Impact GHG-2

The project would not conflict with or impede implementation of applicable plans, policies, and regulations adopted to reduce GHG emissions. While the project is consistent with applicable Scoping Plan goals and policies and incorporates PDFs that would further minimize GHG emissions, it would exceed the numeric threshold and result in a cumulatively considerable impact with respect to GHG emissions (see Impact GHG-1 above). Impact GHG-2 is **significant and unavoidable**.

5.6.10 References

Urban Crossroads. 2019, January. Agua Mansa Commerce Park Specific Plan, Air Quality Impact Analysis, City of Jurupa Valley.

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5.7 HAZARDS AND HAZARDOUS MATERIALS

This section evaluates the potential impacts of the Agua Mansa Commerce Park Specific Plan on human health and the environment due to exposure to hazardous materials or conditions associated with the project site, project construction, and project operations. Potential project impacts and appropriate mitigation measures or standard conditions are included as necessary.

The following analysis is based in part on information obtained from:

- *Revised Remedial Investigation Report*, Langan Engineering and Environmental Services, November 3, 2017.
- *Revised Executive Summary of the Remedial Investigation Report Riverside Cement Company City of Jurupa Valley, County of Riverside, California, Langan Project No.: 721011301*, Langan Engineering and Environmental Services, November 6, 2017.
- *Site Assessment Work Plan: Agua Mansa Commerce Park Jurupa Valley, Riverside County California*, Langan Engineering and Environmental Services, revised July 10, 2018.
- *Summary of Findings Report: Agua Mansa Commerce Park Jurupa Valley, Riverside County California*, Langan Engineering and Environmental Services, August 31, 2018.
- *Work Plan: Environmental Assessment Southern California Edison Substation Aqua Mansa Commerce Park,* Langan Engineering and Environmental Services, November 26, 2018.
- *Updated Phase I Environmental Site Assessment for Rubidoux / Agua Mansa Open Space, Jurupa Valley, California* Langan Engineering and Environmental Services, May 24, 2018.
- *Site Assessment Work Plan: Agua Mansa Recreational Park/Open Space, Jurupa Valley, California, Riverside County, California*, Langan Engineering and Environmental Services, January 7, 2019.
- *Draft Summary of Findings for Park/Open Space,* Langan Engineering and Environmental Services, April 2019.

Complete copies of these documents are included in the Technical Appendices to this Draft EIR (Volume II, Appendix G).

The Department of Toxic Substances Control (DTSC) is the lead regulatory agency for the project under the California Land Reuse and Revitalization Act (CLRRA) program. In January 2018, DTSC and Crestmore Redevelopment Company executed nine CLRRA agreements for the proposed investigation and remediation activities in conjunction with the proposed "brownfield" redevelopment for the commerce park area; they executed four additional CLRRA agreements for the open space park area in August 2018.

5.7.1 Environmental Setting

5.7.1.1 REGULATORY BACKGROUND

Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the project site are summarized below.

Federal

Comprehensive Environmental Response, Compensation and Liability Act

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) is a law developed to protect the water, air, and soil resources from the risks created by past chemical disposal practices. This law is also referred to as the Superfund Act and regulates sites on the National Priority List, which are called Superfund sites. The Act was intended to be comprehensive in encompassing both the prevention of, and response to uncontrolled hazardous substances releases. The Act deals with environmental response, providing mechanisms for reacting to emergencies and chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for, and respond to, failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Emergency Planning and Community Right-To-Know Act

In 1986, Congress passed the Superfund Amendments and Reauthorization Act. Title III of this regulation is called the "Emergency Planning and Community Right-to-Know Act of 1986" (EPCRA). The act required the establishment of state commissions, planning districts, and local committees to facilitate the preparation and implementation of emergency plans. Under its requirements, local emergency planning committees are responsible for developing a plan for preparing for and responding to a chemical emergency.

The Riverside County Department of Environmental Health, Hazardous Materials Branch, is responsible for coordinating hazardous material and disaster preparedness planning and appropriate response efforts with city departments and local and state agencies.

Another purpose of the EPCRA is to inform communities and citizens of chemical hazards in their areas. Sections 311 and 312 of EPCRA requires businesses to report to state and local agencies the location and quantities of chemicals stored on-site. Under section 313 of EPCRA, manufacturers are required to report chemical releases for more than 600 designated chemicals. In addition to chemical releases, regulated facilities are also required to report off-site transfers of waste for treatment or disposal at separate facilities, pollution prevention measures, and chemical recycling activities. The US Environmental Protection Agency (EPA) maintains the Toxic Release Inventory database that documents the information that regulated facilities are required to report annually.

Resource Conservation and Recovery Act

The Act was intended to be comprehensive in encompassing both the prevention of, and response to uncontrolled hazardous substances releases. The Act deals with environmental response, providing mechanisms for reacting to emergencies and chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for, and respond to, failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Hazardous Materials Transportation Regulations

The Hazardous Materials Transportation Act and Hazardous Materials Transportation Uniform Safety Act provide regulatory and enforcement authority to the Secretary of Transportation to reduce risks to life and property from hazards associated with the transport of hazardous materials.

Title 29, Code of Federal Regulations, Section 1926.62

Title 29, CFR Section 1926.62, sets standards for occupational health and environmental controls for lead exposure in construction, regardless of the lead content of paints and other materials.

State

Hazardous Materials Release Notification

Many state statutes require emergency notification of a hazardous chemical release:

- California Health and Safety Codes Sections 25270.8, and 25507
- Vehicle Code Section 23112.5
- Public Utilities Code Section 7673, (PUC General Orders #22-B, 161)
- Government Code Sections 51018, 8670.25.5 (a)
- Water Codes Sections 13271, 13272
- California Labor Code Section 6409.1 (b)10

Requirements for immediate notification of all significant spills or threatened releases cover owners, operators, persons in charge, and employers. In addition, all releases that result in injuries or harmful exposure to workers must be immediately reported to the California Occupational Safety and Health Administration pursuant to the California Labor Code Section 6409.1(b).

Hazardous Materials Disclosure Programs

The Unified Program administered by the State of California consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities for environmental and emergency management programs, which include: Hazardous Materials Release Response Plans and Inventories (business plans), the California Accidental Release Prevention (CalARP) Program, and the Underground

Storage Tank (UST) Program. The Unified Program is implemented at the local government level by Certified Unified Program Agencies (CUPAs).

The CUPA for Jurupa Valley is the Riverside County Department of Environmental Health (RCDEH) Hazardous Materials Branch.

Hazardous Materials Business Plans

Both the federal government (Code of Federal Regulations) and the State of California (California Health and Safety Code) require all businesses that handle more than a specified amount—or "reporting quantity"—of hazardous or extremely hazardous materials to submit a hazardous materials business plan to its CUPA.

The RCDEH Hazardous Materials Branch currently reviews submitted business plans and updates. Businesses that handle hazardous materials are required by law to provide an immediate verbal report of any release or threatened release of hazardous materials if there is a reasonable belief that the release or threatened release poses a significant present or potential hazard to human health and safety, property, or the environment. The RCDEH Hazardous Materials Branch is also charged with the responsibility of conducting compliance inspections of regulated facilities in Riverside County.

California Accidental Release Prevention Program

CalARP aims to be proactive and therefore requires businesses to prepare risk management plans, which are detailed engineering analyses of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential.

Leaking Underground Storage Tanks

Leaking USTs have been recognized since the early 1980s as the primary cause of groundwater contamination from gasoline compounds and solvents. The State Water Resources Control Board has been designated the lead California regulatory agency in the development of UST regulations and policy. The California Regional Water Quality Control Boards, in cooperation with the Office of Emergency Services, maintain an inventory of leaking USTs in a statewide database.

California Code of Regulations

Title 22, Division 4.5, of the California Code of Regulations (CCR) sets forth the requirements for hazardous-waste generators; transporters; and owners or operators of treatment, storage, or disposal facilities. These regulations include the requirements for packaging, storage, labeling, reporting, and general management of hazardous waste prior to shipment. In addition, the regulations identify standards applicable to transporters of hazardous waste.

Title 23, Chapter 16, sets forth the requirements for new underground storage tank design, construction, and monitoring requirements.

Asbestos-Containing Materials Regulations

State-level agencies, in conjunction with the EPA and OSHA, regulate removal, abatement, and transport procedures for asbestos-containing material (ACM). Releases of asbestos from industrial, demolition, or construction activities are prohibited by these regulations and medical evaluation and monitoring is required for employees performing activities that could expose them to asbestos. Additionally, the regulations include warnings that must be heeded and practices that must be followed to reduce the risk for asbestos emissions and exposure. Finally, federal, state, and local agencies must be notified prior to the onset of demolition or construction activities with the potential to release asbestos.

California Fire Code

The 2013 California Fire Code (CCR Title 24 Part 9) sets requirements pertaining to fire safety and life safety, including for building materials and methods, fire protection systems in buildings, emergency access to buildings, and handling and storage of hazardous materials. Updated every 3 years, the California Fire Code includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, fire hydrant locations and distribution, and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Department of Forestry and Fire Protection (CAL FIRE) is dedicated to the fire protection and stewardship of over 31 million acres of California's wildlands. The Office of the State Fire Marshal supports CAL FIRE's mission to protect life and property through fire prevention engineering programs, law and code enforcement, and education. Office of the State Fire Marshal provides for fire prevention by enforcing fire-related laws in state-owned or operated buildings; investigating arson fires in California; licensing those who inspect and service fire protection systems; approving fireworks for use in California; regulating the use of chemical flame retardants; evaluating building materials against fire safety standards; regulating hazardous liquid pipelines; and tracking incident statistics for local and state government emergency response agencies. The California Fire Plan is the state's road map for reducing the risk of wildfire through planning and prevention to reduce firefighting costs and property losses, increase firefighter safety, and contribute to ecosystem health. The California Fire Plan is a cooperative effort between the State Board of Forestry and Fire Protection and CAL FIRE.

California Health and Safety Code, Sections 17920.10 and 105255

Lead must be contained during demolition activities.

Brownfield Voluntary Cleanup Program

Established in 1993, the Voluntary Cleanup Program (VCP) allows DTSC and RWQCB to provide oversight to motivated parties to address brownfield sites. For the proposed project, DTSC was selected to be the lead agency for the VCP. The lead agency is responsible for overseeing and directing all site investigation and cleanup activities in a manner that ensures that the standards and requirements of both agencies are fully addressed. To accomplish the goal of providing ample opportunities for public input and involvement in brownfield cleanups,

the lead agency is required to ensure that their site investigation and cleanup activities, agreements, policies, and protocols provide the public and other state or local governmental entities with opportunities to participate in decisions

Regional

South Coast Air Quality Management District

SCAQMD Rule 1403 governs the demolition of buildings containing asbestos materials. Rule 1403 specifies work practices with the goal of minimizing asbestos emissions during building demolition and renovation activities, including the removal and associated disturbance of ACM.

Local

Riverside County Fire Service Fire Prevention Guidelines

The Riverside County Fire Service has set fire prevention guidelines that address such matters as fire flow, fire access, building construction, flammable and combustible liquids, and fire protection systems.

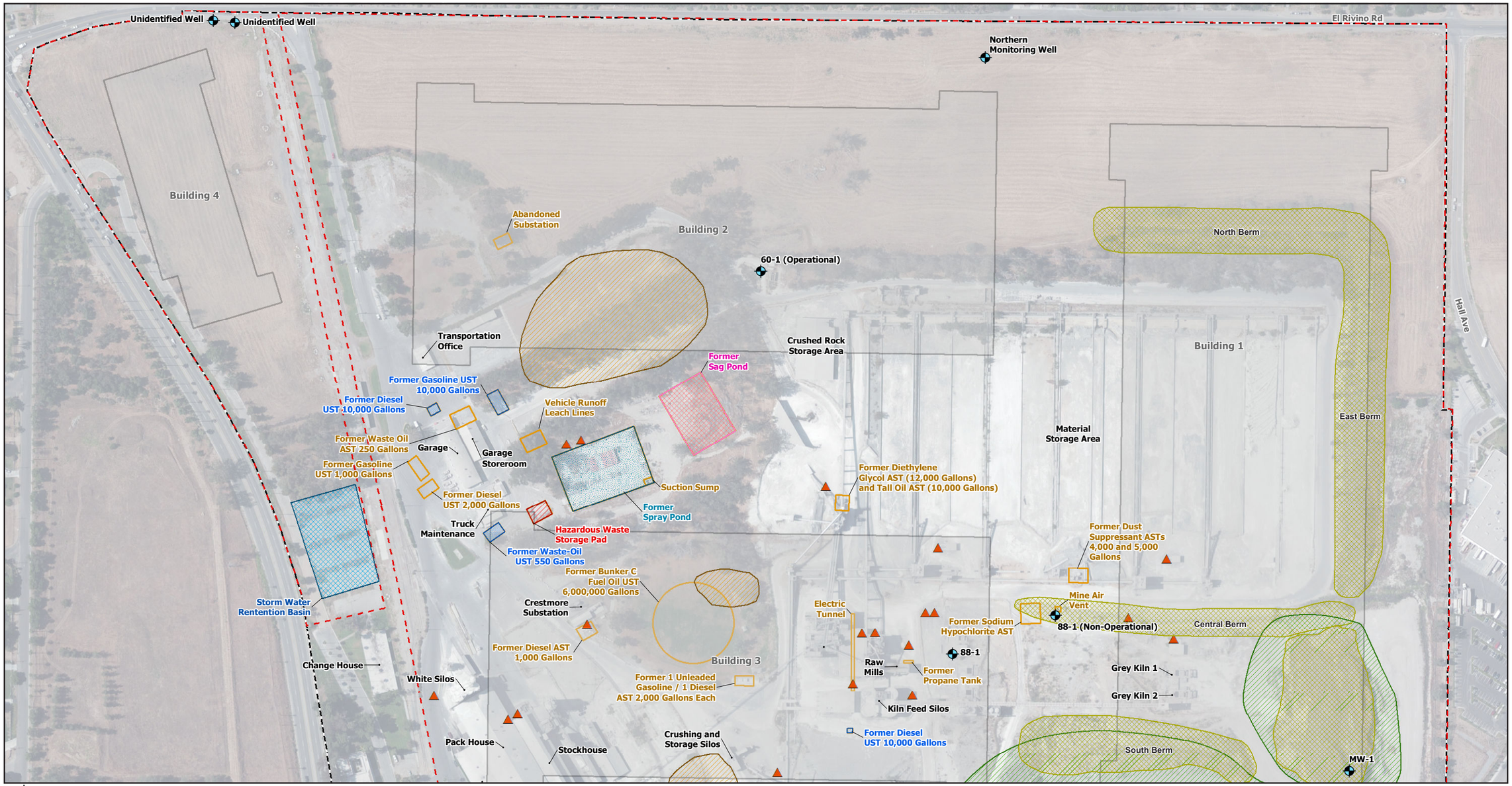
5.7.1.2 HISTORICAL LAND USE

The Riverside Cement Plant (RCP) property has been historically used for mining, quarrying, and/or cement manufacturing since the early 1900s. The RCP terminated manufacturing operations in 2014, and as of early 2017, the cement manufacturing facilities are in the process of decommissioning.

The main components of the site include the cement plant, supporting infrastructure, various silos and kilns, storage areas, and office/maintenance buildings. The site includes four quarries designated as the Wet Weather, the Crestmore, the Commercial, and the Lone Star quarries. An underground mine, the Crestmore Mine, also operated on the site; mining was ceased and the Crestmore Mine was flooded in the mid-1980s, resulting in Crestmore lake located in the Open Space District (see Figures 5.7-1a and 5.7-1b).

Figure 5.7-1a - Key Site Features and Areas of Interest

5. Environmental Analysis



Approximate Groundwater Well Location (MW-3)
Area of Interest #1 - Areas with Soil Containing CKD
Area of Interest #2 - Locations of Former USTs
Area of Interest #3 - White Kiln Pipeline and Diesel Pump
Area of Interest #4 - Former Boiler Blowdown Pond
Area of Interest #5 - Former Spray Pond
Area of Interest #6 - Former Sag Pond
Area of Interest #7 - Hazardous Waste Storage Area
Area of Interest #8 - Sewer Alignments
Area of Interest #9 - Settling Area
Area of Interest #10 - Major Fill Piles or Berms
Area of Interest #11 - Former / Existing Transformers)
Area of Interest #12 - Storm Water Retention Basin
Proposed Building Footprint
Approximate Limits of Development
Approximate Limits of Former Riverside Cement Manufacturing Plant
Approximate Location of Key Site Features

0 225
Scale (Feet)

Source: Langan, 2017

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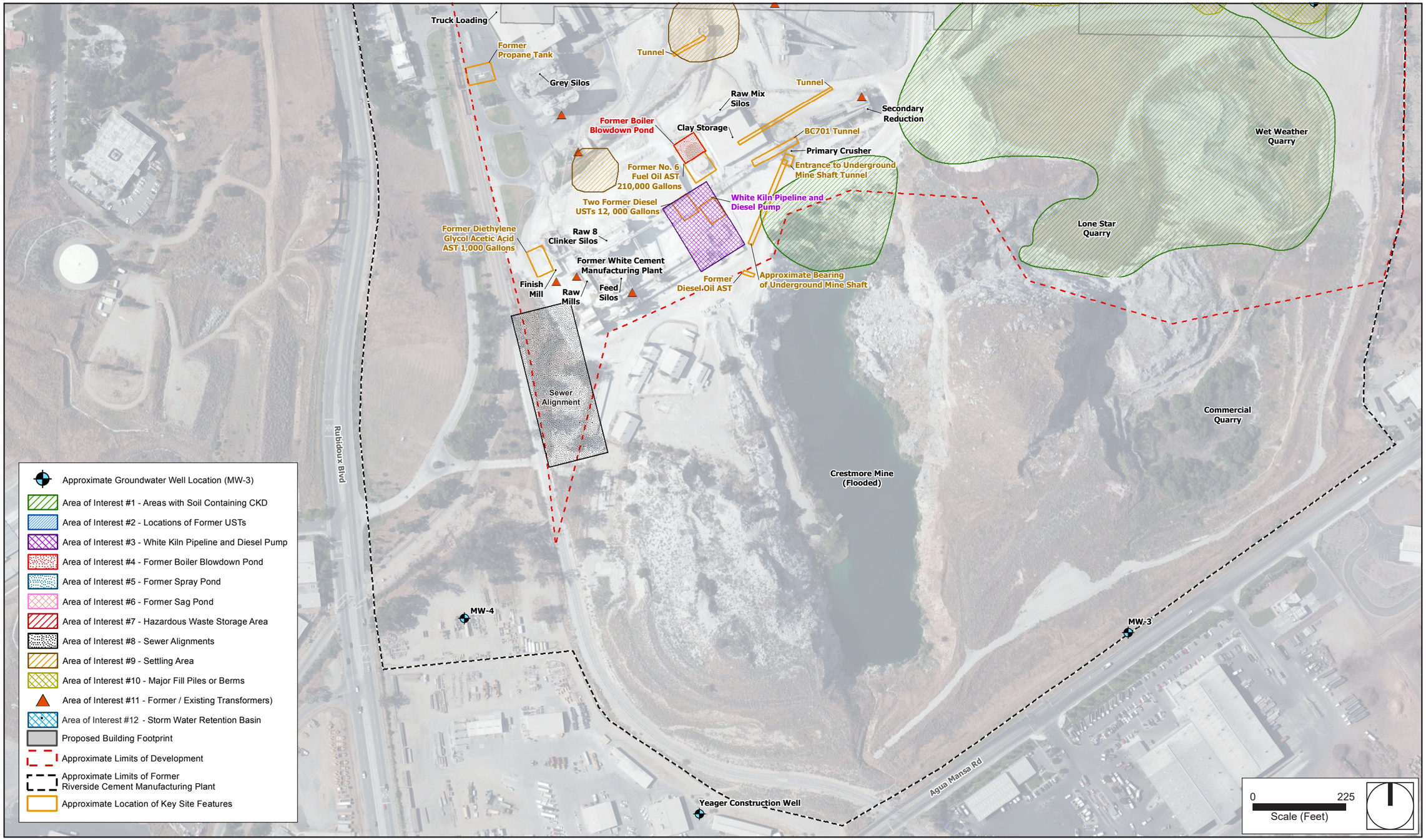
Figure 5.7-1b - Key Site Features and Areas of Interest

5. Environmental Analysis



Source: Langan, 2017

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The facility reportedly underwent three major redevelopment phases over the life of its operation. From the early 1900s to the 1950s, the cement plant was located in the south western portion of the site, just north of the present-day white cement plant. The facility at that time was operated using petroleum-based fuels (i.e. Bunker C) stored in fuel tanks. As the cement manufacturing process evolved through the use of updated technology and other changes in the industry, the facility went through an expansion and redevelopment phase from the late 1950s through early 1960s, which included conveyor belt systems and compressed air, development of raw material storage areas, and upgrades to processing of raw materials to manufacture cement product. During the second renovation phase, the facility was operated using both coal and petroleum-based fuels. By the 1960s, the original plant had been demolished and the present-day facility was constructed that generated both grey and white cement product. The current facility was operated until it was shut down in 2014 (Langan 2018 SOF).

Cement kiln dust (CKD) was one of the primary by-products generated during the manufacturing process, and consisted of material accumulated within the kilns that could not be reused in the process stream. Prior to the 1970s, CKD was hauled from the kilns and placed with fill soils/mine spoils at several locations throughout the site (See Figures 5.7-1a and 5.7-1b). In the 1970s and up until the late 1980s, the CKD was recovered for a mill and kiln feed supplement as part of the cement manufacturing process. Soil piles containing CKD still exist on site. Soil containing CKD can be a concern because of CKD´s potential to increase metal content, which could contaminate soils and groundwater.

The equipment used to manufacture cement generally relied on electrical power for material conveyance/process control, and petroleum fuels for heating. Petroleum fuels were historically provided by a 6,000,000-gallon UST. Other USTs at the site were used to store petroleum products such as gasoline, diesel fuel, fuel oil, and waste oil. All USTs have been removed and closed out by Riverside County. USTs are of concern because they may leak total petroleum hydrocarbons (THPs) and volatile organic compounds (VOCs) into soils and groundwater. Testing has confirmed no groundwater contaminants as a result of USTs.

As a result of historical operations, on-site soils are impacted by arsenic, lead, nickel, and limited TPH-d. Groundwater has not been found to be impacted, because sampling results are not above current total chromium Maximum Concentration Levels (MCLs).

5.7.1.3 SITE GEOLOGY AND HYDROGEOLOGY

Soil and groundwater conditions under the site are described in Section 5.5, *Geology and Soils*, and Section 5.8, *Hydrology and Water Quality*. Following is a summary of conditions for context of the hazards discussion.

The site is located within the fault-bounded, northwest-southeast trending Perris Block in the Peninsular Ranges geomorphic province of California. The Perris Block is bounded in the east by the San Jacinto Fault Zone, the north by Cucamonga Fault Zone, and the west by Elsinore Fault Zone. The site is in an area dominated by granitic rocks that are mainly quartz diorite. Specific areas of the site were used for mining activities due to the presence of two steeply dipping limestone formations approximately 200 to 300 feet thick in the northern end. The limestone formations are roughly parallel, with an upper and lower formation. Thin, poorly developed soils and minor sedimentary strata locally cover the bedrock on the site.

The site is underlain by two geologic units consisting of artificial fill, alluvium, aeolian sands and intermixed tonalite marble and schist. The artificial fill reportedly consists of uncompacted and undocumented fill from mining operations, CKD and unconsolidated talus deposits.

The site is in the eastern end of the Jurupa Mountains on the south side of the San Bernardino Valley. The Santa Ana River drains the San Bernardino Valley toward the southwest and is approximately one-half mile east of the site. The ground surface elevations vary between approximately 820 feet above mean sea level (amsl) on the southern portion of the site to approximately 1150 feet amsl on the northern portion of the site. Groundwater is encountered in the wells on-site at depths between 85 to 90 feet on the southern portion of the site (Langan 2018 Phase I).

Groundwater reportedly occurs in three distinct hydrologic units at the site. They are the Chino limestone (referred to the lower limestone unit), the Wet Weather and the Sky Blue Limestone units (referred to upper limestone unit), and the Santa Ana River alluvium. Dewatering studies were conducted in the Chino limestone, where the Crestmore quarry is currently located. These studies indicated that the granite layers above and below the Chino limestone act as confined layers. The Chino limestone water originates mostly from percolation from rainwater at the mine and an influx of water from somewhere below the Santa Ana River to the east (Langan 2018 Phase I).

5.7.1.4 REVIEW OF REGULATORY LISTINGS

The site was identified in several local, state, and federal agency databases:

- The site is listed on the federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) site.
- The Superfund Enterprise Management System (SEMS) database lists the site as a "state-lead cleanup" that is not included in the National Priority List (NPL).
- The ENVIROSTOR database indicates that the Regional Water Quality Board (RWQCB) and the EPA are agencies that have been involved with the site. Potential chemicals of concern are listed as Polychlorinated Biphenyl (PCB) and hexavalent chromium. The site is listed as an active site in the voluntary cleanup program with the DTSC.
- The Leaking Underground Storage Tank (LUST) database indicates the site status as "completed - case closed as of November 5, 1991". The lead agency was RCDEH, who administers the Riverside County Local Oversight Program. Heating oil/fuel oil was identified as a potential chemical of concern.
- According to the aboveground storage tank (AST) database, the total AST storage capacity at the site is 5,000 gallons. The Certified Unified Program Agency (CUPA) for the site is RCDEH.
- The site is listed on the local lists of landfill/solid waste disposal sites (WMUDS/SWAT).
- The site is listed on the local lists of registered storage tanks.

- LDS: The site is listed as a land disposal site with the Santa Ana Regional Water Quality Control Board. The site is listed as case closed as of November 2009.
- The site is listed on the Toxic Substances Control Act (TSCA) site.
- ICIS: The site is listed as having an administrative order and notice of violation.
- US AIRS: The site is listed on the Aerometric Information Retrieval System list, an EPA list for air pollution point sources.
- Abandoned Mines: The site is listed on the Department of Interiors list of sites impacted by past mining operations.
- FINDS: The site is listed for airborne pollution from industrial plants.
- ECHO: The site is listed on the Enforcement and Compliance History Information list maintained by the EPA for compliance and enforcement information on regulated facilities.
- EMI: The site is listed with South Coast Air Quality Management District for emissions from 1987 to 2015.
- HAZNET: The site is listed for the transport and disposal of polychlorinated biphenyls (PCBs), organic solids, waste oil, and oxygenated solvents.
- Historical CORTESE: The site is listed by the DTSC on the Hazardous Waste and Substances Site List, a database that is no longer updated by the state.
- NPDES: The site is listed by the State Water Resources Control Board for having a NPDES permit.
- WDS: The site is listed by the State Water Resources Control Board as a Waste Discharge System.

Several adjacent and surrounding properties were also identified in the regulatory databases. Based on distance, topographically cross-gradient or down-gradient relative to the site, and the non-violation status, none of the adjacent and surrounding properties are listed to have current or former releases of hazardous substances that are likely to impact the site at levels requiring regulatory cleanup action.

5.7.1.5 PREVIOUS INVESTIGATIONS AND REMEDIATION ACTIVITIES

As a result of the historical operations, the DTSC, the Santa Ana RWQCB, and the RCDEH have investigated the site at various times. A timeline of these investigations and the remedial actions taken is presented in Table 5.7-1.

Table 5.7-1 Environmental History of Project Site

Year	Event
1973	Hexavalent chromium detected at 0.55 milligrams per liter (mg/L) in discharges from the RCP of untreated industrial waste water to the North Riverside Canal, Jurupa Canal, and a gravel percolation pit. A pump failure caused treated cooling water to be inadvertently discharged into the stormwater effluent. A standby pump installed in case the circulating pump fails, and water additives for cooling water changed to reduce or eliminate the use of chromium.
1976	New water quality standards adopted by the Santa Ana Region established additional monitoring and reporting requirements for two additional discharge streams; a sanitary wastewater stream and a brine wastewater stream (from the Boiler Blowdown Pond).
1978	New regulations prohibited the discharge of sanitary wastes to the septic system and required connection to the Rubidoux Community Services District. The Boiler Blowdown Pond was subject to the new discharge requirements. RCP initiated a removal action and remediation of the Boiler Blowdown Pond.
1987	RCP decommissions the 6,000,000-gallon fuel oil UST. Approximately 70,500 tons of soil excavated with lower TPH concentration soil blended with clay and consumed in the grey cement kiln during the normal course of manufacturing operations. Soil with higher TPH concentrations was insufflated at the Grey Kilns with the remaining 44,000 tons stockpiled in two locations on site. Analysis of samples collected from the stockpiles concluded that the soils did not exhibit any characteristics that would lead the soil to be classified as hazardous under Title 22 of the California Administrative Code. RCDEH notified RCP that the last confirmation sampling results for the 6,000,000-gallon fuel UST showed no appreciable impacts and that No Further Action (NFA) was required.
	RCP removes a 550-gallon waste oil UST and one 10,000-gallon diesel UST (located near the kiln feed silos at the grey Cement plant). Confirmation samples for TPH and lead confirm no impact and the excavations were backfilled with the excavated soil and imported soil. 10,000-gallon diesel UST, located north of the garage, also removed. Confirmation samples for TPH show the need to excavate to 36 feet below ground surface (bgs). Approximately 150 cubic yards of impacted soil added to the stockpile containing soils from the removal of the 6,000,000-gallon UST and approximately 250 cubic yards of imported soil used to backfill the excavation.
1989	RCP receives approval from RCDEH to use the stockpiles from the closure of the 6,000,000-gallon fuel oil UST and the 10,000-gallon diesel UST as in road mix for paving.
1990	Site Inspection conducted at the request of the USEPA to investigate the impact of metals to groundwater from the areas containing CKD placed with mine spoils/fill soils.
1991	Closure Plan and a Closure Report for the Boiler Blowdown Pond prepared. Soils impacted by Total Petroleum Hydrocarbons (TPH), or exhibiting elevated conductivity relative to background, excavated and stockpiled on-site. The excavation was backfilled with clay along with 45-mil-thick liner. The clay liner system was also designed to serve as a secondary containment for the AST.
	RCP submits a closure plan for three CKD disposal areas to the RWQCB. The proposed activities included covering each of the three CKD disposal areas with at least 12 inches of native overburden material and maintaining the cover until vegetation begins to establish. No additional capping was proposed to control infiltration because the hydraulic properties of CKD are similar to those of typical capping materials such as clay.

Table 5.7-1 Environmental History of Project Site

Year	Event
1993	Pipeline leak discovered from an underground pipeline connecting the 210,000-gallon fuel oil AST to supply pumps for the White Kiln. Approximately 750 gallons discharged and 700 gallons removed. Soil samples analyzed for Total Recoverable Petroleum Hydrocarbons (TRPH) with soil found to be impacted excavated and temporarily stockpiled on-site and reused as part of the cement manufacturing process. Site conditions satisfied HMMD/RWQCB criteria for site closure.
1994	USEPA conclusion to the 1990 site inspection of CKD containing soils: • Chromium and aluminum concentrations were measured at higher concentrations in the soil background sample than in the CKD sample. • CKD is a material which forms a cement-like mass when it comes in contact with water and creates a barrier to further water penetration or leaching of metals. • The concentrations of metals in groundwater did not confirm that the impacts were a direct result of leaching from the soil/CKD areas.
1995	RWQCB notified RCP that the closure report for the former boiler blowdown disposal pond was approved and that the closure of the former pond was complete.
1996	Samples collected from wells MW-1 and MW-3 were analyzed for metals, total dissolved solids, turbidity, alkalinity, chloride, color, fluoride, nitrate (NO3), odor, pH, specific conductance, and sulfates. Groundwater sample results were compared for three measured sampling events (June 11, 1991, April 6, 1994 and October 18, 1995) to the EPA and State of California drinking water maximum contaminant levels, and were measured below these levels.
	RCDEH stated no further action was required with respect to the pipeline leak in 1993.
1997	RCP decommissions the 12,000-gallon diesel UST at the White Cement plant and one 10,000-gallon gasoline UST. After receiving the closure report, RCDEH confirmed that no further action was required.
1998	Discharges from the RCP were determined by RWQB to be an insignificant threat to water quality.
1999	RCP decommissions a 1,000-gallon diesel UST and a 2,000-gallon gasoline UST located west of the garage. The excavations were backfilled with excavated soil and imported soil and capped with asphalt.
2006	DTSC conducted a preliminary assessment per CERCLA and concluded the site was CERCLA eligible; however, no action was recommended by the agency.
2009	DTSC conducted a preliminary assessment per CERCLA and concluded the site was CERCLA eligible; however, no action was recommended by the agency.

Note: Wells MW-1 and MW-3 as well as all USTs are shown in Figures 5.7-1a and 5.7-1b.

5.7.1.6 CURRENT ASSESSMENT AND REMEDIATION ACTIVITIES

Due to the diverse historic and proposed uses, the site investigation and remediation efforts have been divided into two separate areas that generally coincide with the proposed land uses in the Specific Plan (i.e., Business Park/Industrial Park, and Open Space District), as shown in Figure 3-4 *Proposed Land Use Plan*.

The first area encompasses the proposed Business Park/Industrial Park areas proposed for redevelopment in the Specific Plan, which include APNs 175-170- 005, a portion of 006, 027, 028, 030, 036, 040, 042, 045, and 046; 175-180-001; and 175-200-001 through 005, and 007 through 009. The second area includes the potential Open Space District that includes four lots (Lots A, B, C, and D) in the southern portion of the proposed Business Park. This second area includes APNs 175-170-043 and portions of 175-180-001 and 175-170-046.

Table 5.7-2, *Assessment and Remediation Activity*, summarizes the recent activities for the Business Park/Industrial Park area of the project site with regulatory agencies.

Table 5.7-2 Assessment and Remediation Activity, Business Park/Industrial Park Area

Year	Activity
2017	Project enrolled in the Voluntary Cleanup Program with DTSC.
2017	Preliminary Endangerment Assessment (PEA) was submitted to DTSC with 12 identified Areas of Interest (AOIs). These AOIs were investigated by trenching, sampling, and laboratory analyses conducted between April 2016 and February 2017.
2018	A scoping and strategy meeting was held among representatives of the proponent, Langan, and DTSC on January 12, 2018. A site tour was conducted by the DTSC on January 25, 2018.
2018	The project applicant entered into nine separate DTSC California Land Reuse and Revitalization Agreements (CLRRA) Agreements for each of the Redevelopment Site parcels on January 16, 2018.
2018	DTSC staff provided detailed comments on the PEA and direction regarding preparation of a Site Assessment Work Plan (SAWP) during a February 23, 2018, scoping meeting. The SAWP was submitted to DTSC on June 1, 2018, with a revised plan submitted July 3, 2018, and conditionally approved by DTSC on July 19, 2018. DTSC implemented site visits from July 11 through July 18, 2018. The conditional approval of the SAWP was based on the request for additional sampling as outlined in the July 19, 2018 DTSC letter. The additional field activities were conducted in June and July 2018. DTSC visited the site on July 28, 2018 to oversee soil gas sampling and analysis The information collected from this assessment was incorporated into a Summary of Findings report dated August 31, 2018. On September 27, 2018 DTSC and project proponent representatives met to discuss the preliminary comments on the Summary of Findings report and a path forward. The information from the Summary of Findings (SOF) report was used to prepare the Response Plan. The Response Plan was submitted to the DTSC on December 21, 2018.
2019	DTSC reviewed the SOF report and requested that two additional soil borings be advanced in the Wet Weather Quarry and Lone Star Quarry using the sonic drilling method. The locations of the two soil borings were selected by a DTSC representative. The two sonic borings were drilled in February 2019 with oversight by a DTSC geologist.

Areas of Interest

The Preliminary Endangerment Assessment (PEA) Report identified areas of interest (AOIs) for the Business Park/Industrial Park based on features identified on site during the preliminary assessments (these features and the AOIs are shown in Figures 5.7-1a and 5.7-1b). The areas evaluated for further investigation are:

- **Areas with Soil Containing CKD (AOI #1):** Up to approximately 250,000 tons of CKD were reportedly generated and placed with soil/mine spoils in three distinct areas at the site. The composition of CKD depends upon the raw materials used as feedstock.
- **USTs (AOI #2):** All USTs have been decommissioned.
- **White Kiln Pipeline and Diesel Pump (AOI #3):** Due to the 1993 fuel oil leak (see Table 5.7-1).
- **Former Boiler Blowdown Pond (AOI #4):** Soil samples collected within the pond indicated elevated levels of total chromium. Excavation occurred and the area was recommended for additional assessment due to post-closure usage as a secondary containment area for the 210,000-gallon fuel oil AST.
- **Former Spray Pond (AOI #5):** The spray pond was a large concrete basin designed to reduce the temperature of cooling water. Additional characterization to evaluate the potential for impacts from the use of the area for storage of equipment was identified.

- **Former Sag Pond (AOI #6):** Based on a review of historical aerial photographs, a depression was present containing water periodically where historical maps have identified the former Sag Pond location.
- **Hazardous Waste Storage Area (AOI #7):** A fenced Hazardous Waste Storage Area (HWSA) was identified that included a concrete pad where waste oil, waste grease, waste solvents, and empty drums were stored. A sump was identified at the southwest corner of the HWSA.
- **Sewer Alignments (AOI #8):** Two sewer lines, serving the mining and manufacturing areas of the facility were identified.
- **Settling Areas (AOI #9):** A map obtained from the RWQCB identified four areas at the site where pooling of surface water could occur.
- **Major Fill Piles or Berms (AOI #10):** Four large berms and one fill pile of previously unknown composition are on the eastern portion of the property. The North Berm has an estimated volume of 40,500 cubic yards. The East Berm has an estimated volume of 48,500 cubic yards. The South Berm has an estimated volume of 41,500 cubic yards. The Central Berm has an estimated volume of 20,000 cubic yards. The fill pile has an estimated volume of 63,000 cubic yards.
- **Former/Existing Transformers (AOI #11):** Twenty-five former or existing transformers were identified at the site.
- **Stormwater Retention Basin (AOI #12):** The western side of the retention basin has two wide concrete swales which accept water that flows across the access road from a stormwater culvert serving Rubidoux Boulevard. The culvert receives stormwater runoff from the western side of Rubidoux Boulevard. Another concrete swale was identified on the southeastern corner of the basin, serving as a spillway for excess water

Soil Sampling

A field investigation was conducted in September 2016 to further evaluate whether environmental conditions at the AOIs were likely to present human health or environmental concerns during redevelopment activities.

The locations selected for evaluation during the field investigation follow the AOIs outlined above.

- **AOI #1, CKD Containing Soil.** Samples collected from AOI #1 were analyzed for metals, as metals were the primary focus of previous regulatory investigations associated with the environmental effects of CKD at the site. One soil sample was also analyzed for TPH and Polychlorinated Biphenyls (PCBs).
- **AOI #2, Former USTs.** Four trenches were excavated in the vicinity of the former USTs. Although there was no evidence of residual impacts at these locations based on field screening, limited sampling was conducted for the purpose of confirming field observations and ruling out these areas as potential concerns. Soil samples collected from the trenches were analyzed for TPH and VOCs.
- **AOI #3, White Kiln Pipeline Release.** Two trenches were excavated in the vicinity of the White Kiln Pipeline Release to evaluate the current concentrations of diesel in soil and extent of the residual impacts,

if any. No evidence of residual TPH was observed at the trenches based on visual, olfactory, and photoionization detector (PID) screening, and no samples were collected for laboratory analysis.

- **AOI #4, Former Boiler Blowdown Pond.** One trench was attempted at the Former Boiler Blowdown Pond to evaluate current concentrations of metals in soil. One soil sample was analyzed for metals.

- **AOI #5, Former Spray Pond.** Additional characterization of TPH, metals, and VOCs was warranted in the vicinity of the former Spray Pond due to the potential for accumulation of runoff at the suction sump. One trench was excavated at the suction sump at the southeast corner of the Former Spray Pond. One soil sample was analyzed for TPH, metals, and PCBs.

- **AOI #6, Former Sag Pond.** Additional characterization was warranted in the vicinity of the former Sag Pond due to a lack of available historical information regarding the use of the pond. One trench was excavated at the southeast corner of the Former Sag Pond. Two soil samples were analyzed for TPH, metals, PCBs, semivolatile organic compounds (SVOCs), and VOCs.

- **AOI #7, Hazardous Waste Storage Area.** Additional characterization was warranted in the vicinity of the hazardous waste storage area due to chemicals and waste stored at this location. One trench was excavated near the sump at the southwest corner of the Hazardous Waste Storage Area. No evidence of residual impact was found at this location based on visual/olfactory observations and PID screening, but limited sampling was conducted to evaluate constituents that are not readily identifiable using standard field screening procedures. One soil sample was analyzed for metals and PCBs.

- **AOI #8, Sewer Alignments.** Two trenches were excavated at locations where lateral lines serving the mining and manufacturing areas of the plant tie into the main sewer line. No evidence of residual impact was found at this location based on visual/olfactory observations and PID screening, but limited sampling was conducted to confirm field observations. Three soil samples were analyzed for TPH, metals, PCBs, SVOCs, and/or VOCs.

- **AOI #9, Settling Areas.** Four trenches were excavated at locations identified as surface water settling areas. As stated above, metals have been the primary focus of previous regulatory investigations associated with the environmental effects of CKD at the site. In general, settling areas represented appreciable contaminant input locations. No evidence of excessive sedimentation was found at these areas, however sampling was conducted to confirm field observations. Four soil samples were analyzed for metals.

- **AOI #10, Major Fill Piles or Berms.** A total of 11 composite and three grab samples were analyzed for metals.

- **AOI #11, Former and Exiting Transformers.** Twelve trenches were excavated in the vicinity of nine former or existing transformers. A total of 11 soil samples were analyzed for PCBs.

- **AOI #12, Stormwater Retention basin.** Additional investigation was warranted at the stormwater retention basin due to the potential infiltration of stormwater runoff that may have been impacted by off-

site sources. Four trenches were excavated at locations where influent runoff material and sediments were observed. Six soil samples were analyzed for metals, hexavalent chromium, and TPH.

5.7.2 Notice of Preparation (NOP)/Scoping Comments

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. The comments from the NOP review that will be addressed in the hazards and hazardous materials section are included in Table 5.7-3.

Table 5.7-3 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
Santa Ana Regional Water Quality Control Board (RWQCB) Terri S. Reeder, Chief, Basin Planning Coastal Waters Section	8/18/17	• States that fine cement kiln dust (CKD) created as a by-product of cement production is located on-site in three disposal sites within the project area: 1) northern end of the Crestmore Quarry in the southern portion of the site; 2) beside the Commercial Quarry in the southeastern portion of the site, and 3) in a large area north and northwest of the Wet Weather Quarry in the east-central portion of the site. o CKD disposal areas were covered with a cap of clay and rock by the 1990s as a closure measure, but it appears one large CKD pile remains exposed beside the Wet Weather Quarry and may still pose a threat to air and water quality • The Remedial Action Plan (RAP) prepared for the DEIR should address the on-site CKD disposal areas and fugitive dust generated by project construction • States that any movement of the caps overlying the CKD disposal areas require a rigorous safety and logistics plan for CKD dust containment • Requests that all CEQA Appendix G Checklist question be answered in the DEIR given that an Initial Study was not prepared • Recommends the DEIR discuss how the site's geologic and mining history has led to the construction of quarries and associated infrastructure, as well as the need for careful remediation • Requests that available closure documents should be summarized in the DEIR • The large limestone in the southern portion of the site is a local landmark, identified as "Sky Blue Hill" • States that the water-filled quarry or "Crestmore Lake" was saturated at depth with groundwater recharged by the Santa Ana River, and pollutants entering it could be carried underground and impact downgradient	• Section 5.7, *Hazards and Hazardous Materials* • Section 5.8, *Hydrology and Water Quality* • Appendix G, *Hazardous Materials Reports* • Appendix H, *Hydrology & Water Quality Report*

Table 5.7-3 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
		resources. Surface runoff on-site into Crestmore Lake can also impact groundwater quality. • The hydrology report must address creation of a Water Quality Management Plan to protect the Crestmore Lake from adverse water quality impacts, by using structural and procedural best management practices • Provides a list of items that the project's hydrology report should include • Requests a discussion in the DEIR about whether the brownfield designation was established by the California Department of Toxic Substances Control or another agency, along with the expected level of remediation and waste management from that agency • Provides a summary of regulatory closure actions that occurred from 1978 to 1998 under Regional Board Order No. 78-27. • States that it appears the project may build over capped disposal sites and that the Riverside County Department of Environmental Health should be consulted regarding any dismantling activities. • Recommends the DEIR incorporate and respond to the Crestmore Quarry Mining and Reclamation Plan dated February 7, 1991, which was Riverside Cement Company's proposal for an industrial park and preserved wildlife refuge in Crestmore Lake and ephemeral wetlands within the Commercial Quarry. The DEIR should discuss requirements of the California Surface Mining and Reclamation Act and how the 1991 plan may need to be revised. Any revised reclamation plan should be included in the DEIR as an appendix. • States that the dedication of Crestmore Lake for wildlife use would support the beneficial uses listed in the Basin Plan. Trails would be considered, but any muscle-powered watercraft or swimming would be unsafe • It is possible that Crestmore Lake may be identified as having a federal nexus (i.e., regulated by the US Army Corps of Engineers). If so, and the project would impact these waters, a Clean Water Act Section 404 permit would be required. A wildlife refuge would not appear to require construction disturbance in the lake. • RWQCB may also determine that waste discharge requirements and associated mitigation are necessary for protection of isolated wetlands as wasters of the State. A LSA from the CDFW may also be required.	

Table 5.7-3 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
		• The project is required to obtain a Riverside County MS4 permit per Regional Board Order No. RB-2010-0033, NPDES Permit No. CAS 618033 • The project must obtain a Construction General Permit per SWRCB Order No. 2009-0009-DWQ and implement a Storm Water Pollution Prevention Plan.	

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.7.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to hazards and hazardous materials are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

HAZ-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

HAZ-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

HAZ-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.

HAZ-4 Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

HAZ-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area.

HAZ-6 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

HAZ-7 Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

5.7.4 Applicable Policies and Design Features

5.7.4.1 PLANS, PROCEDURES, AND POLICIES

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to hazards and hazardous materials. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP HAZ-1 As required by Health and Safety Code Section 25507, a business shall establish and implement a business plan for emergency response to a release or threatened release of a hazardous material in accordance with the standards prescribed in the regulations adopted pursuant to Section 25503 if the business handles a hazardous material or a mixture containing a hazardous material that has a quantity at any one time above the thresholds described in Section 25507(a) (1) through (6).

PPP HAZ-2 Any project-related hazardous materials and hazardous wastes will be transported to and/or from the Project Site in compliance with any applicable state and federal requirements, including the U.S. Department of Transportation regulations listed in the Code of Federal Regulations (Title 49, Hazardous Materials Transportation Act); California Department of Transportation standards; and the California Occupational Safety and Health Administration standards.

PPP HAZ-3 Any Project-related hazardous waste generation, transportation, treatment, storage, and disposal will be conducted in compliance with the Subtitle C of the Resource Conservation and Recovery Act (RCRA) (Code of Federal Regulations, Title 40, Part 263), including the management of non-hazardous solid wastes and underground tanks storing petroleum and other hazardous substances. The Project will be designed and constructed in accordance with the regulations of the RCDEH, which serves as the designated Certified Unified Program Agency (CUPA) and which implements state and federal regulations for the following programs: (1) Hazardous Waste Generator Program, (2) Hazardous Materials Release Response Plans and Inventory Program, (3) California Accidental Release Prevention (CalARP), (4) Above Storage Tank (AST) Program, and (5) Underground Storage Tank (UST) Program.

PPP HAZ-4 Any project-related underground storage tank (UST) repairs and/or removals will be conducted in accordance with the California UST Regulations (Title 23, Chapter 16 of the California Code of Regulations). Any unauthorized release of hazardous materials will require release reporting, initial abatement, and corrective actions that will be completed with oversight from the Regional Water Quality Control Board, Department of Toxic Substances Control, Riverside Fire Department, South Coast Air Quality Management District and/or other regulatory agencies, as necessary. Any Project-related use of existing USTs will also have

to be conducted (i.e., used, maintained and monitored) in accordance with the California UST Regulations (Title 23, Chapter 16 of the California Code of Regulations).

PPP HAZ-5 Any project-related demolition activities that have the potential to expose construction workers and/or the public to asbestos-containing materials (ACMs) or lead-based paint (LBP) will be conducted in accordance with applicable regulations, including, but not limited to:

- South Coast Air Quality Management District's Rule 1403
- California Health and Safety Code (Section 39650 et seq.)
- California Code of Regulations (Title 8, Section 1529)
- California Occupational Safety and Health Administration Regulations (California Code of Regulations, Title 8, Section 1529 [Asbestos] and Section 1532.1 [Lead])
- Code of Federal Regulations (Title 40, Part 61 [asbestos], Title 40, Part 763 [asbestos], and Title 29, Part 1926 [asbestos and lead])

PPP HAZ-6 The removal of other hazardous materials, such as polychlorinated biphenyls (PCBs), mercury-containing light ballast, and mold, will be completed in accordance with applicable regulations pursuant to 40 CFR 761 (PCBs), 40 CFR 273 (mercury-containing light ballast), and 29 CFR 1926 (molds) by workers with the hazardous waste operations and emergency response (HAZWOPER) training, as outlined in 29 CFR 1910.120 and 8 CCR 5192.

PPP HAZ-7 Any project-related new construction, excavations, and/or new utility lines within 10 feet or crossing existing high-pressure pipelines, natural gas/petroleum pipelines, or electrical lines greater than 60,000 volts will be designed and constructed in accordance with the California Code of Regulations (Title 8, Section 1541).

5.7.4.2 PROJECT DESIGN FEATURES

No project design features relate to hazards and hazardous materials.

5.7.5 Environmental Impacts

As noted above, the site investigation and remediation efforts were divided into two separate areas that generally coincide with the proposed land uses in the Specific Plan (i.e. Business Park/ Industrial Park, and Open Space District). For the Open Space District, a Phase I and Site Assessment Work Plan have been prepared under the oversight of the DTSC.

5.7.5.1 BUSINESS PARK/INDUSTRIAL PARK

Preliminary Endangerment Assessment Sampling and Results

A Preliminary Endangerment Assessment (PEA) was prepared for the Business Park / Industrial project area (Langan 2017a). The purpose was to assess the potential for the presence or likely presence of hazardous

substances or petroleum products that indicate an existing release, a past release, or a material threat of a release of hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water in connection with the property.

Soil Sampling Results

The 2017 PEA results were screened against the following screening levels within the following agency data sets:

- Environmental Screening Levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) for commercial / industrial shallow soil. (Note: San Francisco Bay Regional Water Quality Control Board screening levels are used because the Santa Ana Regional Water Quality Control Board does not have screening levels).
- Regional Screening Levels (RSLs) established by USEPA Region 9 for industrial soil.
- Screening Levels (SLs) established by the DTSC for commercial / industrial soil.

The soil sampling results are shown in Table 5.7-4.

Table 5.7-4 Business Park/Industrial Park Soil Sampling Results

Chemical of Concern Soil	Concentration	Screening Level	Above Screening Level?
Arsenic	1.4 mg/kg to 14 mg/kg	10 mg/kg	Yes
Total Petroleum Hydrocarbons	Nondetect to 1,700 mg/kg	44 mg/kg	Yes
PCBs Aroclor 1246	Nondetect to 69 µg/kg	950 µg/kg	No
Naphthalene	Nondetect to 7.5 µg/kg	14.3 µg/kg	No

With the exception of arsenic, metals concentrations in soil were below the lowest of the selected screening levels. Arsenic was detected in 30 of the 40 samples analyzed for metals at concentrations ranging from 1.4 to 14 milligrams per kilogram (mg/kg). Arsenic concentrations measured throughout the site exhibit an approximate normal distribution. Background concentrations of arsenic in Southern California soils typically range from 1 to 10 mg/kg, which is consistent with concentrations measured at the site (Langan 2017b).

Groundwater and Surface Water Sampling

Field investigations were also conducted to evaluate concentrations of metals and/or VOCs in groundwater and surface water at the site. Sampling events were conducted in November/December 2016, March 2017, and May 2017. During each of these events, groundwater samples were collected from MW-3, MW-4, and the northern monitoring well (see Figures 5.7-1a and 5.7-1b), and surface water samples were collected from Crestmore Lake.

The samples were analyzed for metals (including CR^{VI}) and general minerals. Groundwater samples collected during the November/December 2016 sampling event were also analyzed for VOCs. CR^{VI} was the only metal

of potential concern identified, and trans 1,2-dichloroethene was the only VOC identified in groundwater (see Table 5.7-5).

Table 5.7-5 Industrial Park/Business Park Groundwater and Surface Water Sampling Results

Chemical of Potential Concern Water	Concentration	Screening Level	Above Screening Level?
Hexavalent Chromium	Nondetect to 19 µg/l	50 µg/l	No*
Trans 1,2-dichloroethene	Nondetect to 2.1 µg/l	100 µg/l	No

* Total chromium MCL is currently 50 µg/l.

Screening-Level Risk Assessment

The PEA included a screening level risk assessment for the samples collected in the Business Park/Industrial Park using an industrial future worker and a construction worker.

Soil

Analytical results from the field investigations were compared to the risk-based screening levels in Table 5.7-6, applicable to the receptors and exposure pathways identified above.

Table 5.7-6 Risk-Based Screening Levels

Source	Screening Level	Applies To
San Francisco Bay Regional Water Quality Control Board	Direct Exposure Human Health Risk Levels; Any Land Use/ Any Depth Soil Exposure: Construction Worker	Construction Worker: Incidental soil ingestion Dermal contact with soil Dermal contact with equipment and debris from former site operations
San Francisco Bay Regional Water Quality Control Board	Direct Exposure Human Health Risk Levels; Commercial / Industrial Shallow Soil Exposure	Future Worker (Hypothetical): Incidental soil ingestion Dermal contact with soil Inhalation of particulates in ambient air
Environmental Protection Agency Region 9	Regional Screening Levels for Industrial Soil	All human receptors at industrial sites
California Department of Toxic Substances Control Office of Human and Ecological Risk	Screening Levels for Commercial / Industrial Soil	All human receptors at commercial / industrial sites

Source: Langan 2017b.

Table 5.7-7 includes the maximum reported concentration in soil and groundwater for metals and petroleum hydrocarbons in addition to the applicable screening levels.

Table 5.7-7 Business Park/Industrial Park Sampling Results

Chemical of Concern	Maximum Concentration	Screening Level	Above Screening Level?
Arsenic - Soil	14 mg/kg	10 mg/kg	Yes
Lead - Soil	200 mg/kg	160 mg/kg	Yes
Nickel - Soil	150 mg/kg	86 mg/kg	Yes
Hexavalent Chromium - Groundwater	19 µg/l	50 µg/l*	No
Total Petroleum Hydrocarbons - Soil	**1,700 mg/kg**	**44 mg/kg**	**Yes**

* MCL for total chromium.

Metals

The analytical results for arsenic exceeded ESLs for shallow soil in the Future Worker (Hypothetical Scenario) exposure scenario (0.31 mg/kg) and the Construction Worker exposure scenario (0.97 mg/kg), as well as the RSL (3.0 mg/kg) and the DTSC's SL (0.36 mg/kg). As discussed previously, arsenic concentrations at the site are within the range of published background concentrations for Southern California.

Lead exceeded the ESL for shallow soil in the Construction Worker exposure scenario (160 mg/kg) in a sample collected at one foot below ground surface (bgs) (200 mg/kg), excavated near a potential surface water settling area (AOI #9) identified by the RWQCB.

Nickel exceeded the ESL for shallow soil in the Construction Worker exposure scenario (86 mg/kg) in a sample collected at two feet bgs (150 mg/kg) excavated at the northern boundary of the potential CKD-containing soil area near the Wet Weather Quarry.

Engineering controls and personal protective measures established in a Soils Management Plan are proposed to mitigate potential risks to construction workers during redevelopment (Langan 2017b).

Diesel Range Petroleum Hydrocarbons

TPH-d exceeded the ESLs for shallow soil in Future Worker (Hypothetical Scenario) exposure scenario (1,078 mg/kg) and the Construction Worker exposure scenario (885 mg/kg), as well as the RSL (44 mg/kg) in a sample collected at four feet bgs (1,700 mg/kg) and a sample collected at eight feet bgs (950 mg/kg), which was excavated at the former Sag Pond.

A Soils Management Plan would establish protocol and procedures for identifying, segregating, screening, and analyzing potentially impacted soils to confirm suitability for re-use or characterize for disposal. Additionally, engineering controls and personal protective measures established in a Soils Management Plan would address potential risks to construction workers during redevelopment (Langan 2017b).

Groundwater

Groundwater and surface water analytical results were compared to RWQCB Maximum Contaminant Levels (MCLs) for drinking water. Metals and VOCs in surface water and groundwater samples did not exceed their relevant MCLs. In 2017, the Superior Court of California for Sacramento County issued a judgment invalidating

the Cr^{VI} MCL for drinking water of 10 μg/l. The court did not make any finding about whether the MCL adequately protected public health, nor did it reach a conclusion about whether the MCL was too low or too high. The court merely found that the department did not adequately document why the MCL was economically feasible. The court also ordered the State Water Board to adopt a new MCL for hexavalent chromium (SWRCB 2019). The total chromium MCL is 50 μg/l which was not exceeded by the concentrations of Cr^{VI} in groundwater.

The PEA concluded that recent sampling of drinking water sources throughout California suggests that hexavalent chromium may occur naturally in groundwater at many locations (Langan 2017a). Sampling data obtained on 12 January 2017 from SWRCB's GeoTracker Groundwater Ambient Monitoring and Assessment (GAMA) Program database for nearby water supply wells up-, down-, and cross-gradient of the RCP indicate that nearby wells have historically measured hexavalent chromium concentrations that vary between 2.6 μg/l to 20 μg/l (up-gradient) and 2 μg/l to 4.8 μg/l (down-gradient).

Shallow groundwater (alluvial groundwater) is not anticipated to be used as a resource during or after site development and would not pose a health risk off-site (Langan 2017b).

In a response to the PEA in a letter dated February 28, 2018, the DTSC requested that a residential receptor be used in the screening level risk assessments to determine if land use restrictions or other remedies may be warranted for site closure. The DTSC:

- Requested development of a Site Assessment Work Plan, to include additional samples to characterize the project site.
- Requested that Criterion/Action Levels for utilizing soils containing contaminants should be established.
- Clarified that placement of contaminated soils should not require landfill permitting requirements, and therefore, hazardous waste levels and tests including leaching tests should be identified and performed to assess leaching characteristics of nonhazardous soils.
- Specified that all demolition waste and conventional trash should be exported off-site for disposal.
- Noted that if significant quantities of impacted soils are placed in areas like the Wet Weather Quarry, new groundwater monitoring well installation and establishment of a monitoring network would be required to ensure groundwater impacts do not develop in the future.
- Requested that soil gas surveys at select areas on the site be implemented including at all site areas that could have used or contained VOCs. Sampling to be performed, but not limited to the following AOIs: all ASTs and USTs with lighter end hydrocarbons (e.g., gasoline and diesel, waste oils); the six-million-gallon tank; AOI #3 - White Kiln Pipeline Release; AOI #5 through AOI #8; former Boiler Shop, Machine Shop, Repair Shop, Electric Shop; Stores; former Material Yard; Garage; Sag Pond; Spray Pond; and Reservoir.

Site Assessment Work Plan

A SAWP was prepared for the Business Park/Industrial Park dated July 10, 2018, and divided the site into six study areas based on general operation with the former RCP. The SAWP was implemented to collect data in areas identified in the PEA and areas identified by the DTSC in their site inspection.

- **Surface Mining and Crushing Study Area**. The 28-acre area includes CKD-containing soil, crushing and reduction of limestone area, storage of iron ore, Wet Weather Quarry and transformer. Previous investigations occurred in this area to assess metal impacts in CKD to groundwater.

- **White Cement Plant**. The 11-acre area located in the southwestern portion of the site includes the White Cement Plant where mixing and milling raw materials, kilns to make cement clinker and grinders were located. Fuel oil AST, diesel UST, pipeline, boiler blowdown pond, kilns, silos, mills, crushers and transformers were in this area. RCDEH oversaw the closure of two USTs, and the boiler blowdown pond was closed by the SARWQCB. For the PEA, samples were analyzed for metals and/or TPH, PCBs, SVOCs and VOCs.

- **Grey Cement Plant**. The 29-acre area north of the Surface Mining and Crushing area included kilns, UST, water cooling system, silos, hopper boiler house, mills, baghouse, substation, ASTs, coal storage, berms, and transformers. Prior investigations in this area included groundwater sampling under the oversight of the SARWQCB and closure of a diesel UST under the oversight of RCDEH. For the PEA, PCBs and metals were not elevated in this area.

- **Material Storage Area**. The approximately 37-acre area was used for clinker and raw material storage and included a network of conveyor belts. The area included ASTs, crushed rock storage, gypsum storage, and berms. No prior investigations in this area had been identified prior to the preparation of the PEA. Sampling in the PEA did not find elevated metals or TPH in soil.

- **Maintenance, Administration and Packaging**. The approximately 51-acre area was used for supportive operations including equipment maintenance, fabrication, warehousing and administration. The area included ASTs, USTs, hazardous materials storage, abandoned substation, wash rack clarifier, spray pond, settling areas, stormwater retention basin, electric shop, boiler shop, machine shop, repair shop, compressor, silos, and transformers. Six USTs/ASTs were closed in this area under the oversight of RCDEH. During the PEA, TPH was reported at 1,700 mg/kg in the former sag pond. TPH, metals, VOCs and/or SVOCs were not elevated.

- **Vacant Land**. Approximately 60 acres of vacant land historically had residential homes that were destroyed during a fire. The area contains berms, monitoring wells, and former production wells. No prior investigations in this area had been identified prior to the preparation of the SAWP.

- **Hexavalent Chromium Sampling**. Ten soil samples were collected and analyzed in 2018 for metals and hexavalent chromium from the CKD located at different areas on the site. Cadmium, thallium, mercury, and hexavalent chromium were above screening levels in one or more samples.

The SAWP was conditionally approved by the DTSC on July 19, 2018. The Summary of Findings for the Business Park/Industrial Park was submitted to the DTSC on August 31, 2018, and reviewed by the DTSC on October 16, 2018. The SAWP investigation included the excavation and soil sampling of 20 composite shallow test pits (SWs), 32 deep excavations (i.e., MAP-LT), 6 soil borings (i.e., MAP-SB), installation of 11 dual-nested soil gas probes (i.e., MAP-SG), and collection of soil gas samples. A total of 144 soil samples were collected. The soil samples were collected from the trenches and soil boring for one or more of the following analyses: TPH, VOCs, SVOCs, PAHs, Title 22 Metals, PCBs, dioxins, and CR^{VI}. Soil gas samples collected from the 11 soil gas locations were analyzed for VOCs and TPH following EPA Method 8260B using an on-site mobile laboratory. The results indicated that VOCs and TPH were not detected above their respective reporting limits.

The following constituents were not reported above their respective reporting limits in the soil samples analyzed: PCBs, pesticides, VOCs and SVOCs. PAHs were reported in 3 samples of the 48 analyzed above their respective detection limit; however, there is not a corresponding DTSC soil commercial/industrial SL for these compounds. The PAH compounds detected included 2-methylanphthalene, anthracene, phenanthrene, pyrene, chrysene, and fluoranthene. The highest concentration of these compounds (phenanthrene) was reported at 31 micrograms per kilogram (µg/kg). Dioxins were reported below the residential SL of 50 ppt in 68 samples analyzed at the site. A total of 87 soil samples were analyzed for TPH. The maximum TPH concentration reported was 524.5 milligrams per kilogram (mg/kg) within the motor oil range (C23 to C40) in the Material Storage Area.

The SOF concluded the following:

- Arsenic was reported above the DTSC SL site-wide (114 samples) and above the published upper bound regional background concentrations of 10 mg/kg (29 samples). The maximum arsenic concentration associated with soils above the regional background was 28.9 mg/k.

- A single lead concentration was detected above the SL of 320 mg/kg at 514 mg/kg in the Material Storage Area in a white clay material, which was a feed product in the cement manufacturing process. The other 170 samples analyzed for lead were below the SL of 320 mg/kg.

- Cr^{VI} was reported above the EPA commercial/industrial Regional Screening Level (RSL) of 6.3 mg/kg in three samples. One sample was collected in a berm east of the Grey Kilns and former baghouses where previous CKD was placed during the cement plant operations. Two samples were located in the Wet Weather Quarry area where non-specification cement product was deposited during the cement plant operations.

- The SOF concluded that the lead and Cr^{VI} concentrations that exceed their respective SLs appear to be associated primarily with former cement feed product (i.e. white clay and/or CKD), and appear to be localized within the Material Storage Area, Gray Cement Plant, and in the vicinity of the Wet Weather Quarry.

During the implementation of the SAWP trench sampling, sampling was not possible in the Maintenance, Administration, and Packaging and Grey Cement Plant study areas because of site conditions. The proposed trenches in these areas are located where the former original cement plant was demolished prior to the

subsequent renovations and construction of the present-day cement plant. In addition, the area of the former Sag Pond (where TPH concentrations were encountered, 1,700 mg/kg and 950 mg/kg at 4 feet and 8 feet, respectively) during Langan's PEA was not accessible during this assessment due to debris prohibiting access. These areas are planned to be addressed during the demolition phase of the project, along with the areas underlying the existing buildings/structures, as outlined in the DSTC-approved SAWP. These areas would be addressed in the Response Plan, which would include a Demolition Plan and Soils Management Plan that would be submitted and approved by DTSC prior to implementation.

The DTSC in their review of the SOF in a letter dated October 16, 2018, indicated that process-related materials would be segregated based on visual observation during grading and handled appropriately based on further characterization results. The DTSC indicated further localized evaluation of arsenic due to the maximum concentration detected in soil appearing significantly higher than the maximum background concentration.

Southern California Edison Substation Workplan

An electrical substation located in the Maintenance, Administration and Packaging area is planned to have a warehouse building located over the area. An Environmental Assessment Workplan for Southern California Edison Substation dated November 26, 2018, was prepared by Langan in response to a meeting that was held between representatives from the DTSC, Southern California Edison, Langan, and RCP. The meeting was to discuss a sampling strategy to evaluate potential impacts from the substation. The workplan proposed soil sampling around four transformer, grounding grids, and concrete chip sampling of the concrete pads. Samples would be analyzed for metals and PCBs. Select samples would be analyzed for hexavalent chromium and TPH to evaluate impact from cement manufacturing process and oil tanks. In the area where oil staining was observed in the substation, select samples would be analyzed for PAHs and SVOCs. Results are not available at this time for the sampling in this area.

5.7.5.2 OPEN SPACE DISTRICT

A Phase I Environmental Site Assessment (ESA) dated May 24, 2018, was prepared for the open space area by Langan. The Open Space District area consists of approximately 79 acres along the southern portion of the RCP. The eastern half of the Open Space area contains the Commercial Quarry, unpaved roads, and CKD-containing soil areas. The western half contains the flooded Crestmore Quarry, seven buildings that supported the mine/quarry operations, a mine shaft, two mine vents, and an area of former Kaolin clay storage. The Union Pacific Railroad (UPRR) track runs along the western portion of Open Space area. Seven buildings associated with the RCP are in the area. Two groundwater monitoring wells are located in the area. In addition, a septic system is located southwest of the seven buildings. The septic system was included in this Phase I ESA as it supported both the RCP and the mine operations.

The following Recognized Environmental Conditions (RECs) were identified for the Open Space Area:

- **REC 1:** CKD was placed in the Commercial Quarry and an area southwest of the Commercial Quarry. CKD may have been placed along the southern portion of the area along with refractory brick.
- **REC 2:** Mine Shaft and Mine Vents may have been used to place various materials.

- **REC 3:** Former Blacksmith Shop that is currently demolished may have used quenching fluids.
- **REC 4:** A 1,500- to 2,000-gallon AST located near the Commercial Quarry with staining observed beneath the tank.
- **REC 5:** A 250-gallon hydraulic fluid reservoir was observed in the Material Testing Lab.
- **REC 6:** Two septic tanks were identified on the western side of the area.
- **REC 7:** Two pole-mounted transformers were located adjacent to the Research Furnace building that were described as in poor condition and corroded.

Groundwater was not considered an REC for the site based on groundwater monitoring results from 2016 and 2017. DTSC did not provide comments to the Phase I for the Open Space District.

A SAWP was prepared for the Open Space area dated January 7, 2019, by Langan. The SAWP divided the open space area into four lots based on the CLRRA agreements (Lots A through D). Table 5.7-8 identifies the lot, acreage and proposed usage. The SAWP was prepared and approved by the DTSC when the Open Space was being considered for a recreational park. Although the recreational park use is not going forward at this time, the additional investigative work identified in the SAWP will be completed.

Table 5.7-8 Historical and Proposed Land Uses, Open Space Area

Lot Designation	Acreage	Historical Usage	Planned Usage
A	5.09	Former Operations Area, mine buildings and administration offices. Mine vents, transformers	Undeveloped Open Space (formerly proposed for commercial/industrial area, parking lot, and visitor center, and museum/interpretive center.
B	65.87	Quarry Area. Commercial Quarry, Crestmore Quarry, CKD containing soil, AST, mine vent	Undeveloped Open Space (formerly proposed as Recreational park, fenced-off trails, viewpoints, hiking/biking trail with rest areas..
C	1.06	Open space	Undeveloped land
D	3.25	Septic tanks and piping	Potentially used for commercial/industrial purposes.

Based on the results of the implementation of this SAWP, a Response Plan would be developed to outline the proposed remedy to address any identified potential impacts encountered during the site redevelopment. As part of the redevelopment program, the on-site structures (mine offices, administration buildings, and various structures) would be decontaminated and demolished prior to redevelopment. The decontamination and demolition phase would occur concurrently with decontamination and demolition activities on the northern portion (Business Park/Industrial Park) of the RCP. Any additional sampling of areas previously inaccessible due to on-site structures would be conducted during the demolition phase. After the demolition and additional sampling, regrading and redevelopment of the site would take place.

The SAWP was approved by the DTSC on January 14, 2019. Sampling was implemented in January and February 2019. The SOF currently has not been approved and posted by the DTSC, but a summary was prepared by Langan. The investigation of the Open Space District found the following:

- Soil vapor samples were collected from two soil vapor probe locations and were analyzed for VOCs, TPH, and methane. The results indicated that VOCs, TPH, and methane were not detected above their respective reporting limits. No further soil gas investigation is being recommended by Langan.
- The following constituents were not reported above their respective DTSC SLs and/or EPA RSLs in the soil samples analyzed: VOCs, SVOCs, PAHs, PCBs, and dioxins. Dioxins were reported below the DTSC Residential SL of 50 parts per trillion (ppt) in the four samples collected and analyzed at the site. No further investigation is being recommended for the above compounds for the site.
- A total of 27 soil samples were collected and analyzed for TPH. The maximum TPH concentration reported was 118 milligrams per kilogram (mg/kg) within the heavy fuel oil range (C28-C33).
- Arsenic was reported above the DTSC SL site-wide (69 samples). Arsenic was reported at concentrations ranging from 4.4 mg/kg to 94 mg/kg.
- Thallium was reported above the EPA Industrial RSL of 1.2 mg/kg in three soil samples. These samples were collected from an area of white cementitious material. The other 125 samples analyzed for thallium were below the RSL of 1.2 mg/kg. This material is visually distinguishable and would be managed during the implementation of the Soil Management Plan, if needed. Based on this information, no further investigation is recommended for thallium.
- Cr^{VI} was reported above the EPA Industrial RSL of 6.3 mg/kg in one sample. This sample was collected from the white cementitious material. This material is visually distinguishable and would be managed during the implementation of the Soil Management Plan, if needed. The other 127 samples analyzed for Cr^{VI} were below the RSL of 6.3 mg/kg.
- Mercury was detected in four samples above the DTSC commercial/industrial standards of RSL 4.4 mg/kg. The mercury concentrations ranged from 8.0 mg/kg to 30 mg/kg. Mercury was initially identified as a chemical of potential concern through comparison to elemental mercury (Hg[0]) screening levels; however, the most prevalent valence states for mercury in soil are Hg(1) and Hg(2). Mercury can exist in either the monovalent or divalent forms as inorganic compounds, such as mercuric chloride. Consequently, maximum total mercury concentrations were compared to the mercuric chloride residential RSL (23 mg/kg), and mercury was eliminated as a chemical of potential concern in Lots B and D. The sample locations are in Lot D. Mercury would be further addressed in the Response Plan and Soil Management Plan.

The following impact analysis addresses thresholds of significance for which impacts are considered potentially significant.

Impact HAZ-1 Threshold: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Proposed Operation

Operation of the business park would involve the use of small amounts of hazardous materials, such as cleansers, greases, and oils for cleaning and maintenance purposes. However, three of the proposed buildings are industrial in nature, intended for manufacturing and/or warehousing uses. Project operation would involve transport, use, and disposal of hazardous materials; the specific substances and quantities of such materials are presently unknown.

The use, storage, transport, and disposal of hazardous materials would be governed by existing regulations of several agencies, including the US Environmental Protection Agency, US Department of Transportation, California Division of Occupational Safety and Health, and the Riverside County Department of Environmental Health.[1] Compliance with applicable laws and regulations governing the use, storage, transportation, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts.

The proposed project would also be constructed and operated with strict adherence to all emergency response plan requirements set forth by the RCDEH and the Riverside County Fire Department.

Project Construction

The brownfield site is being decommissioned and prepared for environmental remediation and successful redevelopment under the requirements of the Specific Plan. The mass grading for the site includes cuts and fills up to 35 feet, with total grading yardage estimated at between one and two million cubic yards. The Project site is expected to balance; however, as a conservative measure, it is estimated that up to 20,000 cubic yards of soil may need to be exported off-site for disposal.

Response Plan

The CLRRA Agreements between the project applicant and DTSC require preparation of a Response Plan, which includes a soils management plan (SMP) with a contingency plan for potential areas encountered during demolition, grading, or construction, and an air monitoring plan for demolition and grading activities in compliance with SCAQMD Rule 1156 and/or Rule 403, as applicable. The Response Plan was submitted to the DTSC as an initial draft on December 21, 2018. As a responsible agency under CEQA, DTSC would use this Draft EIR prepared for the project as the CEQA document to support approval of the Response Plan. The DTSC would conduct its own public outreach/public review process specific to the Response Plan, in accordance with the public participation requirements set forth in HSC Section 25395.96.

[1] RCDEH Hazardous Materials Branch is the CUPA for Jurupa Valley; the Unified Program coordinates and makes consistent enforcement of several state and federal regulations governing hazardous materials.

Soil Sampling and Management

Soil samples would be collected before excavation activities are initiated to assist in characterizing the soils. Discrete and composite soil sampling would occur pursuant to the SMP. All sampling would occur under DTSC oversight, with periodic site visits throughout the site assessment phase by DTSC personnel. Notification of field activities is governed by Section 5.14 of the CLRRA Agreement, which requires that advance notice be given so that DTSC has an opportunity to observe the sampling and obtain its own duplicate samples, if desired.

Evaluation of soil sampling results would classify excavated soil into three categories:

- Soils to be disposed off-site due to hazardous classification, unacceptable risk to human health, or groundwater protection.
- Impacted soil (above screening levels for commercial/industrial use or groundwater protection) that could be disposed off-site or placed on-site in designated capped areas, as deemed appropriate by DTSC.
- Soil that meets screening levels for both commercial/industrial use and groundwater protection, and that can be used in an unrestricted manner as fill material across the site.

Due to the large scale of the brownfield redevelopment project and the complexity involved, the DTSC recognizes and anticipates that not all of the sampling locations would be known until after completion of the Draft EIR (Langan 2018, p.3, par. 1). For example, some soil characterization may need to be completed only after demolition activities have progressed (such as after building/structure foundation slabs are removed). DTSC staff would be present on-site at regular intervals during this process to visually observe and document areas of soil with staining, odors, etc. that may indicate the need for additional sampling, characterization, and management. In addition, the demolition contractor would be provided with appropriate protocols to stop work and promptly notify the environmental engineer for the project and DTSC if any areas of suspected impacts are encountered during demolition and grading activities. Pregrading soil characterization may also be required, which would be determined based upon initial sampling results and the final detailed cut/fill grading plan.

Based on preliminary sampling results, it is not anticipated that significant quantities of soil would need to be removed from the site for off-site placement or disposal. The vast majority of the soil meets screening levels for commercial/industrial use and groundwater protection and is proposed to be used across the site as fill material.

Following grading, the placement of the building pads and pavement on each parcel of the redevelopment site could serve as an engineering control or "cap" on the site, if required by DTSC, to prevent exposure to potential fugitive dust. Finally, a land use covenant or deed restriction, as required by Health and Safety Code (HSC) Section 25395.99, may be recorded for each parcel, as required, limiting the use of the properties for commercial/industrial development and prohibiting future development of other uses. If any on-site designated area is proposed to contain contaminated soils, a long-term Operations and Maintenance (O&M) Plan would be required to be approved by DTSC, including engineering controls, maintenance and regular inspections, and groundwater monitoring, as required by HSC Section 25395.97(b).

Waste Management

A waste management plan would be prepared by the project applicant (or applicant's demolition/construction contractor) and reviewed by DTSC prior to commencement of demolition activities. The purpose of the waste management plan is to ensure appropriate handling, storage, removal, and transport of materials on the redevelopment site, including materials that would be salvaged/recycled or that are planned to be transferred to identified local permitted landfills. The majority of existing concrete within the redevelopment site is planned for recycling and would be crushed to be used as road base and/or fill material. DTSC has indicated that sampling of this material would be required prior to use to verify that it does not exceed screening levels for commercial/industrial use.

Decontamination and Demolition

A decontamination/demolition plan would also be prepared by the project applicant (or applicant's demolition /construction contractor) and reviewed by DTSC prior to commencement of decontamination/demolition activities. The purposes of the decontamination/demolition plan are to:

- Provide decontamination processes as necessary including procedures for safe demolition of buildings and the removal of processing equipment and tanks in accordance with the demolition permit that would be issued by the City of Jurupa Valley.
- Designate staging areas for items that are slated to be salvaged, recycled, or disposed of.
- Ensure compliance with applicable air quality regulations.
- Include guidelines for effective coordination between the project applicant and DTSC staff to ensure that timely site visits occur at the appropriate stages of demolition.
- Provide the protocol for identification of potential new AOIs that may be discovered during the demolition phase.
- Identify and list local disposal facilities.

Before demolition, an updated hazardous materials survey may be conducted to identify the locations and quantities of lead based paint, ACM, and miscellaneous universal waste (MUW) in above-ground structures. Hazardous materials would be removed from the on-site structures by a licensed hazardous materials abatement contractor that is experienced in handling and removing these types of wastes. These materials would be transported to a licensed disposal facility that accepts this type of waste.

Fugitive Dust Control

The current site operator is subject to SCAQMD Rule 1156, which is intended to protect the public from hexavalent chromium exposure from cement manufacturing operations. The current site operator is required to implement two SCAQMD-approved plans (Compliance Plan for Post Closure Activities and Compliance Monitoring Plan) according to Rule 1156. Upon transfer of ownership, the project applicant would comply

with SCAQMD Rule 1156 and Rule 403, as applicable, to control fugitive dust during facility dismantling/demolition, removal of cement dust/materials, and during remediation-related activities, which would be conducted under DTSC oversight. The project would comply with applicable mandatory SCAQMD requirements and the provisions of the DTSC-approved decontamination/demolition plan.

Response Action Completion Report

A response action completion report would be prepared and approved by DTSC to verify compliance with all plan requirements and facilitate the issuance of a certificate of completion/no further action letter in compliance with HSC Section 25395.97, containing an exception for any required long-term O&M requirements or monitoring required for the site. The certificate of completion/no further action letter would be issued within 30 days of receipt of an acceptable response action completion report, O&M plan and agreement (if required), and the executed land use restriction.

Construction Hazardous Materials

Project-related construction activities would involve the use of larger amounts of hazardous materials than would project operation. Construction activities would include the use of materials such as fuels, lubricants, and greases in construction equipment and coatings used in construction. However, the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard. These activities would also be short term or one time in nature and would cease upon completion of the proposed project's construction phase. Project construction workers would also be trained in safe handling and hazardous materials use.

Additionally, as with project operation, the use, storage, transport, and disposal of construction-related hazardous materials would be required to conform to existing laws and regulations. Compliance with applicable laws and regulations governing the use, storage, transportation, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. For example, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable state and local regulations for the cleanup and disposal of that contaminant. All contaminated waste would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility.

Furthermore, strict adherence to all emergency response plan requirements set forth by RCDEH would be required through the duration of the project construction phase.

Hazards to the public or the environment arising from the routine use of hazardous materials during project construction and operation would be less than significant; however, hazards from the transport, reuse, and disposal of impacted soils could be potentially significant and requires mitigation.

Level of Significance before Mitigation: Impact HAZ-1 would be potentially significant. Mitigation Measures MM HAZ-1 to MM HAZ-7 are required to reduce Impact HAZ-1 to less than significant.

Impact HAZ-2 Threshold: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Construction and site preparation activities associated with implementation of the proposed project could increase hazardous materials use and the associated risk of accident conditions involving the release of hazardous materials in the project area. The project site has been found to have some areas impacted by CKD.

Without mitigation, contaminants could pose a health risk to future employees and visitors within the project site. Mitigation measures (Section 5.7-8) include the approval and implementation of response plans and works plans that would include multiple dust control strategies. Air monitoring would be conducted in accordance with local air quality management regulations, and equipment used to excavate, transport, and manage soil would be decontaminated through a process of brushing and washing in a central decontamination area. In addition, construction activities would not involve a significant amount of hazardous materials, and the use of hazardous materials would be temporary.

See response to Impact HAZ-1, above. Impact HAZ-2 requires mitigation.

Level of Significance before Mitigation: Impact HAZ-2 would be potentially significant. Mitigation Measures MM HAZ-1 to MM HAZ-7 are required to reduce Impact HAZ-2 to less than significant.

Impact HAZ-3 Threshold: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school?

There are no schools within one-quarter mile of the project site. The closest school is Walter Zimmerman Elementary School at 11050 Linden Avenue in Bloomington, approximately 1.4 miles north of the project site.

Level of Significance before Mitigation: HAZ-3 would cause no impact.

Impact HAZ-4 Threshold: Would the project be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment.

The site was identified in several local, state, and federal agency databases:

- The site is listed on the federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) site.
- The Superfund Enterprise Management System (SEMS) database lists the site as a "state-lead cleanup" that is not included in the National Priority List (NPL).
- The ENVIROSTOR database indicates that the Regional Water Quality Board (RWQCB) and the EPA are agencies that have been involved with the site. Potential chemicals of concern are listed as Polychlorinated Biphenyl (PCB) and hexavalent chromium. The site is listed as an active site in the voluntary cleanup program with the DTSC.

- The Leaking Underground Storage Tank (LUST) database indicates the site status as "completed - case closed as of November 5, 1991". The lead agency is RCDEH who administers the Riverside County Local Oversight Program. Heating oil/fuel oil is identified as a potential chemical of concern.
- According to the aboveground storage tank (AST) database, the total AST storage capacity at the site is 5,000 gallons. The Certified Unified Program Agency (CUPA) for the site is RCDEH.
- The site is listed on the local lists of landfill/solid waste disposal sites (WMUDS/SWAT).
- The site is listed on the local lists of registered storage tanks.
- LDS: The site is listed as a land disposal site with the Santa Ana Regional Water Quality Control Board. The site is listed as case closed as of November 2009.
- The site is listed on the Toxic Substances Control Act (TSCA) site.
- ICIS: The site is listed as having an administrative order and notice of violation.
- US AIRS: The site is listed on the Aerometric Information Retrieval System list, an EPA list for air pollution point sources.
- Abandoned Mines: The site is listed on the Department of Interiors list of sites impacted by past mining operations.
- FINDS: The site is listed for airborne pollution from industrial plants.
- ECHO: The site is listed on the Enforcement and Compliance History Information list maintained by the EPA for compliance and enforcement information on regulated facilities.
- EMI: The site is listed with South Coast Air Quality Management District for emissions from 1987 to 2015.
- HAZNET: The site is listed for the transport and disposal of polychlorinated biphenyls (PCBs), organic solids, waste oil, and oxygenated solvents.
- Historical CORTESE: The site is listed by the DTSC on the Hazardous Waste and Substances Site List, a database that is no longer updated by the state.
- NPDES: The site is listed by the State Water Resources Control Board for having a NPDES permit.
- WDS: The site is listed by the State Water Resources Control Board as a Waste Discharge System.

Several adjacent and surrounding properties were also identified in the regulatory databases. Based on distance, topographically cross-gradient or down-gradient relative to the site, and the non-violation status, none of the adjacent and surrounding properties are listed to have current or former releases of hazardous substances that are likely to impact the site at levels requiring regulatory cleanup action.

Level of Significance before Mitigation: Impact HAZ-4 would be potentially significant. Mitigation Measures MM HAZ-1 to MM HAZ-7 are required to reduce Impact HAZ-4 to less than significant.

Impact HAZ-5 Threshold: 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 and would not result in a safety hazard for people residing or working in the project area?.

The closest airports to the project site are Flabob Airport and Riverside Municipal Airport approximately 3.0 and 6.5 miles southwest of the site, respectively. Given the distance, the project site is not located within the airport land use plan of either Flabob or Riverside Municipal Airports.

There are no private airstrips within two miles of the proposed project (AirNav 2018); therefore, the project would not result in a safety hazard for people residing or working in the project area.

Level of Significance before Mitigation: HAZ-5 would cause no impact.

Impact HAZ-6 Threshold: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Riverside County Emergency Management Department (EMD) is responsible for coordinating all emergency management activity in the City and implementing the County's Emergency Operations Plan (EOP). The County's EOP addresses how the County and City should respond to extraordinary events or disasters (e.g., aviation accidents, civil unrest and disobedience/riot, dam and reservoir failure, disease, earthquake, flood, etc.), from preparedness phase through recovery.

Construction activities associated with the proposed project, including staging and stockpiling, would occur within the project boundaries and would not occur on any major arterials or highways that may be used during potential emergency situations. The proposed project would also be required to provide adequate access for emergency vehicles per the California Fire Code. Any short-term temporary impacts on adjacent roadways (i.e., El Rivino Road, Hall Avenue, and Rubidoux Boulevard) would be temporary and limited to the construction period. Thus, the proposed project would not impair implementation or physically interfere with the City's ability to implement the EOP.

Additionally, storage of construction materials and construction equipment—such as construction office trailers, cranes, storage containers, and trailers detached from vehicles—is prohibited on City property, including City streets, without a permit. Project construction would comply with City requirements regarding storage on City property, including City streets. Construction material and equipment would be staged or stored on-site and would not interfere with emergency access to or evacuation from surrounding properties. Impacts would be less than significant.

As part of the City's discretionary review process, the City reviewed the proposed project design to ensure that during operation appropriate emergency ingress and egress would be available to project site, and determined that the proposed project would not substantially impede emergency response routes in the local area. Impacts would be less than significant.

Level of Significance before Mitigation: Impact HAZ-6 is less than significant.

Impact HAZ-7 Threshold: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

According to the California Department of Forestry and Fire Protection's (CAL FIRE) map, "Western Riverside County Very High Fire Hazard Severity Zones in LRA," the entire project site is outside of any fire hazard severity zone (CAL FIRE 2009). Thus, development of the proposed project would not expose people or structures to wildland fire hazards.

Level of Significance before Mitigation: HAZ-7 would cause no impact.

5.7.6 Cumulative Impacts

The area considered for cumulative impacts is Riverside County, the service area for RCDEH Hazardous Materials Branch, the affected CUPA. The population of Riverside County is forecast to increase from about 2.32 million in 2015 to 3.17 million in 2040, and employment in the county is forecast to increase from about 742,000 to 1.12 million over the same period (SCAG 2016). Other projects would use, store, transport, and dispose of increased amounts of hazardous materials and thus could pose substantial risks to the public and the environment. The use, storage, transport, and disposal of hazardous materials by other projects would conform with regulations of the multiple agencies described in Section 5.7.1.5, above. Cumulative impacts would be less than significant after compliance with such regulations, and project impacts would not be cumulatively considerable.

5.7.7 Level of Significance Before Mitigation

HAZ-3, HAZ-4, HAZ-5, and HAZ-7 would have no impact.

Upon implementation of regulatory requirements and standard conditions of approval, HAZ-6 would be less than significant.

Without mitigation, these impacts would be potentially significant: HAZ-1, HAZ-2 and HAZ-4.

- **HAZ-1** Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials.
- **HAZ-2** Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- **HAZ-4** Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

5.7.8 Mitigation Measures

Impacts HAZ-1, HAZ-2, and HAZ-4

MM HAZ-1 Prior to issuance of project demolition permits by the City of Jurupa Valley, the project applicant shall submit a Demolition Plan to the California Department of Toxic Substances Control (DTSC) for review and approval and shall submit proof of that approval to the City of Jurupa Valley. The project applicant shall also provide written verification to the City of Jurupa Valley demonstrating DTSC approval of a Waste Management Plan. The applicant shall fully comply with the approved plans, which together shall ensure compliance with local air district requirements; ensure appropriate equipment and structures/buildings decontamination, tank removal, if applicable, and building/equipment demolition; designate appropriate waste and recycling material staging areas; and provide protocols to identify areas that require additional sampling based on visual observations and field monitoring instruments (e.g., photo ionization detector) during demolition activities. A Contingency Plan shall be included as part of the Demolition Plan. The Contingency Plan shall address actions to be taken in the event that, during demolition activities, unanticipated conditions are discovered that warrant additional assessment and remediation. If such conditions are discovered, the project applicant shall promptly comply with DTSC notice requirements and shall provide the City with a copy within 24 hours of any such notification made to DTSC.

MM HAZ-2 Prior to issuance of project grading permits on the industrial portion of the project site, the project applicant shall provide written verification to the City of Jurupa Valley demonstrating DTSC approval of: 1) a Site Assessment Workplan, 2) Summary of Findings, and 3) a Response Plan. The Site Assessment Workplan shall comply with California Health and Safety Code Section 25395.94 and Section 5.3 of the CLRRA Agreements between the project applicant and DTSC. The Site Assessment Workplan will provide protocols for additional sampling in areas identified by DTSC staff to ensure that on-site soils are fully characterized, to the extent practicable, and to ensure proper classification of on-site soils for on-site reuse or for off-site disposal. The Report of Findings (or Summary of Findings) combined with the Site Assessment Workplan will constitute the Site Assessment Plan required under California Health and Safety Code Section 25395.94 and Section 5.3 of the CLRRA Agreements between the project applicant and DTSC. The Response Plan shall comply with California Health and Safety Code Section 25395.96 and Section 5.4 of the CLRRA Agreements between the project applicant and DTSC. Potential response actions include soil management, land use controls, cover, capping, and long-term operation and maintenance, as needed. The Response Plan will include measures to address worker and public safety, air quality, groundwater protection, and fugitive dust generated from the earthmoving activities during implementation of the response action. The Response Plan will include components such as:

- A Soils Management Plan to ensure safe and appropriate handling of site soils and transport and off-site disposal, if necessary.

- A Contingency Plan for new findings that may occur during site grading.
- Dust control measures and an Air Monitoring Plan in accordance with SCAQMD Rule 1156, Rule 1466, and Rule 403, as applicable.
- Any other components deemed necessary by the DTSC to protect groundwater, air quality, or human health or as required by California Health and Safety Code Sections 25395.94 and 25395.96.

MM HAZ-3 Prior to issuance of project grading permits on the SCE Substation portion of the project site, the project applicant shall provide written verification to the City of Jurupa Valley demonstrating DTSC approval of: 1) a Site Assessment Workplan, 2) Summary of Findings, and 3) a Response Plan. The Site Assessment Workplan shall comply with California Health and Safety Code Sections 25395.94 and Section 5.3 of the CLRRA Agreements between the project applicant and DTSC. The Site Assessment Workplan will provide protocols for additional sampling in areas identified by DTSC staff to ensure that on-site soils are fully characterized, to the extent practicable, and to ensure proper classification of on-site soils for on-site reuse or for off-site disposal. The Report of Findings (or Summary of Findings) combined with the Site Assessment Workplan together will constitute the Site Assessment Plan required under California Health and Safety Code Section 25395.94 and Section 5.3 of the CLRRA Agreements between the project applicant and DTSC. The Response Plan shall comply with California Health and Safety Code Section 25395.96 and Section 5.4 of the CLRRA Agreements between the project applicant and DTSC. Potential response actions include soil management, land use controls, cover, capping, and a long-term operation and maintenance plan, as needed. The Response Plan will include measures to address worker and public safety, air quality, groundwater protection, and fugitive dust generated from the earthmoving activities during implementation of the response action. The Response Plan will include components such as:

- A Soils Management Plan to ensure safe and appropriate handling of site soils and transport and off-site disposal, if necessary.
- A Contingency Plan for new findings that may occur during site grading.
- Dust control measures and an Air Monitoring Plan in accordance with SCAQMD Rule 1156, Rule 1466, and Rule 403, as applicable.
- Any other components deemed necessary by the DTSC to protect groundwater, air quality, or human health or as required by California Health and Safety Code Sections 25395.94 and 25395.96.

MM HAZ-4 Prior to issuance of building permits for construction of project buildings on a particular parcel, the project applicant shall provide a copy or copies of a deed restriction or land use covenant, as applicable, that has been recorded over the parcel for which a building permit is sought. The deed restriction or land use covenant shall serve as a land use control to limit the use of the parcel to commercial/industrial use and prohibit future noncommercial

/nonindustrial development, and shall be in a form approved by the DTSC and recorded pursuant to California Health and Safety Code Section 25395.99.

MM HAZ-5 Prior to issuance of a Certificate of Occupancy for each building within the Agua Mansa Commerce Park, the project applicant shall undertake and complete the necessary remedial actions identified for that respective parcel within the Response Plan under the oversight of the DTSC. The project applicant shall provide written verification from DTSC to the City of Jurupa Valley Planning Director demonstrating either: 1) that the parcel has been remediated sufficiently to allow safe occupancy; or 2) issuance of a DTSC Certificate of Completion for the Response Action on the parcel for which a Certificate of Occupancy is sought. The written verification shall serve to indicate that the parcel is suitable for commercial/industrial development based upon screening levels appropriate for a commercial land use exposure scenario, or other risk methodology required by the DTSC, and that no further investigation or remediation is required other than any long-term operation and maintenance requirements or monitoring that may be required by DTSC or other regulatory agencies.

MM HAZ-6 Prior to issuance of project demolition permits by the City of Jurupa Valley for the Open Space area, the project applicant shall submit a Demolition Plan to the California Department of Toxic Substances Control (DTSC) for review and approval. The project applicant shall also provide written verification to the City of Jurupa Valley demonstrating DTSC approval of a Waste Management Plan. The applicant shall fully comply with the approved plans, which together shall ensure compliance with local air district requirements; ensure appropriate equipment and structures/buildings decontamination, tank removal, if applicable, and building/equipment demolition; designate appropriate waste and recycling material staging areas; and provide protocols to identify areas that require additional sampling based on visual observations and field monitoring instruments (e.g., Photo Ionization Detector) during demolition activities. A Contingency Plan shall be included as part of the Demolition Plan. The Contingency Plan will address actions to be taken in the event that, during demolition activities, unanticipated conditions are discovered that warrant additional assessment and remediation. If such conditions are discovered, the project applicant shall promptly comply with DTSC notice requirements and shall provide the City with a copy within 24 hours of any such notification made to DTSC.

MM HAZ-7 Prior to issuance of project grading permits in the Open Space area, the project applicant shall provide written verification to the City of Jurupa Valley demonstrating DTSC approval of: 1) a Site Assessment Workplan, 2) Summary of Findings, and 3) a Response Plan. The Site Assessment Workplan shall comply with California Health and Safety Code Section 25395.94 and Section 5.3 of the CLRRA Agreements between the project applicant and DTSC. The Site Assessment Workplan will provide for additional sampling in areas identified by DTSC staff to ensure that the soils within the proposed open space area are fully characterized, to the extent practicable, and to ensure proper classification of on-site soils for on-site reuse or for off-site disposal. The Report of Findings (or Summary of Findings) combined with the Site Assessment Workplan will constitute the Site Assessment Plan required under California

Health and Safety Code Section 25395.94 and Section 5.3 of the CLRRA Agreements between the project applicant and DTSC. The Response Plan shall comply with California Health and Safety Code Section 25395.96 and Section 5.4 of the CLRRA Agreements between the project applicant and DTSC. The Response Plan will include measures to address worker and public safety, air quality, groundwater protection, and fugitive dust generated from the earthmoving activities during implementation of the response action. The Response Plan will include components such as:

- A Soils Management Plan to ensure safe and appropriate handling of site soils and transport and off-site disposal, if necessary.
- A Contingency Plan for new findings that may occur during site grading.
- Dust control measures and an Air Monitoring Plan in accordance with SCAQMD Rule 1156, Rule 1466, and Rule 403, as applicable.
- Any engineering or administrative controls or long-term operations and maintenance plan that is required by DTSC; and any other components deemed necessary by the DTSC to protect groundwater, air quality, or human health or as required by California Health and Safety Code Sections 25395.94 and 25395.96.

5.7.9 Level of Significance After Mitigation

Impacts would be less than significant.

5.7.10 References

AirNav. 2018 (accessed). http://www.airnav.com/airports/us/ca?type=H&use=R.

California Department of Toxic Substances Control (DTSC). 2018, February 23. Preliminary Environmental Assessment Report, Agua Mansa Commerce Park, Jurupa Valley, California. Memorandum.

California State Water Resources Control Board. 2019. Chromium-6 Drinking Water MCL. https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chromium6.html.

Langan Engineering and Environmental Services. 2017a, December 20. Preliminary Environmental Assessment Report.

———. 2017b, November 3. Revised Remedial Investigation Report.

———. 2017c, November 6. Revised Executive Summary of the Remedial Investigation Report Riverside Cement Company City of Jurupa Valley. Langan Project No. 721011301.

———. 2018, July 10 (revised). Site Assessment Work Plan Agua Mansa Commerce Park Jurupa Valley, Riverside County California.

———. 2018, August 31. Summary of Findings Report Agua Mansa Commerce Park Jurupa Valley, Riverside County California.

———. 2018, November 26. Work Plan: Environmental Assessment Southern California Edison Substation Aqua Mansa Commerce Park.

———. 2018, May 24. Updated Phase I Environmental Site Assessment for Rubidoux / Agua Mansa Open Space.

———. 2019, January 7. Site Assessment Work Plan Agua Mansa Recreational Park/Open Space.

———. 2019, April. Draft Summary of Findings for Park/Open Space.

Southern California Association of Governments (SCAG). 2016. "Current Context: Demographics and Growth Forecast." Appendix in 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf.

US Environmental Protection Agency, Office of Solid Waste (USEPA). 1998. Draft Risk Assessment for Cement Kiln Dust Used as an Agricultural Soil Amendment. Prepared by Center for Environmental Analysis. US EPA Archive Document. https://archive.epa.gov/epawaste/nonhaz/industrial/special/web/pdf/ckdp0103.pdf.

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5.8 HYDROLOGY AND WATER QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts of the Agua Mansa Commerce Park Specific Plan project (proposed project) to hydrology and water quality conditions. Hydrology deals with the distribution and circulation of water, both on land and underground. Water quality deals with the quality of surface- and groundwater. Surface water includes lakes, rivers, streams, and creeks; groundwater is under the earth's surface.

The following analysis is based in part on information obtained from:

- *Hydrology & Water Quality Report for Agua Mansa Commerce Park, Jurupa Valley, California*, Langan Engineering and Environmental Services, Inc., November 21, 2018.
- *Preliminary Water Quality Management Plan for Agua Mansa Commerce Park, Jurupa Valley, Riverside County, California,* Langan Engineering and Environmental Services, Inc., April, 2018.

Complete copies of these studies are included in the Technical Appendices to this Draft EIR (Volume II, Appendix H).

5.8.1 Environmental Setting

5.8.1.1 REGULATORY BACKGROUND

Federal

Safe Drinking Water Act

The federal Safe Drinking Water Act regulates drinking water quality nationwide and gives the US Environmental Protection Agency (EPA) the authority to set drinking water standards, such as the National Primary Drinking Water regulations. These regulations protect drinking water by limiting the levels of contaminants that can adversely affect public health. All public water systems that provide service to 25 or more individuals must meet these standards. Water purveyors must monitor for contaminants on fixed schedules and report to the EPA when a maximum contaminant level (MCL) is exceeded. MCL is the maximum permissible level of a contaminant in water that is delivered to any user of a public water system. Contaminants include organic and inorganic chemicals (e.g., minerals), substances that are known to cause cancer, radionuclides (e.g., uranium and radon), and microbial contaminants (e.g., coliform and E. coli). The MCL list typically changes every three years as the EPA adds new contaminants or revises MCLs. The California Department of Public Health's Division of Drinking Water and Environmental Management is responsible for implementation of the Safe Drinking Water Act in California.

Clean Water Act

The federal Water Pollution Control Act, or Clean Water Act (CWA), is the principal statute governing water quality. It establishes the basic structure for regulating discharges of pollutants into the waters of the United States and gives the EPA authority to implement pollution control programs, such as setting wastewater

standards for industry. The statute's goal is to completely end all discharges and to restore, maintain, and preserve the integrity of the nation's waters. The CWA regulates direct and indirect discharge of pollutants; sets water quality standards for all contaminants in surface waters; and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges; requires states to establish site-specific water quality standards for navigable bodies of water; and regulates other activities that affect water quality, such as dredging and filling wetlands. The CWA funds the construction of sewage treatment plants and recognizes the need for planning to address nonpoint sources of pollution. Section 402 of the CWA requires a permit for all point source (a discernible, confined, and discrete conveyance, such as a pipe, ditch, or channel) discharges of any pollutant (except dredge or fill material) into waters of the United States.

National Pollutant Discharge Elimination System

Under the National Pollutant Discharge Elimination System (NPDES) program (under Section 402 of the CWA), all facilities that discharge pollutants from any point source into waters of the United States must have a NPDES permit. The term "pollutant" broadly applies to any type of industrial, municipal, and agricultural waste discharged into water. Point sources can be publicly owned treatment works (POTWs), industrial facilities, and urban runoff. (The NPDES program addresses certain agricultural activities, but the majority are considered nonpoint sources and are exempt from NPDES regulation.) Direct sources discharge directly to receiving waters, and indirect sources discharge to POTWs, which in turn discharge to receiving waters. Under the national program, NPDES permits are issued only for direct, point-source discharges. The National Pretreatment Program addresses industrial and commercial indirect dischargers. Municipal sources are POTWs that receive primarily domestic sewage from residential and commercial customers. Specific NPDES program areas applicable to municipal sources are the National Pretreatment Program, the Municipal Sewage Sludge Program, Combined Sewer Overflows, and the Municipal Storm Water Program. Nonmunicipal sources include industrial and commercial facilities. Specific NPDES program areas applicable to these industrial/commercial sources are: Process Wastewater Discharges, Nonprocess Wastewater Discharges, and the Industrial Storm Water Program. NPDES issues two basic permit types: individual and general. Also, the EPA has recently focused on integrating the NPDES program further into watershed planning and permitting (USEPA 2012).

The NPDES has a variety of measures designed to minimize and reduce pollutant discharges. All counties with storm drain systems that serve a population of 50,000 or more, as well as construction sites of one acre or more, must file for and obtain an NPDES permit. Another measure for minimizing and reducing pollutant discharges to a publicly owned conveyance or system of conveyances (including roadways, catch basins, curbs, gutters, ditches, man-made channels and storm drains) designed or used for collecting and conveying stormwater is the EPA's Storm Water Phase II Final Rule. The Phase II Final Rule requires an operator (such as a city) of a regulated small municipal separate storm sewer system (MS4) to develop, implement, and enforce a program (e.g., best management practices, ordinances, or other regulatory mechanisms) to reduce pollutants in post-construction runoff to the City's storm drain system from new development and redevelopment projects that result in a land disturbance equal to or greater than one acre. The MS4 permit for the part of Riverside County in the Santa Ana Regional Water Quality Control Board's (RWQCB) jurisdiction, Order No. R8-2010-0033 (NPED No. CAS 618033), was issued by the Santa Ana RWQCB in 2010. The principal

permittee of the MS4 NPDES permit is the Riverside County Flood Control and Water Conservation District, and the City of Jurupa Valley is one of the 15 co-permittees.

State

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act (Water Code sections 13000 et seq.) is the basic water quality control law for California. Under this Act, the State Water Resources Control Board (SWRCB) has ultimate control over state water rights and water quality policy. In California, the EPA has delegated authority to the SWRCB to issue NPDES permits. The state is divided into nine regions related to water quality and quantity characteristics. The SWRCB, through its nine RWQCBs, carries out the regulation, protection, and administration of water quality in each region. Each regional board is required to adopt a water quality control plan or basin plan that recognizes and reflects the regional differences in existing water quality, the beneficial uses of the region's ground and surface water, and local water quality conditions and problems. The City of Jurupa Valley is in the Santa Ana River Basin, Region 8, in the Upper Santa Ana Watershed. The water quality control plan for the Santa Ana River Basin (Region 8) was adopted in 1995. This basin plan gives direction on the beneficial uses of the state waters in Region 8; describes the water quality that must be maintained to support such uses; and provides programs, projects, and other actions necessary to achieve the standards established in the basin plan.

Regional

Riverside Basin Groundwater Management Plan

The goal of the Riverside Basin Groundwater Management Plan (GWMP) is to provide a planning framework to operate and manage the groundwater basin in a sustainable manner to ensure a long-term, reliable supply for beneficial uses among all stakeholders in the basin. The Riverside Basin GWMP informs the public about the importance of groundwater to the Riverside Basin and about the challenges and opportunities it presents; develops consensus among stakeholders on issues and solutions related to groundwater; builds relationships among stakeholders within the basin and between local, state, and federal agencies; and defines actions for developing project and management programs to ensure the long-term sustainability of groundwater resources in the Riverside Basin. The GWMP provides action items that, when implemented, are intended to optimize groundwater levels, enhance water quality, and minimize land subsidence (Riverside 2012).

Santa Ana River Basin Water Quality Control Plan

The Basin Plan establishes water quality standards for the ground and surface waters of the region and includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards. The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan,

along with the causes, where they are known. For waterbodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included.

Storm Water Pollution Prevention Plans

Pursuant to the CWA, in 2001, the SWRCB issued a statewide general NPDES Permit for stormwater discharges from construction sites (NPDES No. CAS000002). Under this Statewide General Construction Activity permit, discharges of stormwater from construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for stormwater discharges or be covered by the General Permit. Coverage by the General Permit is accomplished by completing and filing a Notice of Intent with the SWRCB and developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). Each applicant under the General Construction Activity Permit must ensure that a SWPPP is prepared prior to grading and is implemented during construction. The SWPPP must list best management practices (BMP) implemented on the construction site to protect stormwater runoff and must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a monitoring plan if the site discharges directly to a water body listed on the state's 303(d) list of impaired waters.

Water Quality Management Plan

The water quality management plan (WQMP) for the Santa Ana Region of Riverside County is the guidance document for the project's stormwater design in compliance with Santa Ana RWQCB requirements for a "Priority Development Project." The 2010 MS4 Permit requires that a WQMP be prepared for all projects that meet the definition of a Priority Development Project and for which a final map or permit for discretionary approval is sought. A project-specific WQMP is required for the project to address the following:

- Design the site to minimize imperviousness, detain runoff, and infiltrate, reuse, or evapotranspire runoff where feasible.
- Cover or control sources of stormwater pollutants.
- Use low-impact development (LID) to infiltrate, evapotranspire, harvest and re-use, or treat runoff.
- Ensure runoff does not create a hydrologic condition of concern.
- Maintain stormwater BMPs.

The WQMP's design goal is to maintain or replicate the pre-development hydrologic conditions through the use of design techniques that create a functionally equivalent post-development hydrologic regime through site preservation techniques and the use of integrated and distributed infiltration, retention, detention, evapotranspiration, filtration, and treatment systems. The 2010 MS4 Permit requires the design capture volume (DCV) to be retained and infiltrated onsite. When on-site LID infiltration BMP methods prove infeasible, a feasibility analysis regarding harvest and reuse must be considered. When such retention methods are infeasible, the remainder of the DCV can be treated via processes such as bioretention. The intent behind these prioritization requirements is to maximize on-site retention, so as to reduce the volume of urban runoff and pollutant loads entering receiving waters.

City of Jurupa Valley

Municipal Code

Chapter 6.05, Storm Water/Urban Runoff Management and Discharge Controls, of the City of Jurupa Valley Municipal Code regulates volume and water quality of stormwater discharges to the City's storm drain system. The intent of Chapter 6.05 is to protect and enhance the water quality of water bodies in accordance with the City's NPDES permit (Santa Ana Region Order No. R8-2010-0033, NPDES No. CAS 618033).

City General Plan Policies

The specific policies outlined in the City of Jurupa Valley's General Plan Community Safety, Services, and Facilities Element that are related to hydrology and water quality and that apply to the proposed project are listed in Table 5.9-2, *City of Jurupa Valley General Plan Consistency Analysis*.

5.8.1.2 ENVIRONMENTAL SETTING

Regional Drainage

The City of Jurupa Valley is within the Upper Santa Ana Watershed of the Santa Ana River Basin Region, which is a group of connected inland basins and open coastal basins drained by surface streams flowing generally southwestward to the Pacific Ocean. The Santa Ana Region is the smallest of the nine regions in California, approximately 2,800 square miles, and is located roughly between Los Angeles and San Diego. The primary drainage channel in the watershed is the Santa Ana River, which is divided into six reaches and begins from the San Bernardino Mountains and extends downstream through the counties of San Bernardino, Riverside, Los Angeles, and Orange until it reaches the Pacific Ocean.

Local Drainage

The project site is directly tributary to the Santa Ana River via existing infrastructure owned and operated by the Riverside County Flood Control and Water Conservation District (RCFC). The infrastructure includes the Belltown Market Street Storm Drain system, the Agua Mansa Brown Avenue Storm Drain, Wilson Street Storm Drain, laterals, and outlet erosion control basins.

The Belltown Market system drainage area is generally bounded by El Rivino Road (San Bernardino/Riverside County Line) on the north, 20th Street to the south, the Jurupa Mountains to the west, and the project site to the east. The system also currently collects runoff from areas within San Bernardino County, north of El Rivino Road. However, current development plans and infrastructure improvements in El Rivino Road may reduce or eliminate this tributary flow.

The Agua Mansa Brown Avenue System Drainage Area is generally bounded by El Rivino Road and Hall Avenue to the north, Holly Street to the east, and Agua Mansa Road and Wilson Street to the west and south, respectively.

Site Hydrology

Approximately 172 acres of the project site is tributary to the Belltown Market system, 22 acres is tributary to the Agua Mansa Brown Avenue system, and 91 acres is retained within the site. The existing surface water hydrology includes approximately 92 acres from San Bernardino County (City of Rialto) north of El Rivino Road. According to the Rialto Commerce Center EIR, a development is planned for this former golf course site, which may include the installation of a storm drain within El Rivino Road to collect and convey the surface water runoff to the east along El Rivino Road. If constructed, the 92-acre tributary area would be removed from the proposed project site's hydrology. For purposes of this report, it is assumed that the off-site area will be collected and conveyed to the Santa Ana River by off-site improvements to be constructed as part of the Rialto Commerce Center Project.

The existing surface water hydrology also includes approximately 322 acres of the Jurupa Mountains, west of Rubidoux Boulevard. The northern section (approximately 283 acres) directs surface water runoff to Rubidoux Boulevard, which is hydraulically connected to an existing basin within the site. The southern section of the off-site area (approximately 39 acres) directs surface water runoff directly to the Belltown Market system.

Surface Water Quality

Section 303(d) of the 1972 Federal Clean Water Act requires states to identify water bodies that do not meet water quality objectives and are not supporting their beneficial uses. Each state must submit an updated list, called the 303(d) list, to the EPA every two years. The list also identifies the pollutant or stressor causing impairment and establishes a priority for developing a control plan to address the impairment. The list identifies water bodies where 1) a total maximum daily load (TMDL) has been approved by the EPA and an implementation is available, but water quality standards are not yet met, and 2) the water quality problem is being addressed by an action other than a TMDL and water quality standards are not yet met.

The relevant section of the Santa Ana River is Reach 4. Currently, this section is listed on the California 303(d) as a Category 5 water segment, which is a water segment where standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants listed. The water quality impairments listed for the Santa Ana River, Reach 4, are pathogens from a nonpoint source. The available information from the Santa Ana RWQCB indicates a TMDL completion date of 2019.

Groundwater

The site is above the Riverside-A Groundwater Management Zone (GMZ). GMZ water quality objectives are 560 mg/L for total dissolved solids and 6.2 mg/L for nitrate-nitrogen. The beneficial uses of this GMZ are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.

The measured depth to groundwater at two on-site wells was 134 feet (approximately 818 feet above mean sea level [amsl]) and 184 feet (approximately 701 feet amsl). The anticipated groundwater elevation within the project site is significantly below the lowest surface elevations planned for development.

Groundwater Quality

The Riverside Cement Plant (RCP) property has been used for mining, quarrying, and/or cement manufacturing since the early 1900s. Cement kiln dust (CKD) was one of the primary by-products of the manufacturing process and was composed of material accumulated within the kilns that could not be reused. Prior to the 1970s, CKD was hauled from the kilns and placed with fill soils/mine spoils at several locations throughout the site (see Figures 5.7-1a and 5.7-1b). In the 1970s and up until the late 1980s, the CKD was recovered for a mill and kiln feed supplement as part of the cement manufacturing process. Soils mixed with CKD still exist on site. Soil with CKD is a concern because it may have high metal content, which could contaminate soils and groundwater.

The equipment used to manufacture cement generally relied on electrical power for material conveyance/process control, and petroleum fuels for heating. Petroleum fuels were historically provided by a 6,000,000-gallon underground storage tank (UST). Other USTs at the site were used to store petroleum products such as gasoline, diesel fuel, fuel oil, and waste oil. All USTs have been removed. USTs are of concern because they may leak total petroleum hydrocarbons and volatile organic compounds into soils and groundwater.

Groundwater was found to be impacted by hexavalent chromium; however, none of the water samples analyzed from on-site wells exceed the state chromium levels.

5.8.2 Notice of Preparation / Scoping Comments

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. The comments from the NOP review that will be addressed in the hydrology and water quality section are included in Table 5.8-1.

Table 5.8-1 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
Santa Ana Regional Water Quality Control Board (RWQCB) Terri S. Reeder, Chief, Basin Planning Coastal Waters Section	8/18/17	RWQCB states that the water-filled quarry or "Crestmore Lake" was saturated at depth with groundwater recharged by the Santa Ana River, and pollutants entering it could be carried underground and impact downgradient resources. Surface runoff onsite into Crestmore Lake can also impact groundwater quality. RWQCB requests that: • The hydrology report address the creation of a Water Quality Management Plan to protect the Crestmore Lake from adverse water quality impacts, by using structural and procedural best management practices The RWQCB requests that the EIR include: • Discussion of groundwater quality onsite, as well as upgradient and downgradient, and establish a baseline prior to construction.	• Section 5.8, *Hydrology and Water Quality* • Appendix H, *Hydrology & Preliminary Water Quality Management Reports*

Table 5.8-1 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
		• Discuss the Riverside A Groundwater Management Zone (GMZ), over which the site is located • State the project's intentions for the two onsite wells, with their respective casing construction measurements (camera survey) and depths to groundwater. Any abandonment must be conducted according to California Well Standards. The RWQCB further requests: • A monitoring program of sampling and analyses tracking for groundwater throughout the project; • Establishing a groundwater elevation contour map (with seasonal fluctuations) indicating the gradient between the SAR, Crestmore Lake, and downgradient locations; • The project obtain a Construction General Permit per SWRCB Order No. 2009-0009-DWQ and implement a Storm Water Pollution Prevention Plan. • The project obtain a Riverside County MS4 permit per Regional Board Order No. RB-2010-0033, NPDES Permit No. CAS 618033	

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.8.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in § 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to hydrology and water quality are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

HYD-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

HYD-2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

HYD-3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) result in a substantial erosion or siltation on- or off-site;

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv) impede or redirect flood flows.

HYD-4 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

HYD-5 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

5.8.4 Applicable Policies and Design Features

5.8.4.1 PLANS, POLICIES, OR PROGRAMS

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to hydrology and water quality. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP HYD-1 As required by Municipal Code Chapter 6.05.050, "Storm Water/Urban Runoff Management and Discharge Controls," Section B (1), any person performing construction work in the city shall comply with the provisions of this chapter, and shall control storm water runoff so as to prevent any likelihood of adversely affecting human health or the environment. The City Engineer shall identify the BMPs that may be implemented to prevent such deterioration and shall identify the manner of implementation. Documentation on the effectiveness of BMPs implemented to reduce the discharge of pollutants to the MS4 shall be required when requested by the City Engineer.

PPP HYD-2 As required by Municipal Code Chapter 6.05.050, "Storm Water/Urban Runoff Management and Discharge Controls," Section B (2), any person performing construction work in the city shall be regulated by the State Water Resources Control Board in a manner pursuant to and consistent with applicable requirements contained in the General Permit No. CAS000002, State Water Resources Control Board Order Number 2009-0009-DWQ. The city may notify the State Board of any person performing construction work that has a non-compliant construction site per the General Permit.

PPP HYD-3 As required by Municipal Code Chapter 6.05.050, "Storm Water/Urban Runoff Management and Discharge Controls," Section C, new development or redevelopment projects shall control storm water runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. The City Engineer shall identify the BMPs that may be implemented to prevent such deterioration and shall identify the manner of implementation. Documentation on the effectiveness of BMPs implemented to reduce the

discharge of pollutants to the MS4 shall be required when requested by the City Engineer. The BMPs may include, but are not limited to, the following and may, among other things, require new developments or redevelopments to do any of the following:

(1) Increase permeable areas by leaving highly porous soil and low lying area undisturbed by:

(a) Incorporating landscaping, green roofs and open space into the project design;

(b) Using porous materials for or near driveways, drive aisles, parking stalls and low volume roads and walkways; and

(c) Incorporating detention ponds and infiltration pits into the project design.

(2) Direct runoff to permeable areas by orienting it away from impermeable areas to swales, berms, green strip filters, gravel beds, rain gardens, pervious pavement or other approved green infrastructure and French drains by:

(a) Installing rain-gutters oriented towards permeable areas;

(b) Modifying the grade of the property to divert flow to permeable areas and minimize the amount of storm water runoff leaving the property; and

c) Designing curbs, berms or other structures such that they do not isolate permeable or landscaped areas.

(3) Maximize storm water storage for reuse by using retention structures, subsurface areas, cisterns, or other structures to store storm water runoff for reuse or slow release.

(4) Rain gardens may be proposed in-lieu of a water quality basin when applicable and approved by the City Engineer.

PPP HYD-4 As required by Municipal Code Chapter 6.05.050, "Storm Water/Urban Runoff Management and Discharge Controls," Section E, any person or entity that owns or operates a commercial and/or industrial facility(s) shall comply with the provisions of this chapter. All such facilities shall be subject to a regular program of inspection as required by this chapter, any NPDES permit issued by the State Water Resource Control Board, Santa Ana Regional Water Quality Control Board, Porter-Cologne Water Quality Control Act (Wat. Code Section 13000 et seq.), Title 33 U.S.C. Section 1251 et seq. (Clean Water Act), any applicable state or federal regulations promulgated thereto, and any related administrative orders or permits issued in connection therewith.

5.8.4.2 PROJECT DESIGN FEATURES

PDF HYD-1 The proposed project will implement LID strategies that will include: bioretention facilities or rain gardens (lined with underdrains as necessary), extended detention basins, lined grass swales and channels, vegetated filter strips, and rainwater harvesting and re-use.

PDF HYD-2 The onsite detention basins would be designed to ensure that post-development flows do not exceed the capacity of the existing RCFC storm drainage infrastructure systems. The proposed project would also connect to the Belltown Market Street and Agua Mansa Brown Avenue systems at the same locations that are currently being utilized, in the southwest and northeast corners of the site, respectively.

5.8.5 Environmental Impacts

The following impact analysis addresses thresholds of significance for hydrology and water quality.

Impact HYD-1 Threshold: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Construction

During construction and remediation activities, the proposed project has the potential to produce typical pollutants such as nutrients; heavy metals; toxic chemicals related to construction and cleaning; waste materials including wash water, paints, wood, paper, concrete, food containers, and sanitary wastes; and fuel and lubricants.

However, future development of the project would require compliance with the Construction General Permit Water Quality Order 2009-0009-DWQ (as amended by Order No. 2010-0014-DWQ and 2012-006-DWQ), which requires the preparation and implementation of a SWPPP. A SWPPP estimates sediment risk from construction activities to receiving waters and specifies BMPs that would be used by the project to minimize pollution of stormwater.

Categories of BMPs used in SWPPPs are described in Table 5.8-2, *Construction BMPs*. Water quality impacts of project construction would be less than significant after implementation of the SWPPP.

Table 5.8-2 Construction BMPs

Category	Purpose	Examples
Erosion Controls and Wind Erosion Controls	• Use project scheduling and planning to reduce soil or vegetation disturbance (particularly during the rainy season) • Prevent or reduce erosion potential by diverting or controlling drainage • Prepare and stabilize disturbed soil areas	Scheduling, preservation of existing vegetation, hydraulic mulch, hydroseeding, soil binders, straw mulch, geotextile and mats, wood mulching, earth dikes and drainage swales, velocity dissipation devices, slope drains, streambank stabilization, compost blankets, soil preparation/roughening, and non-vegetative stabilization
Sediment Controls	• Filter out soil particles that have been detached and transported in water	Silt fence, sediment basin, sediment trap, check dam, fiber rolls, gravel bag berm, street sweeping and vacuuming, sandbag barrier, straw bale barrier, storm drain inlet protection, manufactured linear sediment controls, compost socks and berms, and biofilter bags

Table 5.8-2 Construction BMPs

Category	Purpose	Examples
Wind Erosion Controls	• Apply water or other dust palliatives to prevent or minimize dust nuisance	Dust control soil binders, chemical dust suppressants, covering stockpiles, permanent vegetation, mulching, watering, temporary gravel construction, synthetic covers, and minimization of disturbed area
Tracking Controls	• Minimize the tracking of soil offsite by vehicles	Stabilized construction roadways and construction entrances/exits, and entrance/outlet tire wash.
Non-Storm Water Management Controls	• Prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. • Conduct various construction operations, including paving, grinding, and concrete curing and finishing, in ways that minimize non-stormwater discharges and contamination of any such discharges.	Water conservation practices, temporary stream crossings, clear water diversions, illicit connection/discharge, potable and irrigation water management, and the proper management of the following operations: paving and grinding, dewatering, vehicle and equipment cleaning, fueling and maintenance, pile driving, concrete curing, concrete finishing, demolition adjacent to water, material over water, and temporary batch plants.
Waste Management and Controls (i.e., good housekeeping practices)	• Manage materials and wastes to avoid contamination of stormwater.	Stockpile management, spill prevention and control, solid waste management, hazardous waste management, contaminated soil management, concrete waste management, sanitary/septic waste management, liquid waste management, and management of material delivery storage and use.

Source: CASQA 2012.

Remediation

The brownfield site is being decommissioned and prepared for environmental remediation and successful redevelopment under the requirements of the Specific Plan. Based on preliminary sampling results, it is not anticipated that significant quantities of contaminated soil would need to be removed from the site for off-site placement or disposal. The vast majority of the soil meets screening levels for commercial/industrial use and groundwater protection and is proposed to be used across the site as fill material. However, Impact HAZ-1 includes mitigation measures to address soils to be disposed off-site due to hazardous classification, unacceptable risk to human health, or groundwater protection. These mitigation levels will reduce the impact to groundwater to less than significant.

Operations

Operation and maintenance of most development projects, including the proposed project, may produce typical pollutants, including suspended solids/sediment, nutrients, heavy metals, pathogens (bacteria/virus), pesticides, oil and grease, toxic organic compounds, trash and debris, and household hazardous wastes. Additionally, vegetated areas in the landscaped areas throughout the site are likely to produce suspended solids/sediment, nutrients, and pesticides.

According to the Santa Ana RWQCB MS4 permit, a project of this type is classified a Priority Development Project because it is an industrial project that would create more than 10,000 square feet of impervious surfaces collectively over the project site. It also qualifies for a Priority Development Project because it is a significant redevelopment project that will add 5,000 square feet or more of impervious surface on an already developed site. Therefore, a WQMP would be required for the proposed project under the MS4 permit. Separate, preliminary WQMPs are included in Appendix H for the Industrial Park/Business Park and for the Activity Park.

Low-Impact Development BMPs

LID is an approach to land development (or redevelopment) that works with nature to manage and treat stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness, and creating functional and appealing site drainage that treats stormwater as a resource rather than a waste product. Practices that adhere to these principles include bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. By implementing LID principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed. Applied on a broad scale, LID can maintain or restore a watershed's hydrologic and ecological functions (USEPA 2016).

The preliminary water quality management plan (WQMP) for the Industrial Park and Business Park areas includes extended detention basins, bioretention basins, and modular wetland systems (see Figure 5.8-1, *Water Quality Management Plan: Industrial and Business Parks*):

- The Business Park area includes one extended detention basin that collects stormwater from downspouts, parking areas, access roads, and hardscape.
- The Industrial Park includes four extended detention basins and two bioretention areas. The extended detention basins and bioretention areas collect the stormwater runoff from the downspouts, parking areas, access roads, and hardscape of the five buildings proposed for this area.
- The Industrial Park also includes three modular wetland systems (MWS) that collect stormwater from the access road, running from El Rivino Road to the park entrance, east of the industrial park.

The MWS utilizes multistage treatment processes, including screening media filtration, settling, and biofiltration. Stormwater runoff enters the MWS via curb inlet opening into a pretreatment chamber with a settling chamber for separating out larger solids and a media filter cartridge for capturing fine total suspended solids, metals, nutrients, and bacteria. It flows into the wetland chamber and through a variety of physical, chemical, and biological processes. As stormwater passes through the planting soil, pollutants are filtered, absorbed, and sequestered by the soil and plants, similar to bioretention systems.

All proposed BMPs are designed to treat the on-site runoff from the impervious areas based on the Riverside County Low Impact Development BMP Design Handbook. Perforated pipes in the proposed BMPs would collect the treated water and convey it to the proposed storm drain, as shown in Figure 5.8-1.

The Open Space District would leave the site undeveloped with controlled access, resulting in no changes in current use and no human access. Therefore, this portion of the site would not involve development that would violate water quality standards or waste discharge requirements.

Source Control BMPs

Source control BMPs reduce the potential for pollutants to enter runoff in the first place. Structural source control BMPs are used in a project's design to both minimize runoff and keep pollutants from entering runoff. Nonstructural source control BMPs are restrictions on activities on-site to reduce the potential for pollutants to contaminate runoff. The project WQMP prescribes the source control BMPs in Table 5.8-3.

Table 5.8-3 Source Control BMPs

Potential Sources of Runoff Pollutants	Structural Source Control BMPs	Nonstructural Source Control BMPs
On-site storm drain inlets	• Mark all inlets with the words "Only Rain Down the Storm Drain" or similar. • Include catch basin filter inserts in all inlets/catch basins onsite as a pretreatment measure.	• Maintain and periodically repaint or replace inlet markings. • Provide stormwater pollution prevention information to new site owners, lessees, or operators. • See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks
Landscape / outdoor pesticide use	• Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. • Show stormwater treatment and hydrology modification management BMPs.	• Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater • Consider using pest-resistant plants, especially adjacent to hardscape. • To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.
Refuse areas	• Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. • If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on, and show locations of berms to prevent runoff from the area.	• State how site refuse will be handled and provide supporting detail to what is shown on plans. • State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.
Loading docks	• Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas shall be drained	• Move loaded and unloaded items indoors as soon as possible.

Table 5.8-3 Source Control BMPs

Potential Sources of Runoff Pollutants	Structural Source Control BMPs	Nonstructural Source Control BMPs
	to the sanitary sewer, or diverted and collected for ultimate discharge to the sanitary sewer.	
Plazas, sidewalks, and parking lots.	• N/A	• Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain

Source: Langan 2018.

Post-development water quality impacts would be less than significant after construction, operation, and maintenance of the BMPs specified in the WQMP. Runoff from the site would not violate any water quality standards specified in the Santa Ana River Basin Water Quality Control Plan. Impacts would be less than significant.

Level of Significance before Mitigation: With implementation of PPP HYD-1, PPP HYD-2, PPP HYD-3, PPP HYD-4, and PDF HYD-1, Impact HYD-1 would be less than significant.

Impact HYD-2 Threshold: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

As stated above (in Section 5.8.1.2 under *Groundwater*), groundwater depth was measured at two onsite wells at 134 feet deep (approximately 818 feet amsl) and 184 feet deep (approximately 701 feet amsl). The anticipated groundwater elevation within the project site is significantly below the lowest surface elevations onsite. Therefore, the project site is not a significant opportunity for groundwater recharge.

There are several other existing onsite wells that were previously used by the Riverside Cement facility; however, no potable water is available. Thus, the project would not impact the production rate of these existing wells and may relocate and/or abandon them in accordance with RWQCB requirements. Overall, the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge, and would not obstruct the implementation of the Riverside Basin Groundwater Management Plan.

Level of Significance before Mitigation: Impact HYD-2 would be less than significant.

Impact HYD-3 Threshold: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) result in a substantial erosion or siltation on- or off-site;

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv) impede or redirect flood flows?

As stated in Section 5.8.1.2, the existing drainage patterns for the project site discharge via two piped conveyance systems owned and operated by the RCFC—Belltown Market Street system and the Agua Mansa Brown Avenue system. Of the total watershed area, which includes the site and the off-site areas, approximately 97 percent is tributary to the Belltown Market Street system, and 3 percent is tributary to the Agua Mansa Brown Avenue syst.

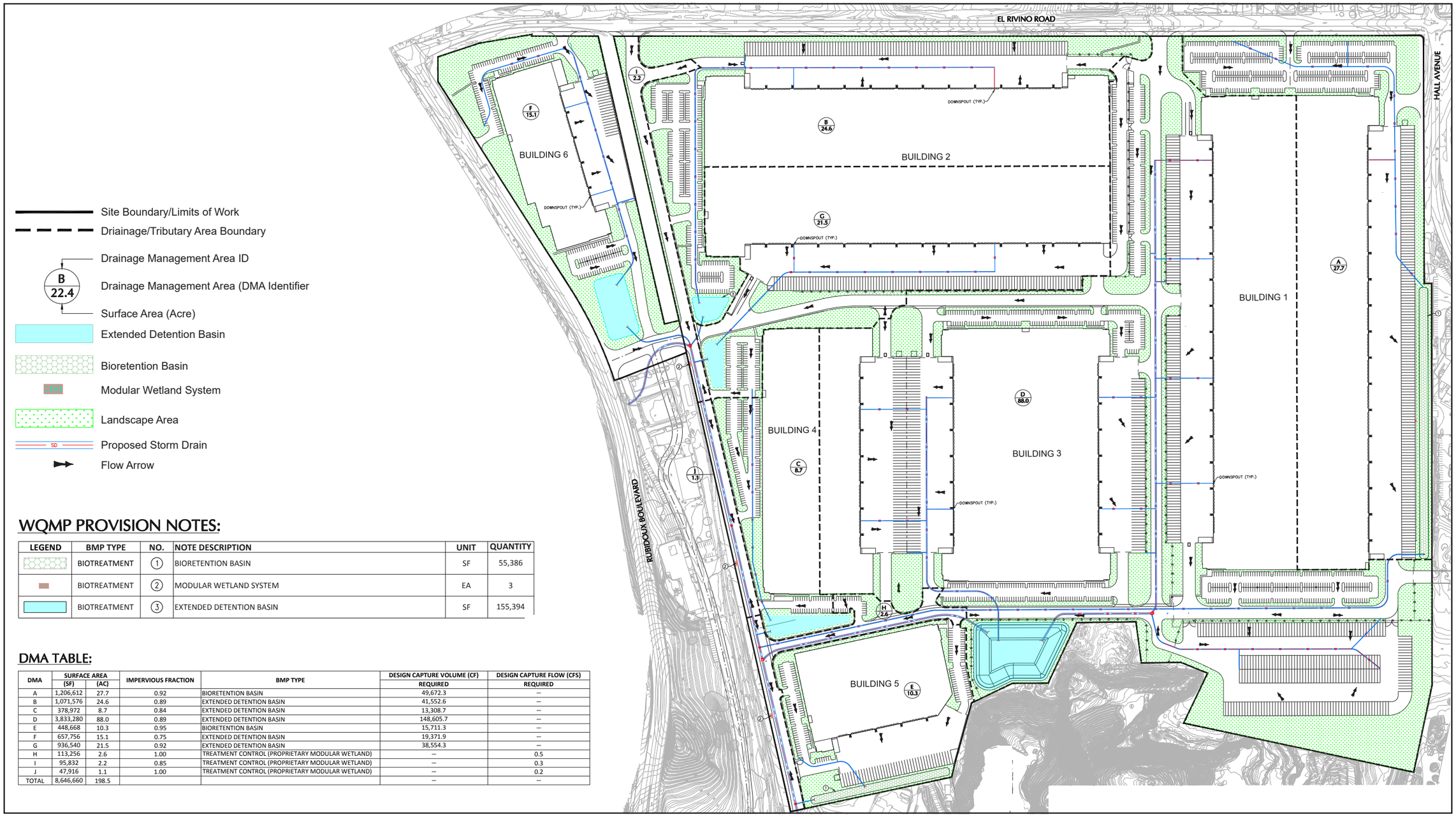
Proposed Drainage

Development of the proposed project would alter the on-site drainage patterns with the development of the buildings, roadways, and associated site improvements. The project would also alter the percentage of tributary area to each system, with more area being directed to the Belltown Market Street system.

The proposed project would include onsite stormwater detention BMPs designed in accordance with the RCFC and NPDES requirements. The surface runoff would be conveyed from the project to the BMPs, which then discharge into the existing storm drainage infrastructure and ultimately to the Santa Ana River at the same locations. The proposed project would connect to the Belltown Market Street system at the southwest corner of the site, which is the terminus of the RCFC "Line A" at the Rubidoux Boulevard and Union Pacific Railroad intersection, and would connect to the Agua Mansa Brown Avenue system at the northeast corner of the site, which is the upstream end of the system at a recently constructed (2005) concrete drop inlet. The surface runoff from the Jurupa Mountains, west of the site, would continue to pass through the project site. Although the type of drainage conveyance onsite would change, the direction of drainage would remain similar to existing conditions.

Figure 5.8-1 - Water Quality Management Plan – Industrial and Business Parks

5. Environmental Analysis



WQMP PROVISION NOTES:

LEGEND	BMP TYPE	NO.	NOTE DESCRIPTION	UNIT	QUANTITY
	BIOTREATMENT	1	BIORETENTION BASIN	SF	55,386
	BIOTREATMENT	2	MODULAR WETLAND SYSTEM	EA	3
	BIOTREATMENT	3	EXTENDED DETENTION BASIN	SF	155,394

DMA TABLE:

DMA	SURFACE AREA (SF)	SURFACE AREA (AC)	IMPERVIOUS FRACTION	BMP TYPE	DESIGN CAPTURE VOLUME (CF) REQUIRED	DESIGN CAPTURE FLOW (CFS) REQUIRED
A	1,206,612	27.7	0.92	BIORETENTION BASIN	49,672.3	–
B	1,071,576	24.6	0.89	EXTENDED DETENTION BASIN	41,552.6	–
C	378,972	8.7	0.84	EXTENDED DETENTION BASIN	13,308.7	–
D	3,833,280	88.0	0.89	EXTENDED DETENTION BASIN	148,605.7	–
E	448,668	10.3	0.95	BIORETENTION BASIN	15,711.3	–
F	657,756	15.1	0.75	EXTENDED DETENTION BASIN	19,371.9	–
G	936,540	21.5	0.92	EXTENDED DETENTION BASIN	38,554.3	–
H	113,256	2.6	1.00	TREATMENT CONTROL (PROPRIETARY MODULAR WETLAND)	–	0.5
I	95,832	2.2	0.85	TREATMENT CONTROL (PROPRIETARY MODULAR WETLAND)	–	0.3
J	47,916	1.1	1.00	TREATMENT CONTROL (PROPRIETARY MODULAR WETLAND)	–	0.2
TOTAL	8,646,660	198.5			–	–

Source: Langan Engineering and Environmental Services, 2018

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Impervious Areas and Drainage Flow Rates

Industrial and Business Parks

Project development would increase impervious areas onsite from its current approximately 100 acres to approximately 187 acres, a net increase of 87 acres of impervious area. The onsite comparison of the peak drainage flow rates and discharge volume from a 2-year, 24-hour storm to the Belltown Market Street tributary and the Agua Mansa Brown Avenue tributary are shown in Table 5.8-4.

Table 5.8-4 Proposed Peak Drainage Flow Rates from a 2-Year, 24-Hour Storm

Belltown Market Street	Pre-Development	Post-Development	% Difference
Peak Flow rate (cfs)	43.7	56.7	29.8
Volume (cubic feet)	1,196,781	1,559,448	30.2
Agua Mansa Brown Avenue			
Peak Flow rate (cfs)	0.68	3.72	447.1
Volume (cubic feet)	17,424	100,188	190

Source: Langan 2018.
cfs = cubic feet per second

As demonstrated in the table above, the pre-development hydrology is not maintained. The volume that needs to be mitigated was determined by taking the difference between pre- and post-project conditions at each tributary area. This displayed an excess runoff of 361,548 cubic feet and 82,764 cubic feet from the Belltown Market and Agua Mansa Brown tributaries respectively. As depicted in Figure 5.8-1, a bioretention basin (south of building 5) and five extended detention basins have been placed throughout the Belltown Market Tributary, capable of capturing and storing approximately 616,080 cubic feet. Furthermore, the stormwater bioretention basin east of building 1 is capable of handling 86,320 cubic feet of runoff from the Agua Mansa Brown Tributary. Thus, all additional runoff created by post-development conditions is mitigated by the proposed BMPs, and the overall impact would be less than significant.

Open Space District

The Open Space District would leave the site undeveloped resulting in no changes in current use. Therefore, this portion of the site would not result in a change to the existing drainage pattern and would have no impact.

Level of Significance before Mitigation: With implementation of PPP HYD-3, PPP HYD-4, PDF HYD-1, and PDF HYD-2, Impact HYD-3 would be less than significant.

Impact HYD-4 Threshold: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

According to the Federal Emergency Management Agency (FEMA) flood insurance rate map for the project area, the entire project site is located within Zone X "Other Flood Areas" and is outside of any 100-year flood hazard area. The existing body of water within the southern portion of the site, which is outside the developable

area of the project, is shown as a 100-year flood hazard area and designated Zone A "Special Flood Hazard Area" with no base flood elevation determined (FEMA 2008). This portion of the project site is proposed for open space and no development would occur near the body of water. Furthermore, the proposed project does not include any housing, Thus, potential flood hazard impacts would be less than significant.

A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. There are no bodies of water near the project site, with the exception of the water-filled Chino Quarry in the southern portion of the Specific Plan area. The lake is approximately 200 feet in depth, and the project site is approximately 100 feet higher than the water elevation. Therefore, the potential for a seiche to overtop the site is considered to be low and insignificant (Langan 2017).

Tsunamis are large ocean waves caused by underwater seismic activity. When tsunamis hit the coast, they can cause considerable damage to property and put the public at risk. The project site is over 40 miles from the Pacific Ocean and is well outside the tsunami hazard zone.

Mudflows are associated with landslides and heavy rainfall. The project site is mostly flat in the northern portion of the site where the closed Riverside Cement plant is located; however, the southern portion includes the quarry and steeply sloped hill. Nevertheless, this southern portion of the site would be developed an open space; all other development (i.e., industrial park and business park) would occur in the northern portion. Additionally, surrounding uses near the project site are mostly flat, and there are no adjacent hillsides that could cause mudflows or landslides onto the project site. Overall, impacts would be less than significant.

Level of Significance before Mitigation: Impact HYD-4 would be less than significant.

5.8.6 Cumulative Impacts

Hydrology and Drainage

Cumulative projects in the Upper Santa Ana River basin hydrologic units could increase impervious areas and would thus increase local runoff rates at those project sites. However, other projects in the region would be required to capture and infiltrate runoff from two-year storms, and many other projects in the region would be required to limit post-development runoff discharges to no greater than pre-development runoff rates, in accordance with the NPDES MS4 permit. Thus, no significant cumulative drainage impact would occur, and project drainage impacts would not be cumulatively considerable.

Water Quality

Cumulative projects would generate pollutants during project construction and operation. While the specific types of pollutants would vary by land use category, the types of pollutants that would be generated by the proposed project are common to a range of developed land uses. Other construction projects of one acre or more would be required to prepare and implement SWPPPs in order to obtain coverage under the statewide Construction General Permit. Other projects in the region would also be required to prepare and implement

WQMPs specifying BMPs, including LID measures that would be applied during project design and project operation to minimize water pollution from project operation. Thus, no significant cumulative water quality impact would occur, and project water quality impacts would not be cumulatively considerable.

5.8.7 Level of Significance Before Mitigation

Upon implementation of PPP HYD-1, PPP HYD-2, PPP HYD-3, PPP HYD-4, and PDF HYD-1, Impacts HYD-1, HYD-2, HYD-3, and HYD-5 would be less than significant.

Impact HYD-4 would be less than significant.

5.8.8 Mitigation Measures

No mitigation measures required.

5.8.9 Level of Significance After Mitigation

Impacts would be less than significant.

5.8.10 References

California State Water Resources Control Board (SWRCB). 2019. Chromium-6 Drinking Water MCL. https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chromium6.html.

Langan Engineering and Environmental Services, Inc. 2017, May 19. Hydrology & Water Quality Report for Agua Mansa Commerce Park, Jurupa Valley, California.

———. 2017, November 3. Revised Remedial Investigation Report.

———. 2018, April. Preliminary Water Quality Management Plan for Agua Mansa Commerce Park, Jurupa Valley, Riverside County, California.

Riverside, City of. 2012, October. Riverside Basin Groundwater Management Plan. https://water.ca.gov/LegacyFiles/groundwater/docs/GWMP/SC-17_CityOfRiverside_GWMP_2012.pdf.

U.S. Environmental Protection Agency (USEPA). 2012, September 26. Water Permitting 101. http://www.epa.gov/npdes/pubs/101pape.pdf.

———. 2016, December 14. Urban Runoff: Low Impact Development. https://www.epa.gov/nps/urban-runoff-low-impact-development.

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5.9 LAND USE AND PLANNING

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts to land use and planning from implementation of the Agua Mansa Commerce Park Specific Plan project (proposed project).

Land use impacts can be either direct or indirect. Direct impacts are those that result in land use incompatibilities, division of neighborhoods or communities, or interference with other land use plans, including habitat or wildlife conservation plans. This section focuses on direct land use impacts. Indirect impacts are secondary effects resulting from land use policy implementation, such as an increase in demand for public utilities or services, or increased traffic on roadways. Indirect impacts are addressed in other sections of this DEIR.

5.9.1 Environmental Setting

5.9.1.1 REGULATORY BACKGROUND

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized metropolitan planning organization (MPO) for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

The proposed project is considered a project of regionwide significance pursuant to the criteria in SCAG's Intergovernmental Review Procedures Handbook (November 1995) and Section 15206(b)(2)(e) of the California Environmental Quality Act (CEQA) Guidelines, because it is a proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or encompassing more than 650,000 square feet of floor area. Therefore, this section addresses the project's consistency with the applicable regional planning guidelines and policies.

Regional Transportation Plan/Sustainable Communities Strategy

The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted in November 2016 (SCAG 2016). Major themes in the 2016 RTP/SCS include integrating strategies for land use and transportation; striving for sustainability; protecting and preserving existing transportation infrastructure; increase capacity through improved systems managements; providing more transportation choices; leveraging technology; responding to demographic and housing market changes; supporting commerce, economic growth and opportunity; promoting the links between public health, environmental protection, and economic opportunity; and incorporating the principles of social equity and environmental justice into the plan.

The SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce GHG emissions from transportation (excluding goods movement). The SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency. The proposed project's consistency with the applicable RTP/SCS goals is analyzed in detail in Table 5.9-1, *SCAG 2016-2040 RTP/SCS Consistency Analysis*.

Western Riverside County Multiple-Species Habitat Conservation Plan (MSHCP)

The Western Riverside County MSHCP covers 146 species and 14 natural communities within a plan area of about 1.26 million acres—or 1,970 square miles—extending from the western Riverside County boundary to the San Jacinto Mountains. It includes all unincorporated Riverside County as well as jurisdictional areas of the cities of Jurupa Valley, Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, and San Jacinto. The Western Riverside County MSHCP is administered by the Western Riverside County Regional Conservation Authority and was approved by the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife in 2004.

The goal of the Regional Conservation Authority is to fulfill the mandate of the MSHCP to set aside 500,000 acres of western Riverside County for preserving habitat and protecting the 146 species listed in the MSHCP. In order to do so, the MSHCP has established protected "criteria cells" throughout the plan area; criteria cells are core areas with adequate resources to provide and support live-in habitat for one or more species listed in the MSHCP.

Local

Jurupa Valley General Plan

The Jurupa Valley General Plan provides a source of information and a policy framework for the future and through appropriate goals, policies and programs serves as a decision making tool to guide growth and development. The 2017 General Plan was adopted in September 2017 and consists of a series of state-mandated and optional elements to direct the City's physical, social, and economic growth. Elements within the City of Jurupa Valley General Plan include: Land Use; Mobility; Conservation and Open Space; Housing; Air Quality; Noise; Community Safety, Services and Facilities; Environmental Justice; Healthy Communities; and Economic Sustainability Elements. Following is a discussion of the various elements.

The policies in each of the elements that are relevant to the proposed project are listed in Table 5.9-2, *City of Jurupa Valley General Plan Consistency Analysis*, which analyzes the proposed project's consistency with these policies.

Land Use. The Land Use Element is an essential tool in achieving Jurupa Valley's goals and is typically considered the General Plan's most important policy document, because it describes the allowed types and configurations of land uses and where they can be located, including residential, commercial, mixed use, industrial, open space, recreation, and public uses.

Mobility. The Mobility Element guides the long-term circulation system of the City. Its goals and policies are closely linked with the Land Use Element and are intended to provide the best possible balance among Jurupa Valley's transportation needs, community character, roadway size, traffic service levels, bicycle, equestrian and pedestrian amenities, public transit opportunities and resources. This element represents a new approach to transportation planning in Jurupa Valley and focuses on mobility corridors rather than streets and roadways.

Conservation and Open Space. This element addresses the conservation, development, and use of energy and natural resources, and the preservation of open space for protection of natural resources such as wildlife habitat, wetlands, recreation trails, and facilities, cultural, and historic resources. The Conservation and Open Space Element also promotes public health and safety by redirecting development away from areas subject to geologic hazards, flooding, and fires.

Housing. The Housing Element identifies the housing needs and goals, policies, and programs for Jurupa Valley, and promotes expanded housing opportunities, community safety, prosperity, and quality of life for all. This element was prepared to meet the State of California's 5th Cycle Housing Element Update Planning Period from October 15, 2013, to October 15, 2021. The primary issues addressed include: 1) the provision of a decent housing in a healthy environment for all income levels, 2) affordable housing for special needs populations, 3) implementation of housing programs, 4) rehabilitation and preservation of existing affordable housing, and 5) removal of blight. Housing is a key part of the City's overall economic development efforts to improve and expand its housing stock, improve property values, diversify the employment base, and improve the quality of life for all residents.

Air Quality. This element provides background information on the physical and regulatory environment affecting air quality and climate change in the City. This element also identifies goals, policies, and programs that are meant to balance the City's actions regarding land use, circulation, and other issues with their potential effects on air quality and climate change.

Noise. The Noise Element is a mandatory component of the General Plan pursuant to California Government Code Section 65302(f). It is closely related to the Land Use, Mobility, Healthy Communities, and Environmental Justice elements of the General Plan. The element identifies noise issues within the community, quantifies existing and projected noise levels, addresses excessive noise exposure, and provides goals, policies, and programs to reduce noise to acceptable levels. In the Noise Element, the City describes how it intends to prevent and mitigate the adverse impacts of excessive noise exposure on its residents, employees, visitors, and other persons.

Community Safety, Services and Facilities. The Community Safety, Services, and Facilities Element contains goals, policies, and programs to ensure the safety of the community and the delivery of quality services and facilities to meet the City's needs. Public facilities that help deliver these services and utilities, such as water, sewer, and storm drainage/urban runoff collection, are operated and maintained by multiple agencies and community services districts in Jurupa Valley.

Environmental Justice. In Jurupa Valley, the issue of Environmental Justice has gained momentum partly as a result of litigation challenging the approval of industrial development by the County of Riverside prior to the City's incorporation near a low-income residential neighborhood. This element seeks to address environmental

justice through a set of comprehensive goals, policies, and programs aimed at increasing the influence of target populations in the public decision-making process and reducing their exposure to environmental hazards.

Healthy Communities. The Healthy Communities Element establishes goals and policies to help improve quality of life and foster healthy behavior and lifestyles, translating the General Plan vision for a robust Jurupa Valley into reality. The Healthy Communities Element is an optional section of the General Plan.

Economic Sustainability. The Economic Sustainability Element sets goals and policies to guide decisions that affect the local economy and the City's fiscal health. It also expands upon Land Use Element goals and policies by addressing how to grow and sustain the local economy. The element's main purpose is to enhance and preserve our prosperity and quality of life.

General Plan Land Use Designation

The Land Use Element of the City's General Plan includes a land use plan that designates the entire project site as Business Park-Specific Plan Overlay (BP-SPO) (Jurupa Valley 2017).

Jurupa Valley Zoning Ordinance

The Jurupa Valley Zoning Ordinance was created to provide guidance for the development and use of land in Jurupa Valley, classify different land uses and structures in appropriate places, and to regulate such land uses in order to serve the needs of residential neighborhoods, commerce, industry, recreation, open space, and other purposes.

Most of the project site is zoned Manufacturing – Heavy (M-H) with a smaller portion along El Rivino Road zoned as Manufacturing – Service Commercial (M-SC). Both the M-H and M-SC zones (1) promote and attract industrial and manufacturing activities that will provide jobs to local residents and strengthen the County's economic base; (2) provide the necessary improvements to support industrial growth; (3) ensure that new industry is compatible with uses on adjacent lands, and (4) protect industrial areas from encroachment by incompatible uses that may jeopardize industry. Permitted uses include industrial and manufacturing uses (e.g., food, textile, lumber/wood, paper, chemical, rubber/plastic/synthetics, leather, metal, stone/clay/glass/concrete products) and service and commercial uses (e.g., banks and financial institutions; blueprint and duplicating services; gas/diesel stations, laboratories, professional offices, restaurants, repair shops, building materials sales yards, nurseries).

5.9.1.2 EXISTING CONDITIONS/ENVIRONMENTAL SETTING

Project Site

The closed Riverside Cement Plant encompasses most of the project site and was in operations from 1906 until 2014. The plant facility included several quarries for the mining of limestone for cement and cement products manufacturing, and various support buildings. There is a mix of paved roadways, open space, soil and material stockpiles, machinery, and buildings. Concrete and steel structures that were used in the cement manufacturing process remain onsite and are not in operation. Additional structures that remain onsite from the plant operations include white and grey cement production lines, storage silos and sheds, a cement bagging

building, empty tanks, conveyor belts, utility tunnels, a control center, and an administration building. A water-filled quarry is at the southern portion of the cement plant. Vacant and undeveloped lands along the northern and western sides make up the rest of the project site. A Southern California Edison substation is near the northern part of the project site, and Union Pacific railroad tracks cross the site on the west.

Surrounding Land Uses

Surrounding land uses adjacent to the project site include industrial development and single-family residences to the north in the City of Rialto and San Bernardino County; vacant land and industrial uses to the east along Hall Avenue and to the west along Rubidoux Boulevard; and industrial and public facilities uses to the south along Agua Mansa Road.

Further west is the neighborhood of Crestmore Heights, a semi-rural and low density residential neighborhood. Low density residences are also located to the northeast of the project site near El Rivino Road and Hall Avenue. The remaining project area is predominantly industrial uses.

5.9.2 Notice of Preparation (NOP)/Scoping Comments

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period specifically pertain to the topic of land use and planning. A summary of NOP comments is included in Table 2-1, and a complete copy of comments received is included in Appendix A.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.9.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to land use and planning are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

LU-1 Physically divide an established community.

LU-2 Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

5.9.4 Applicable Policies and Design Features

5.9.4.1 PLANS, POLICIES OR PROGRAMS (PPP)

The City's General Plan and SCAG's 2016-2040 RTP/SCS, as summarized in Section 5.9.1, represent comprehensive plans applicable to the proposed project. Consistency with the goals and policies in these plans is evaluated in Tables 5.9-1 (RTP/SCS) and 5.9-2 (General Plan).

5.9.4.2 PROJECT DESIGN FEATURES (PDF)

There are no applicable PDFs related to land use and planning.

5.9.5 Environmental Impacts

The following impact analysis addresses thresholds of significance that are considered potentially significant impacts.

Impact LU-1 Threshold: Would the project physically divide an established community?

The closed Riverside Cement plant and quarry and associated buildings currently occupy most of the project site. Surrounding land uses include vacant land and other industrial uses with minimal residential uses. The closest residential community in Jurupa Valley is Crestmore Heights, about 0.2 mile west of the project site's most western boundary; however, it is separated from the project site by vacant land and Rubidoux Boulevard. Single-family residential communities are also located north of the project site in the community of Bloomington in unincorporated San Bernardino County; however, they are separated from the project site by El Rivino Road.

The remaining surrounding uses are vacant land and other industrial uses, such as distribution centers, solid waste facilities, general contractor offices, auto repair shops, and building material warehouses. Overall, the project site is in a mostly industrial area, and development in accordance with the Agua Mansa Commerce Park Specific Plan would not divide an established community. Impacts would be less than significant.

Level of Significance before Mitigation: Impact LU-1 would be less than significant.

Impact LU-2 Threshold: Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Table 5.9-1 provides an assessment of the proposed project's relationship to pertinent SCAG 2016-2040 RTP/SCS goals.

Table 5.9-1 SCAG 2016-2040 RTP/SCS Goals Consistency Analysis

RTP/SCS Goal	Project Compliance with Goal
RTP/SCS G1: Align the plan investments and policies with improving regional economic development and competitiveness.	**Consistent:** Development in accordance with the proposed Specific Plan would begin with remediating the former Riverside Cement Plant and quarry onsite, which would eliminate a large barrier to economic development in the project area. The proposed industrial, business park, and retail buildings would provide long-term job opportunities for Jurupa Valley residents, introducing approximately 964 jobs in the area. The proposed industrial park would allow high-cube logistics warehouse uses, fulfillment centers, e-commerce centers, warehousing and distribution, and research and development uses. The business park and retail overlay would allow research and development, professional offices, limited industrial, light manufacturing uses, and potential retail and personal services, food services, and convenience stores. These uses would bring private capital investment into the City and provide skilled and professional job opportunities.
RTP/SCS G2: Maximize mobility and accessibility for all people and goods in the region.	**Consistent:** Figure 3-6, *Circulation Plan*, illustrates the truck and automobile circulation network. The Specific Plan's circulation plan is designed to encourage interconnecting private streets, drive aisles, sidewalks, and ingress and egress points for efficient circulation, safety, and accessibility. All pedestrian sidewalks shall be developed in accordance with ADA standards and City sidewalk requirements per the City's Engineering Department. Pedestrian circulation in parking lot areas shall be planned to provide safety and convenience. Off-street parking areas shall incorporate walkways and striped paving in conjunction with landscaping to ensure the visibility and separation of pedestrians from vehicular paths. Conceptual street improvements proposed under the Specific Plan include the installation of curbs, gutters, sidewalks, parkway landscaping, and street trees along Rubidoux Boulevard, , El Rivino Road, and Hall Avenue. Potential pedestrian amenities, such as street trees, signage, and lighting are also included in the Specific Plan's development standards and design guidelines. Furthermore, internal circulation driveways and streets crossing railroad tracks will include special railroad safety features. The proposed industrial, business park, and retail uses would also create an opportunity to partner with Riverside Transit Agency to explore the feasibility of expanded public transportation options for workers and visitors of the Specific Plan area. Transit stops and shelters along surrounding roadways are encouraged, and bicycle storage, racks, and lockers are required.
RTP/SCS G3: Ensure travel safety and reliability for all people and goods in the region.	**Consistent:** See response to RTP/SCS G2 above.
RTP/SCS G4: Preserve and ensure a sustainable regional transportation system.	**Consistent:** As analyzed in Section 5.15, *Transportation and Traffic*, the proposed project would impact surrounding roadways and would result in some roadways operating at unacceptable levels of service. The project's Specific Plan, however, assures improvements to facilitate long-range multi-modal transportation. The Specific Plan provides a conceptual right-of-way improvement plan both within and outside the site. These new right-of-way improvements would include bikeways and sidewalk. The Specific Plan could accommodate bus stops and shelters provided by the responsible Riverside Transit Agency (RTA) consistent with its transportation plans. The Specific Plan also includes: Goal ME 2: Maintains an interconnected network of bicycle, pedestrian, equestrian and public transit facilities that encourage non-automotive travel.

Table 5.9-1 SCAG 2016-2040 RTP/SCS Goals Consistency Analysis

RTP/SCS Goal	Project Compliance with Goal
	Goal ME 3: Promotes trails for pedestrian, bicycle and equestrian use for recreational as well as local travel needs. Policy ME 2.4: Transportation Options. Support development of a variety of transportation options for major employment and activity centers, including direct access to transit routes, primary highways, bikeways, park-n-ride facilities, and pedestrian facilities. Policy ME 2.9 Project Integration. Encourage development of projects that facilitate use of alternative modes of transportation, including public transit, light rail, pedestrian-oriented retail and activity centers, equestrian trails and related facilities, and bicycle facilities. Policy ME 3.11 Pedestrian Connectivity. Require development projects and site plans to be designed to encourage pedestrian connectivity among buildings within a site, while linking buildings to the public bicycle and pedestrian network. Policy LUE 3.2 Accessibility. Require commercial buildings and centers to be sited along or easily accessible from public sidewalks, pedestrian areas, neighborhoods, and bicycle routes, and include amenities that encourage walking and biking. Policy LUE 11.6: Complete Streets. Promote compact growth and complete streets that promote pedestrian, equestrian and bike trails, and that takes advantage of public transit routes and facilities. Furthermore, the Specific Plan integrates pedestrian-oriented ADA-responsive design in the form of connected walkways, pathways, and bikeways into the site plan design. Bicycle parking is also included in the site design plan. Pedestrian access is provided from the public right-of-way, the parking areas, and perimeter sidewalk.
RTP/SCS G5: Maximize the productivity of our transportation system.	**Consistent:** The project area currently is not developed with multimodal transportation options, such as bicycle lanes and amenities, bus stops and shelters, and pedestrian sidewalks. Development of the proposed Specific Plan would include sidewalks along El Rivino Road, Rubidoux Boulevard, and Hall Avenue. Street and wayfinding signage, street trees, benches, bicycle lockers/storage, and street lighting are also conceptually planned for perimeter and internal roadways. These improvements would help improve the productivity of the project area's transportation network compared to existing conditions. Additionally, mitigation measures detailed in Section 5.15, *Transportation and Traffic*, would help reduce traffic impacts and improve existing roadways to maximize their productivity.
RTP/SCS G6: Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	**Consistent:** The Agua Mansa Commerce Park would have a mix of industrial, business park, retail, and open space uses, creating an employment and community center in the northeastern portion of Jurupa Valley. Buildout of the proposed project would introduce up to 964 jobs in the project area and help reduce vehicle miles traveled by providing jobs and retail services near residential areas. The Specific Plan also requires setbacks from the perimeter roadways to protect sensitive receptors from air quality and noise impacts, and requires landscaping focused along public roadways to promote water conservation and water retention, improve air quality, and provide a buffer to adjacent areas. Landscaping trees are also encouraged to be grouped together to minimize the visual impact to surrounding uses, minimize noise propagation, and improve air quality. Active transportation opportunities, such as bicycling and walking, are also provided by the proposed land use plan. Sidewalks are planned as street improvements along El Rivino Road, Rubidoux Boulevard, and Hall Avenue. Street and wayfinding

Table 5.9-1 SCAG 2016-2040 RTP/SCS Goals Consistency Analysis

RTP/SCS Goal	Project Compliance with Goal
	signage, street trees, benches, bicycle lockers/storage, and street lighting are also conceptually planned for perimeter and internal roadways.
RTP/SCS G7: Actively encourage and create incentives for energy efficiency, where possible.	**Consistent:** The proposed land uses and design guidelines incorporate energy efficient strategies. Sustainable construction and technology concepts in the proposed design guidelines include the following: • All new construction, building additions, and alterations must conform to the State of California's Green Building Code (CALGreen) or the Building Code in effect at the time of permit issuance. • Development projects should be designed and constructed to consist of energy-efficient buildings to reduce air, water, and land pollution and the environmental impacts associated with energy production and consumption. • Passive design techniques should be used to improve building energy performance through use of skylights, building orientation, landscaping, natural ventilation, natural daylighting, energy efficient light fixtures (e.g., florescent and LED lightings), and paint colors. • Shade structures and trees that produce large canopies should be used to reduce heat island effects. In addition, roof and paving materials should be utilized that possess a high level of solar reflectivity. • Recycled and other environmentally friendly building materials should be used to the maximum extent practicable.
RTP/SCS G8: Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	**Consistent:** See response to RTP/SCS G2 and G6 above.
RTP/SCS G9: Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	**Consistent:** See response to RPT/SCS G4 and G5 above.

Source: 2016-2040 SCAG Regional Transportation Plan/Sustainable Communities Strategy.

The analysis concludes that the proposed project would be consistent with the applicable RTP/SCS goals. Therefore, implementation of the proposed project would not result in significant land use impacts related to relevant RTP/SCS goals.

City of Jurupa Valley General Plan Land Use Designations

The project site is designated as Business Park with Specific Plan Overlay (BP-SPO) under the City of Jurupa Valley General Plan Land Use Plan (Jurupa Valley 2017). Project implementation would require adoption of the following **General Plan Amendments**:

- Changing the land use designation of the site from "Business Park with Specific Plan Overlay" to the following land use designations:
  - Heavy Industrial (HI) with Specific Plan Overlay to be applied within the Industrial Park District of Agua Mansa Commerce Park Specific Plan.

- Light Industrial (LI) with Specific Plan Overlay to be applied within the Business Park with Retail Overlay District of Agua Mansa Commerce Park Specific Plan
- Open Space-Recreation (OS-R) to be applied within the Open Space District of Agua Mansa Commerce Park Specific Plan

- Creating a "Rubidoux Warehouse and Distribution Center Overlay" in the General Plan and
- Establishing the "Rubidoux Warehouse and Distribution Center Overlay" on the Industrial Park District of the Agua Mansa Commerce Park Specific Plan.

The project would also require approval of the following entitlement requests:

- **Change of Zone.** To rezone the existing zoning from "Manufacturing-Heavy" and "Manufacturing-Service Commercial" to "Specific Plan"
- **Specific Plan.** To adopt the Agua Mansa Commerce Park Specific Plan which would supersede the existing Agua Mansa Specific Plan No. 210 from the project site.
  - **Site Development Permit.** To establish the speculative buildings for the future uses
  - **Tentative Parcel Map.**
  - **Development Agreement.**

Goals and Policies

A detailed analysis of the proposed project's consistency with applicable City of Jurupa Valley 2017 General Plan policies is provided in Table 5.9-2. The analysis concludes that the proposed project would be consistent with applicable general plan policies that are intended to avoid or minimize an environmental effect. Therefore, implementation of the proposed project would not result in significant land use impacts.

Table 5.9-2 City of Jurupa Valley General Plan Consistency Analysis

Applicable Policies	Project Consistency Analysis
Land Use Element	
LUE 3 – Commercial, industrial, and business park	
LUE 3.12 Industrial and Business Park Development. Accommodate the continuation of existing and the development of new industrial, manufacturing, research and development, and professional offices in areas designated by the General Plan, specific plans, community and village plan land use maps.	**Consistent:** The project site is designated Business Park-Specific Plan. Proposed uses would require the entitlement approvals, including a General Plan Amendment, as described above. Upon approval, the project would be consistent with this policy.
LUE 3.13 Commercial Trucks. Manage commercial truck traffic, access, loading, and parking to minimize potential impacts on adjacent residential and commercial properties.	**Consistent:** The Jurupa Valley General Plan allows trucks on Rubidoux Boulevard, Agua Mansa Road, El Rivino Road, and Brown Avenue. As detailed on Figure 3-6, *Circulation Plan*, commercial trucks would be allowed only on certain roadways and have access to the site only along El Rivino Road, Rubidoux Boulevard, and Brown Avenue. Trucks would be restricted from entering the site from the open space area. Table 4.4 of the Specific Plan details off-street parking and loading design standards for commercial trucks to minimize impacts on adjacent residential and commercial properties. For example, all truck-loading activity, including turnaround and maneuvering, shall be made on site. Buildings, structures, and loading facilities shall be designed and placed on the site so that vehicles, whether rear loading or side loading, may be loaded or unloaded without extending beyond the property line. Drive aisles shall be sufficient in length so that no queuing of trucks or delivery vehicles will occur within the public right-of-way. All loading docks and truck parking areas shall also be visually screened from the public right-of-way with landscaping, decorative walls, or any other appropriate screening material or combination of materials to achieve the required screening (see Table 3.10 *Walls, Fences, and Screening Requirements* in the Specific Plan).
LUE 3.15 Locations. Concentrate industrial and business park uses near major transportation facilities and utilities and along public transit corridors. Avoid siting such uses close to residentially zoned neighborhoods or where truck traffic will be routed through residential neighborhoods.	**Consistent:** The proposed industrial and business parks would be located primarily along El Rivino Road and Rubidoux Boulevard, which are major corridors in Jurupa Valley. The project site is zoned Manufacturing-Heavy, and Manufacturing Service-Commercial, and thus, the proposed uses would be compatible with the existing zoning. Truck traffic would also be restricted to certain roadways as to minimize impacts to sensitive receptors, as shown on Figure 3-6, *Circulation Plan*.
LUE 3.16 Employee Facilities. Encourage the inclusion of daycare, on-site lunch areas, showers, meeting rooms, and other employee-oriented facilities for new industrial and business park development.	**Consistent:** Allowable uses in the industrial and business park districts include outdoor dining, employee cafeterias, food courts/halls, mobile food vending, and restaurants, which provide employees with onsite amenities. In addition, bicycle parking and near-zero emissions parking would be provided. Meeting rooms, showers, and daycares can also be provided in the industrial and business buildings.
LUE 3.17 Toxic Materials. Prohibit the development of industrial and business park uses that use, store, produce, or transport toxic substances, or that generate unacceptable levels of noise or air pollution.	**Consistent:** The land use plan prohibits and discourages uses and activities that are generally incompatible for various reasons, such as heavy industry and manufacturing and storage of hazardous materials. If hazardous materials are utilized by future industrial and business park uses, the business owner is required to comply with existing federal, state, and local regulations to minimize environmental impacts on nearby sensitive receptors.
LUE 3.18 Infrastructure. Require that new industrial and business park developers provide adequate parking, transportation facilities, including sidewalks and trails, street trees, water resources, sewer facilities, and other utilities to serve	**Consistent:** Tables 3.3 and 3.4 of the Specific Plan specify the number of parking and loading spaces that must be provided by each land use. Additionally, Sections 5.15, *Transportation and Traffic*, and 5.17, *Utilities and Service Systems*, of this DEIR analyze the project's potential impacts

Table 5.9-2 City of Jurupa Valley General Plan Consistency Analysis

Applicable Policies	Project Consistency Analysis
new industrial and business park businesses in addition to meeting the needs of existing residents and businesses.	on transportation and utilities systems, including roadways, sidewalks, water, sewer, and dry utilities. Buildout of the proposed project would be adequately accommodated by existing and planned infrastructure.
LUE 3.19 Architectural Compatibility. Ensure that new industrial and business park development is designed to enhance and be architecturally compatible with its surroundings and with designated scenic highways or public view corridors by providing high quality architecture, landscaping, and site improvements.	**Consistent:** The design guidelines and development standards in the Specific Plan detail standards and guidelines for building siting and architectural elements. Required setbacks, site design, and landscaping create buffers between residential areas and the project site. The proposed industrial, business, and retail buildings would be designed with high-quality landscaping, architecture, building materials, and signage. Supportive infrastructures such as trash enclosures, mechanical equipment, utilities, and other similar elements are required to be screened from public street view and located away from residential areas. Furthermore, architectural plans demonstrate consistency.
LUE 5 – Land use overlays	
LUE 5.37 Specific Plan Content. Require that all specific plans must meet the requirements of state law and include four planning frameworks: Land Use, Design, Circulation, and Infrastructure/Public Facilities. Within each framework, the specific plan will provide the goals and policies that will guide future decisions on projects within the specific plan area. The plan will also include a detailed implementation plan that will identify responsibilities, financing requirements, and phasing/timing.	**Consistent:** The proposed Agua Mansa Commerce Park Specific Plan includes all state-required elements of a specific plan, including Land Use, Design, Circulation, and Infrastructure/Public Facilities elements with goals and policies to guide future development in accordance with the plan. An 'Implementation and Administration' chapter is also included to identify responsibilities, financing requirements, and phasing/timing.
LUE 5.38 Application of New Specific Plan Overlays. The 2017 General Plan designates several large key undeveloped areas of the City with the Specific Plan Overlay. These areas include industrial and business park property along I-15 and in the Agua Mansa industrial area.	**Consistent:** The proposed Agua Mansa Commerce Park Specific Plan, which includes industrial and business park uses, is an area designated within the New Specific Plan Overlay in the 2017 General Plan.
LUE 6 – General plan administration	
LUE 6.3 Regional Planning. Participate in regional efforts to address issues of mobility, transportation, traffic congestion, economic development, air and water quality, and watershed and habitat management with cities, local and regional agencies, stakeholders, Indian nations, and surrounding jurisdictions.	**Consistent:** As part of the analysis in this DEIR, surrounding jurisdictions, local and regional agencies, and Native American tribes were consulted to determine the project's environmental impacts. The project's transportation and traffic congestion impacts on Caltrans facilities and surrounding jurisdictions' roadways were analyzed. Air quality and water quality impacts to the South Coast Air Basin and Santa Ana Regional Water Quality Control Board, respectively, were analyzed. The Western Riverside County Regional Conservation Authority was consulted to determine the project's consistency with the Western Riverside County Multiple Species Habitat Conservation Plan. And Native American tribes were consulted as required by Senate Bill 18 and Assembly Bill 52.
LUE 6.4 Agency Coordination. Coordinate with local agencies, such as community service districts (CSDs), school districts, Riverside County Fire and Sheriff Departments, and others to ensure to ensure adequate service provision for development.	**Consistent:** To supplement the analysis in Section 5.13, *Public Services,* the Riverside County Fire and Sheriff Departments were consulted to determine the project's impacts on existing fire and police resources and levels of service. Additionally, the staff has transmitted the project for comments to other agencies including County Department of Health, Rubidoux Community Services District and Jurupa Unified School District. Received comments were considered.
LUE 7 – General plan land use implementation	
LUE 7.4 Multimodal Orientation. Provide for a broad range of land uses, intensities, and densities, including a range of residential, commercial, business, industry, open space, recreation, and public facilities uses and locate them to capitalize	**Consistent:** The proposed industrial, business park, retail, and open space uses would provide a variety of land uses in the Specific Plan area. Compared to the existing Riverside Cement Plant and quarry, these uses

Table 5.9-2 City of Jurupa Valley General Plan Consistency Analysis

Applicable Policies	Project Consistency Analysis
on multimodal transportation opportunities and to promote compatible land use patterns that reduce reliance on the automobile.	would help the City revitalize an underutilized area of the City and help promote multimodal transportation opportunities in the area.
LUE 7.6 Retail and Office Growth Areas. Locate retail commercial and professional office growth near or within existing and planned village centers and commercial nodes to the greatest extent possible.	**Consistent:** The proposed land use plan allows professional office uses and potential retail within the Business Park. The Business Park would be located east of Rubidoux Boulevard which is considered a principal commercial corridor.
LUE 7.7 Industrial, Warehousing and Service-Commercial Growth Areas. Limit industrial, warehousing and service-commercial uses to the Mira Loma Warehouse and Distribution Center Overlay, and to other areas readily accessible from major highways or rail traffic, and sufficiently separated and buffered to protect residential uses.	**Consistent:** The project site is not located in the Mira Loma Warehouse and Distribution Center Overlay, but is in an area of the City accessible from major highways, including State Route 60, Interstate 215, and Interstate 10. The site is also located near other industrial and manufacturing uses. Residential uses to the north and west of the project site would be buffered from the industrial and business park buildings with proper screening and landscaping as required by the Specific Plan development standards. Project implementation includes a request to create a "Rubidoux Warehouse and Distribution Center Overlay" and to establish the "Rubidoux Warehouse and Distribution Center Overlay" to the project site to allow logistics.
LUE 7.8 Environmentally Sensitive Areas. Prevent inappropriate development in areas that are environmentally sensitive or subject to severe natural hazards.	**Consistent:** Severe natural hazards may include geologic and soil conditions, such as faults, liquefaction, landslides, expansive soils, and soil erosion. As analyzed in Sections 5.5, *Geology and Soils*, and 5.8, *Hydrology and Water Quality*, buildout of the project would not contribute to increasing these existing natural hazards because future development would comply with existing building regulations and recommendations from the geotechnical report.
LUE 8 – Land use compatibility	
LUE 8.1 Land Use Compatibility. Require land to be developed and used in accordance with the General Plan, specific plans, and community and village plans to ensure compatibility and minimize impacts.	**Consistent:** See response to LUE 3.19 above. The proposed land uses are in accordance with the proposed Agua Mansa Commerce Park Specific Plan and would comply with its development standards and design guidelines.
LUE 8.2 High Quality Development. Require that all development be of high quality and enhance the positive characteristics and unique features of the project site, neighboring properties and the surrounding community.	**Consistent:** One overarching objective for the long-term urban design and architectural direction of the Specific Plan is to maintain high-quality development in the Agua Mansa Commerce Park that complements and integrates into the community and adds value to the City.
LUE 8.4 Buffering. Require buffering between urban uses and adjacent rural/equestrian oriented land uses to the maximum extent feasible. New development shall be responsible for providing the buffering on its own site or off-site, where appropriate, and acceptable to affected property owners.	**Consistent:** The conceptual site plan buffers the proposed industrial and business park uses from sensitive residential receptors with required landscaping and buffering requirements. The development standards require buffers to lengthen the distance of impact of the proposed buildings on sensitive uses and also improve the aesthetic appearance of the proposed developments from surrounding roadways. 'Buffering and Screening Design Guidelines' in Chapter 5, Design Guidelines, of the Specific Plan requires buffering and screening design features to screen truck courts and loading and service areas.
LUE 10 – Community design and aesthetics	
LUE 10.1 Land Use Balance. Encourage communities that provide a balanced mix of land uses, including open space, employment, recreation, shopping, and housing. **LUE 10.2 Infill Development.** Assist in and promote the development of infill and underutilized parcels, which are located	**Consistent:** The proposed land use plan provides a mix of industrial, business, retail, and open space uses within the Specific Plan area. The project site is also located in one of the Opportunity and Specific Plan Areas, as identified on the Jurupa Valley General Plan Land Use Map.

Table 5.9-2 City of Jurupa Valley General Plan Consistency Analysis

Applicable Policies	Project Consistency Analysis
in Opportunity and Specific Plan Areas, as identified on the General Plan Land Use Map.	
LUE 10.4 Street and Trail Connectivity. Create street and trail networks that directly connect local destinations and that promote use by pedestrians, equestrians, and bicyclists. **LUE 10.6 Complete Streets.** Promote compact growth and complete streets that promote pedestrian, equestrian and bike trails, and that takes advantage of public transit routes and facilities. **LUE 10.7** Community Linkages. Create opportunities to link communities through access to multimodal transportation systems.	**Consistent:** Figure 3-6, *Circulation Plan*, illustrates the truck and automobile circulation network and Figure 3-7 illustrates a conceptual onsite bike/pedestrian and offsite equestrian trail. The diverse land use mix proposed by the Specific Plan includes employment-generating uses and retail uses that would serve the surrounding residential neighborhoods. The proposed industrial, business park, and retail uses would also create an opportunity to partner with Riverside Transit Agency to explore the feasibility of expanded public transportation options for workers and visitors of the Specific Plan area. Transit stops and shelters along surrounding roadways are encouraged, and bicycle storage, racks, and lockers are required.
LUE 11 – Project design	
LUE 11.2 Design Standards. Comply with the design standards of the appropriate General Plan and community plan land use category. **LUE 11.3 Construction.** Require that public and private structures be constructed in accordance with the requirements of the City's zoning, building, and other pertinent codes and regulations.	**Consistent:** Chapters 3 and 4 of the Specific Plan detail development standards and design guidelines for future development in the Specific Plan area. All development would be constructed in accordance with the Specific Plan and City's requirements related to zoning and building codes.
LUE 11.4 Landscape and Irrigation Plans. Require landscape and irrigation plans to be submitted and implemented for development projects subject to discretionary review, as required by City Landscape Standards. **LUE 11.5 Water Conservation Techniques.** Require water conservation techniques, such as groundwater recharge basins, use of porous pavement, cisterns for non-potable water uses, drought-tolerant landscaping, drought-conscious irrigation systems, water recycling, and other water conservation methods to be included in new public and private development, as appropriate. **LUE 11.6 Energy Efficiency.** Require development projects to use energy efficient design features in their site planning, building design and orientation, and landscape design that meet or exceed state energy standards.	**Consistent:** All projects developed shall provide and maintain landscaping and irrigation in compliance with applicable sections of the proposed Specific Plan and zoning code. The landscape plan shall be designed with water efficiency in mind; plants shall be selected and planted based upon their adaptability to the climate and the topographical conditions of the project site. Further, the Landscape Plan shall address conditions of the Specific Plan area such as controlling erosion, filtering storm water, screening of unsightly elements, creating shade, and softening the appearance of walls or structures. All utilities shall be shown on plans to facilitate landscape design and tree placement, and the Landscape Plan shall avoid plantings which restrict sight distance at driveways or require unusual maintenance. Conceptual landscape plans have been submitted for discretionary review with the entitlement applications. The construction landscape and irrigation plans would be submitted to the City for review and approval during the plan check review process. Water conservation and energy efficiency are addressed in the Specific Plan. Landscape and irrigation plans are required to incorporate water conservation features, including groundwater recharge, biofiltration swales, porous surfaces, drought-tolerant landscaping, etc. Additionally, the following sustainable construction and technology concepts are encouraged: • All new construction, building additions, and alterations must conform with the State of California's Green Building Code (CALGreen) or the Building Code in effect at the time of permit issuance. • Development projects should be designed and constructed to consist of energy-efficient buildings to reduce air, water, and land pollution and

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	the environmental impacts associated with energy production and consumption. • Passive design techniques should be used to improve building energy performance through use of skylights, building orientation, landscaping, natural ventilation, natural daylighting, energy efficient light fixtures (e.g., florescent and LED lightings), and paint colors. • Shade structures and trees that produce large canopies should be used to reduce heat island effects. In addition, roof and paving materials should be utilized that possess a high level of solar reflectivity. • Recycled and other environmentally friendly building materials should be used to the maximum extent practicable.
LUE 11.8 Signage. Require development projects to use high quality, well-designed signage that is architecturally integrated with and complementary to the proposed building(s) and adjacent development.	**Consistent:** The development standards and design guidelines of the Specific Plan detail signage requirements. A comprehensive sign program may be required to be developed for the entire Specific Plan area or the specific Industrial Park, Business Park with Retail Overlay. A comprehensive sign program for the Specific Plan area would integrate project signage with the overall site and building design to provide a unified architectural statement. A comprehensive sign program also provides a means for flexible application of sign regulations to provide incentive and latitude in the design and display of multiple signs.
LUE 11.9 Commercial Vehicle Access. Use safe and convenient vehicular access and reciprocal access between adjacent commercial uses and properties. **LUE 11.10 Residential Compatibility.** Require non-residential uses to be designed so that site and building entries, drive-ways, parking and loading areas, trash and recycling areas, drive-through uses, and storage bays are located and designed to minimize conflicts with adjacent residential neighborhoods due to traffic, noise, vibration, odor, lighting, and other impacts on surrounding properties. Any potential impacts shall be mitigated to a level of non-significance, to the approval of the City.	**Consistent:** See response to Policy LUE 3.13 above. Site and building entries, driveways, parking and loading areas, trash and recycling areas, drive-through uses, and storage bays would be designed to minimize impacts on adjacent residential uses to the north and west of the project site. There are no loading docks directly across from residential areas. Employee and visitor parking area for Building 1 is approximately 40 feet away from the curb of the street. Additionally, a landscape berm will minimize the view of this parking area.
LUE 11.11 Landscape Maintenance. Require development projects to include landscaping in all site areas, including street trees, parking lots, setback areas, open spaces, and other exterior use areas. Landscaping shall include trees, shrubs and ground covers, and an automatic, water-conserving irrigation system, and shall be designed and maintained in accordance with City Landscape Standards.	**Consistent:** See response to Policy LUE 11.4 above. Plans do provide for landscaping in streetscapes, parking lots, setback areas, open spaces, and other exterior use areas. Conditions will address the maintenance. Landscaping would be maintained in compliance with applicable sections of the proposed Specific Plan and zoning code.
LUE 11.12 Natural Features. Require development projects, including public projects, utilities, and earthworks/ grading, to protect and preserve natural features, such as unique natural terrain, rocky outcrops, ridgelines, drainage ways, mature trees, and native vegetation, wherever possible, particularly where they provide continuity with more extensive regional systems.	**Consistent:** See response to Policy LUE 9.1 above.
LUE 11.13 Connectivity. Require development projects to be designed to provide adequate space for pedestrian connectivity and access, recreational trails, vehicular access and parking, supporting functions, open space, and other amenities.	**Consistent:** The Specific Plan provides an internal circulation plan and a conceptual right-of-way improvement plan both within and outside the site. New right-of-way improvements may include new turning lanes, curb cuts and driveways, new traffic signals, bikeways, road rehabilitation, new traffic signs, entryway signage, emergency vehicle access, curb, gutters, sidewalks, parkway landscaping, and street trees.

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LUE 11.15 Accessibility. Require building entries to be accessible from the public sidewalk, parking and pedestrian areas, and equestrian and bicycle routes where appropriate, and include amenities that encourage accessibility, such as low-scale entry signage, bicycle parking, equestrian hitching posts, down lighting, and waiting areas, where appropriate. **LUE 11.16 Street Crossings.** Require new development to provide safe and frequent pedestrian, bicycle and, where appropriate, equestrian street crossings, including over- or underpasses where necessary.	**Consistent:** See response to Policies LUE 3.13, 10.4, and 11.13 above. The proposed site plan provides for connections between sidewalks and building entries
LUE 11.17 Screened Trash and Recycling Areas. Require new development to provide clean, safe, secure, visually screened trash and recycling enclosures that are architecturally compatible with the development. Existing development and uses are encouraged to provide safe, secure, and visually screened trash and recycling enclosures.	**Consistent:** See response to Policy LUE 3.19 above. The proposed design guidelines encourage using buffering and screening techniques to block trash and recycling enclosures from public view. Passive screening and buffering, landscaping, and topographical features can minimize the use of screening wall as interventions. All screening walls must be of high-quality material, sufficiently decorative, or integrated to building facades.
LUE 11.18 Crime Prevention. Require that development projects consider public safety and "defensible space" in their design through the appropriate use of building windows, entries, landscaping, and site lighting that is designed for efficiency and to reduce glare and "light spillage" across property lines.	**Consistent:** Crime Prevention Through Environmental Design (CPTED) best practices are encouraged in the Specific Plan for all site plan and building placement design. Additionally, designs for security and lighting infrastructure are integrated into the land use development of the plan. Lighting requirements detailed in Table 3.7 of the Specific Plan ensure lighting contributes to the building identity while providing enhanced safety and security for pedestrians and vehicles. Pole-mounted lights shall be shielded and the light directed away from the public streets. Further, pole-mounted lights shall utilize cut-off fixtures and shall not be directed towards residences. All projects in the Specific Plan area are required to have zero light spill off site.
LUE 12 – Infrastructure, public facilities, and services	
LUE 12.1 Service Capacity. Ensure that development does not exceed the City's or the community services districts' ability to adequately provide supporting infrastructure and services, such as water, wastewater treatment, energy, solid waste and public services such as police/ fire/emergency medical services, recreational facilities, and transportation systems. **LUE 12.2 Monitoring.** Monitor the capacities of infrastructure and services in coordination with service providers, utilities, and outside agencies and jurisdictions to ensure that housing and population growth does not reduce levels of service below acceptable levels.	**Consistent:** As detailed in Sections 5.13, *Public Services*, 5.14, *Recreation*, 5.15, *Transportation and Traffic*, and 5.17, *Utilities and Service Systems*, the project applicant would be responsible for paying its fair share of facilities and infrastructure costs as required to mitigate the project's impacts on existing resources. As development occurs in accordance with the Specific Plan, developers would be required to coordinate with service providers to ensure they can accommodate the anticipated growth.
LUE 12.3 Urban Water Management Plans. Review all projects for consistency with the appropriate community services district's urban water management plans.	**Consistent:** A Water Supply Assessment (WSA) was prepared for the proposed project and is included as Appendix M of this DEIR. The WSA reviews the project's consistency with the Rubidoux Community Services District's 2015 Urban Water Management Plan. A summary of the WSA findings is provided in Section 5.17, *Utilities and Service Systems*.

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LUE 13 – Fiscal impacts	
LUE 13.1 Fair Share Infrastructure Funding. Require that new development contribute its fair share to fund infrastructure and public facilities, such as police and fire facilities, parks, streets, and trail improvements.	**Consistent:** See response to Policy LUE 12.1 above.
Mobility Element	
ME 1 – Mobility corridors	
ME 1.2 Corridor Design. When existing mobility corridors require modification or new corridors are established, their design shall be consistent with the following standards: 1. Roadway designs shall maintain no more than two through travel lanes wherever possible and shall not exceed four through travel lanes except within Express Mobility Corridors, or where a transition is required for roadways that connect to roads in other jurisdictions at the City boundaries. 2. Existing improvements and rights of way within mobility corridors may establish the general design criteria for the relevant segment in order to avoid replacing existing street improvements or right of way acquisitions for street widening. 3. Where sidewalks are appropriate, they should be detached and separated from the roadway by landscaped parkways. Where sidewalks are adjacent to curb on an existing roadway within a mobility corridor, sidewalks on either side of the relevant segment may be continued to a reasonable transition point. **ME 1.3 Preserving Community Character in Mobility Corridors.** Mobility corridors shall be designed to consider the land use and aesthetic contexts of their surroundings and shall include the following features unless determined infeasible or inconsistent with General Plan goals and policies: 1. Mobility corridors shall include parkways, street trees and where appropriate, medians that include substantial landscape treatments and that separate pedestrians and equestrians from vehicle traffic and provide a pleasant and inviting traveling experience for non-vehicular travel. 2. Express and Primary Mobility Corridors shall include a landscaped raised median wherever possible and shall include substantial setbacks and landscape buffers to protect adjacent noise-sensitive uses.	**Consistent:** The proposed industrial and business parks would be located primarily along El Rivino Road, Hall Avenue, and Rubidoux Boulevard, which are major corridors in Jurupa Valley. El Rivino Road, Hall Avenue, and Rubidoux Boulevard will undergo improvements that are in line with the General Plan requirements as specified in the Specific Plan. These include requirements relating to sidewalks, landscaping, parkways, street trees, setbacks, and medians.
ME 2 – Roadway networks	
ME 2.1 Roadway system. Require that the City's mobility corridors: 2. Maintain at least a Level of Service (LOS) D or better at all intersections, except where flexibility is warranted based on a multi-modal LOS evaluation, or where LOS E is deemed appropriate to accommodate complete streets/multi-modal facilities. **ME 2.3. Development Project Impacts.** Require development projects to analyze potential off-site traffic impacts and related	Off-site traffic impacts and related environmental impacts related to roadway systems are detailed in Section 5.15, *Transportation and Traffic.* This section details mitigation measures needed for adverse impacts to be at less-than-significant levels.

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environmental impacts through the CEQA process and to mitigate adverse impacts to less-than-significant levels.	
ME 2.4 Transportation Options. Support development of a variety of transportation options for major employment and activity centers, including direct access to transit routes, primary highways, bikeways, park-n-ride facilities, and pedestrian facilities. **ME 2.5 Public Transit Connections.** Support the development of transit connections that link the village centers located throughout the City and as identified in the Land Use Element and in the specific, community and village plans.	**Consistent:** See response to Policies LUE 7.4 and 10.4 above.
ME 2.6 Efficient Use. Utilize existing infrastructure and utilities to the maximum extent practicable and provide for the logical, timely, and economically efficient extension of infrastructure and services. **ME 2.7 System Evaluation.** Evaluate the planned circulation system as needed to enhance the street network to respond to anticipated growth and mobility needs.	**Consistent:** See response to LUE 12.1.
ME 2.9 Project Integration. Encourage development of projects that facilitate use of alternative modes of transportation, including public transit, light rail, pedestrian-oriented retail and activity centers, equestrian trails and related facilities, and bicycle facilities.	**Consistent:** Within the Specific Plan boundary, an on-site trail is proposed along the southern portion of Rubidoux Boulevard, between the CalPortland building and the intersection of Rubidoux Boulevard and Production Circle (see Figure 3.7). The northern portion of the Rubidoux Boulevard streetscape will include a sidewalk, connecting the proposed on-site trail to Rubidoux Boulevard and then north to its intersection with El Rivino Road. Across Rubidoux Boulevard to the west is where an equestrian trail is planned that will follow along Castellano Road and Andalusia Avenue. Transit routes can also provide an alternative mode of transportation for motorists and a primary mode for the transit dependent. The provision of a concentrated employment center is an opportunity to partner with Riverside Transit Agency to explore the feasibility of expanded public transportation options for workers and visitors of the Specific Plan area. Table 3.5 of the Specific Plan also includes bicycle parking requirements for each of the proposed land use types. Bicycle parking spaces would be provided in the form of bicycle racks and/or bicycle lockers. Bicycle parking shall be provided in a convenient, highly visible, and well-lit area within 100 feet of a building entry.
ME 2.11 Street Improvements with New Development. Require street improvements as a condition of new developments, including undergrounding of utility lines, installation of fiber optic cable and other utilities, sidewalk, curb, gutter and street pave-out, bicycle and equestrian facilities, street lighting (where appropriate), street trees and landscaping.	**Consistent:** As detailed in the Specific Plan and site plans, new right-of-way improvements along El Rivino Road, Rubidoux Boulevard, and Hall Avenue may include new turning lanes, curb cuts and driveways, new traffic signals, bikeways, road rehabilitation, new traffic signs, entryway signage, emergency vehicle access, curb, gutters, sidewalks, parkway landscaping, and street trees.
ME 2.12 Target Levels of Service. **ME 2.14 Traffic Study Guidelines.** Apply level of service and/or VMT standards to new development, consistent with state law, based on new Traffic Study Guideline, to be developed by City to	**Consistent:** A Traffic Impact Analysis was prepared for the project (refer to Appendix K, *Traffic Study*). The traffic study identifies project-related impacts to circulation facilities and provides necessary mitigation measures. Off-site traffic impacts and related environmental impacts related to roadway systems are detailed in Section 5.15, *Transportation*

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evaluate traffic impacts and identify appropriate mitigation measures for new development. **ME 2.15 Traffic Impact Evaluation.** New developments shall be reviewed to identify project-related impacts to circulation facilities and shall provide site improvements necessary to mitigate such impacts. The Engineering Department may require developers and/or subdividers to provide traffic impact studies prepared by qualified professionals to identify the impacts of a development. **ME 2.16 Traffic Impacts.** Traffic studies prepared for development entitlements (e.g., tracts, plot plans, public use permits, conditional use permits) shall identify project-related traffic impacts and determine the "significance" of such impacts in compliance with CEQA **ME 2.17 Impact Mitigation.** Mitigate direct project related traffic impacts by requiring street improvements as a condition of approval, or for indirect and cumulative impacts, through the payment of mitigation fees to fund improvement of streets and other transportation facilities.	*and Traffic*. All the mitigation measures in the Traffic Study will be implemented by the project.
ME 3 – Pedestrian and bicycle facilities	
ME 3.1 Bicycle and Pedestrian Trail Network. Plan, develop and maintain a bikeway and pedestrian network according to a Bicycle and Pedestrian Plan, to be prepared following General Plan adoption. Bicycle facilities should be located off-road to the greatest extent possible, such as along flood control channels, the Santa Ana River banks, regional parks and within residential developments and greenbelts. **ME 3.2 Bicycle- and Pedestrian-Oriented Site Design.** Encourage bicycle- and pedestrian-oriented site design in commercial areas. **ME 3.3 Design Standards.** In determining the appropriate street or intersection design standard to apply, the City will seek to balance cyclists' and pedestrians' safety and convenience with that of other roadway users. **ME 3.4 Intersections and Crossing Locations.** Use Federal, State, and local guidelines and standards for traffic operations, signal timing, geometric design, Universal Access (ADA) and roadway maintenance that facilitate walking and bicycling at intersections and other key crossing locations. **ME 3.6 Internal Linkages.** Bicycle and pedestrian trails networks should be located and designed to link to retail and commercial centers. **ME 3.7 External Linkages.** Link on-road and off-road bicycle and pedestrian facilities to existing and planned bicycle and pedestrian facilities in adjacent and regional jurisdictions.	**Consistent:** See response to Policies LUE 10.4 and 11.13 above. An on-site trail is proposed within the Specific Plan area along the southern portion of Rubidoux Boulevard (see Figure 3.7). The northern portion of the Rubidoux Boulevard streetscape will include a sidewalk connecting the proposed on-site trail to Rubidoux Boulevard and then north to its intersection with El Rivino Road. Across Rubidoux Boulevard to the west is where an equestrian trail is planned that will follow along Castellano Road and Andalusia Avenue. Development of bicycle and pedestrian networks onsite would be designed in compliance with ADA standards and the City's street design standards.

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ME 3.8 Traffic Control Devices. Traffic control devices and transportation infrastructure will be operated to serve the needs of all users of the roadway and pedestrians.	**Consistent:** Development of the proposed project would include implementation of City-required traffic control devices (i.e., crosswalks and street lights), as required by the City's Public Works Department.
ME 3.9 Pedestrian Facilities. Public streets shall provide pedestrian facilities in accordance with adopted City standards. Sidewalks shall be separated from the roadway by a landscaped parkway, except where the Planning Director determines that attached sidewalks are appropriate due to existing sidewalk location, design or other conditions. **ME 3.11 Pedestrian Connectivity.** Require development projects and site plans to be designed to encourage pedestrian connectivity among buildings within a site, while linking buildings to the public bicycle and pedestrian network. **ME 3.14 Public Pedestrian Improvements.** Encourage public pedestrian improvement projects such as public art, fountains, street trees, lighting and directional signs. **ME 3.15 Pedestrian Facilities.** Provide facilities for the safe movement of pedestrians within new developments, as specified in the General Plan and City Engineering and trail standards. **ME 3.16 Removal of Barriers.** Maximize visibility and access and encourage the removal of barriers (walls, easements, and fences) for safe and convenient movement of pedestrians within and between adjacent developments, where appropriate. Special emphasis should be placed on the needs of disabled persons considering Americans with Disabilities Act (ADA) regulations.	**Consistent:** See response to Policies LUE 10.4, LUE 11.13, and ME 3.1 above. The Specific Plan's circulation plan is designed to encourage interconnecting drive aisles, sidewalks, and ingress and egress points for efficient circulation, safety, and accessibility. All pedestrian sidewalks shall be developed in accordance with ADA standards and City sidewalk requirements per the City's Engineering Department. Conceptual street improvements proposed under the Specific Plan include the installation of curbs, gutters, sidewalks, parkway landscaping, and street trees along Rubidoux Boulevard, El Rivino Road, and Hall Avenue. Potential pedestrian amenities, such as street trees, signage, and lighting are also included in the Specific Plan's development standards and design guidelines.
ME 3.17 Public Transit Connections. Ensure safe pedestrian access from developments to existing and future transit routes and terminal facilities through project design.	**Consistent:** The proposed industrial, business park, and retail uses would create an opportunity to partner with Riverside Transit Agency to explore the feasibility of expanded public transportation options for workers and visitors of the Specific Plan area. Transit stops and shelters along surrounding roadways are encouraged, and bicycle storage, racks, and lockers are required. Proposed street improvements along surrounding roadways (i.e., sidewalks, lighting, signage, street trees) would ensure safe pedestrian access to future transit routes along Rubidoux Boulevard, and El Rivino Road.
ME 3.20 Development Review. Consult the Engineering Department as part of the development review process regarding any development proposals where pedestrian facilities may be warranted. City may require both the dedication and improvement of pedestrian facilities as a condition of development approval. **ME 3.21 ADA Compliance.** Require safe pedestrian walkways that comply with the Americans with Disabilities Act (ADA) requirements within commercial, office, industrial, mixed use, residential, and recreational developments.	**Consistent:** The City's engineering department has reviewed the project, including the Specific Plan and the proposed improvements under the Site Development Permit, as part of the development review process. The proposed Specific Plan includes conceptual street improvements on Rubidoux Boulevard, El Rivino Road, and Hall Avenue, including sidewalks, gutters, curbs, street trees, signage, and lighting. Future pedestrian improvements would require City review and approval during the development review process. At this time, the City's Engineering Department would also ensure compliance with ADA standards.
ME 3.24 Integration of Bicycle Planning. Integrate development of the bicycle facilities network into larger land use planning and development projects.	**Consistent:** Within the Specific Plan boundary, an on-site trail is proposed along the southern portion of Rubidoux Boulevard, between the CalPortland building and the intersection of Rubidoux Boulevard and Production Circle (see Figure 3.7). The northern portion of the Rubidoux

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ME 3.25 Bicycle-Friendly Infrastructure. Require bicycle-friendly infrastructure design using new technologies and innovative treatments, where necessary to improve bicyclists' safety and convenience. **ME 3.26 Bicycle Facilities.** In preparing City land use plans and applicable Capital Improvement Programs, the City will address bicycle needs, including: 1. Attractive destination facilities, such as secure bicycle lockers, showers, and changing rooms that are conveniently located for bicyclists, i.e. a bike station); 2. Facilities for bicycle parking within newly built and renovated multi-family residential developments, residential condominiums and apartment conversions to condominiums, multi-use and non-residential sites; 3. Safe, secure, attractive and convenient bicycle parking; and 4. Wayfinding systems and traffic control signage or markings for all bicycle facilities. **ME 3.27. Bicycle and Pedestrian Wayfinding.** Bicycle and pedestrian network wayfinding and information shall be provided through signs, street markings or other technologies. **ME 3.29. Off-Road Trail Linkages.** Where feasible, the City connects off-road trails with the on-road transportation network. **ME 3.30. Bicycle and Pedestrian Facility Design Standards.** City shall utilize the Caltrans Highway Design Manual and other infrastructure guidelines as appropriate to design and maintain bicycle and pedestrian facilities to high safety standards. **ME 3.34 Bikeway Width.** Where feasible, design bikeways beyond the minimum required widths, but within federal, state, or local standards (for example, Class 2 lanes should not exceed 8 feet in width to avoid confusion with driving lanes). **ME 3.35 Bicycle Parking.** Require convenient, secure, attractive and easy to use bicycle parking to be provided at public buildings, commercial areas, multi-family residential development projects, and at schools and parks, and encourage other agencies to provide bicycle parking for rail transit and Park-n-Ride facilities. **ME 3.36 Bicycle Improvements Conditionally Required.** Require the construction or rehabilitation of bicycle facilities and/or "bicycle-friendly" improvements as a condition of approving new development, in accordance with Zoning Ordinance standards.	Boulevard streetscape will include a sidewalk, connecting the proposed on-site trail to Rubidoux Boulevard and then north to its intersection with El Rivino Road. Across Rubidoux Boulevard to the west is where an equestrian trail is planned that will follow along Castellano Road and Andalusia Avenue. Development of bicycle and pedestrian networks onsite would be designed in compliance with ADA standards and the City's street design standards. Table 3.5 of the Specific Plan also details bicycle parking requirements for each proposed land use. As detailed in the proposed development standards, bicycle parking shall be provided in a convenient, highly visible, and well-lit area, shall be at least as conveniently located as the most convenient automobile spaces; and shall be located within 100 feet of a building entrance. Internal circulation driveways and public streets crossing the railroad tracks would include special railroad safety features, such as railroad crossing gates for vehicles, bicyclists, and pedestrians. And street improvements, such as wayfinding signage, street trees, benches, bus shelters, and lighting, would be developed along internal and site perimeter roadways.
ME 4 – Equestrian and multi-purpose trails network	
ME 4.1 Equestrian and Multi-Purpose Trails. Provide trails for the safe movement of pedestrians and equestrians within and between new developments where appropriate, and as specified in the General Plan and City Engineering and trail standards.	**Consistent:** The City's Engineering Department would review the Specific Plan Development Plan to ensure compliance with road design standards related to pedestrian and equestrian paths, sidewalks, crosswalks, and other features necessary for safe street crossing.

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ME 4.2 Removal of Barriers. Maximize visibility and access and encourage the removal or modification of barriers (e.g., walls, fences, utilities, drainage ditches, refuse bins) for safe and convenient equestrian movement, and provide hitching posts where appropriate for safety or convenience. Special emphasis should be placed on creating and maintaining safe and convenient trail linkages with the Equestrian Lifestyle Protection Overlay. **ME 4.3 Development Review.** Consult the Engineering Department as part of the development review process regarding any development proposals where trail facilities or improvements may be warranted. City may require both the dedication and improvement of pedestrian and equestrian facilities as a condition of development approval. **ME 4.4 Safe Crossings.** City will plan for and implement pedestrian and equestrian access that is consistent with road design standards, including provisions for interconnected pedestrian and equestrian paths, sidewalks, crosswalks, timing and actuation of traffic signals, in-street annunciators or other features necessary for safe street crossing.	Within the Specific Plan boundary, an on-site trail is proposed along the southern portion of Rubidoux Boulevard, between the CalPortland building and the intersection of Rubidoux Boulevard and Production Circle (see Figure 3.7). The northern portion of the Rubidoux Boulevard streetscape will include a sidewalk, connecting the proposed on-site trail to Rubidoux Boulevard and then north to its intersection with El Rivino Road. Across Rubidoux Boulevard to the west is where an equestrian trail is planned that will follow along Castellano Road and Andalusia Avenue.
ME 5 – Public transit	
ME 5.12 Bus Shelters. Coordinate with transit operators to ensure that bus shelters are provided along and/or near all transit routes, whenever feasible. New developments may be required to provide bus shelters due to existing or future planned transit routes, even if demand for pedestrian facilities are not immediately warranted. **ME 5.13 Accessible Transit.** Require bicycle, pedestrian and wheelchair access to all transit facilities and maintain bicycle, pedestrian and wheelchair facilities so that they are safe, attractive and well lit.	**Consistent:** See response to Policy ME 3.17 above.
ME 7 – Scenic corridors, street character, and design	
ME 7.9 Use of Native Plants and Recycled Water. Encourage the use of drought-tolerant California native plants and the use of recycled water for roadway landscaping.	**Consistent:** See response to Policy LUE 11.4 above.
ME 7.10 Landscape Buffers. Require parking areas of all commercial and industrial land uses that abut residential areas to be buffered and shielded by adequate landscaping and/or other effective visual screens.	**Consistent:** See response to Policies LUE 8.4, 11.14, and 11.17 above.
ME 8 – System operation, maintenance, and funding	
ME 8.1 Dedicated Access. All developments shall provide dedicated and recorded public access, except as provided for under the statutes of the State of California. **ME 8.2 Driveway Location and Number.** Limit driveway locations and/or number based upon the street's General Plan classification and function. Driveways shall be located a sufficient	**Consistent:** As illustrated in Figure 3-6, *Circulation Plan*, the project site would be accessed via multiple driveways along El Rivino Road, Rubidoux Boulevard, and Hall Avenue. Each driveway is either dedicated for automobiles only or for both truck and automobiles. Driveway locations, numbers, and design shall be consistent with the street's General Plan classification and function and would be confirmed during site plan review with the City's Engineering Department.

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distance away from major intersections and designed to allow for safe, efficient operation and minimize traffic conflicts. **ME 8.4 Common Access Driveways.** Provide common access via shared driveways and/or reciprocal access easements whenever access must be taken directly off a General Plan designated arterial street or highway. Parcels on opposite sides of a highway shall have access points located directly opposite each other, whenever possible, to allow for future street intersections and increased safety.	
ME 8.10 Right-of-Way Improvements. Developers shall be responsible for right-of-way dedication and improvements that provide access to and enhance new developments. Improvements include street construction or widening, new paving, frontage improvements like curb, gutter, sidewalks, street trees, trails and parkways, installation of traffic signals, pavement markings and annunciators, and other facilities needed for the safe and efficient movement of pedestrians, bicyclists, equestrians, and motor vehicles.	**Consistent:** See response to Policy ME 2.11 above.
ME 8.12 Heavy Truck Restrictions in Residential Neighborhoods. Restrict heavy truck through-traffic and parking in residential and village center areas and plan land uses so that trucks do not need to traverse these areas.	**Consistent:** See response to Policy LUE 3.13 above.
ME 8.13 Off-Street Loading Facilities. Design off-street loading facilities for new commercial and industrial developments so that they do not face surrounding roadways or residential neighborhoods. Truck backing and maneuvering to access loading areas shall not be permitted on public streets, except when specifically permitted by the City Engineer.	**Consistent:** See response to Policies LUE 3.13 and 11.14 above.
ME 8.14 Driveway Access. Locate and design commercial and industrial land uses so that they take driveway access from streets with a General Plan classification of arterial or greater, and limit the number of such commercial access points by encouraging shared access. Exceptions may be considered for isolated convenience commercial uses, such as standalone convenience stores or gas stations. Industrial or business park type developments may be served via an internal network of Industrial Collector streets.	**Consistent:** See response to Policy ME 8.1 above.
ME 8.15 Intersection Design. Design street intersections, where appropriate, to ensure the safe, efficient passage of pedestrians, bicyclists, equestrians and vehicles. **ME 8.16 Roadway Design.** Design curves and grades to permit safe movement of vehicular traffic at the road's target speed. Target speed should be consistent with and complement the character of the adjacent area. **ME 8.17 Sight Distance.** Provide adequate sight distances for safe pedestrian, equestrian and vehicular movement at all intersections.	**Consistent:** As previously described, the Circulation Plan of the proposed project is designed to facilitate safe travel of pedestrians, bicyclists and vehicles. The site is not intended for equestrians. The site features intersection safety such as crosswalks; railroad crossing safety features; and is designed to minimize turns, idling, and congestion within the site to provide the most direct routes possible to auto traffic. A 10-foot wide multi-purpose bike/pedestrian trail will be provided along the east side of Rubidoux Boulevard, behind the landscape parkway or along the east side of the CalPortland building as shown on Figures 2.4 and 2.5 in the Specific Plan. The Specific Plan also includes lighting and design standards for pedestrian circulation in the parking lots to ensure visibility and separation of pedestrians from vehicular paths and connectivity to the onsite

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	buildings. The proposed project would also comply with the applicable bicycle parking standards identified in the Specific Plan.
ME 8.23 On-Street Parking. Design and manage on-street parking, where appropriate, to reduce traffic congestion, meet parking needs and improve pedestrian and equestrian safety.	**Consistent:** Parking would be provided with at-grade surface parking lots for the industrial park, business park, and retail areas. There will be no on-street parking designated for use of the proposed project.
ME 8.39 Impact Mitigation. Control dust and mitigate other environmental impacts during all stages of roadway maintenance, repair or construction.	**Consistent:** Impacts related to dust and environmental impacts related to roadway maintenance, repair, and construction are detailed in Section 5.15 *Transportation and Traffic* and Section 5.2 *Air Quality.* These two sections detail mitigation measures needed for adverse impacts to be at less-than-significant levels.
ME 8.40 Noise Mitigation. Protect residents from transportation generated noise hazards through the use of increased setbacks, landscaped berms, walls or other sound absorbing barriers, or a combination of these measures along freeways, expressways, and four-lane highways to protect adjacent noise-sensitive land uses from traffic- and rail-generated noise impacts.	**Consistent:** Impacts related to noise from transportation are detailed in Section 5.11, *Noise.* This section details mitigation measures needed for adverse impacts to be at less-than-significant levels. The Jurupa Valley General Plan's Noise Element identifies the main roads in the vicinity of the site, Rubidoux Boulevard and Agua Mansa Road, with future noise contours at buildout consistent with the planned commercial and industrial land uses. The Agua Mansa Specific Plan Development Plan consists of a Land Use Plan and Circulation Plan implementing General Plan Goals and Policies.
ME 8.41 Habitat Conservation Planning. Incorporate specific requirements of the Western Riverside County Multiple Species Habitat Conservation Plan into transportation plans and development proposals. **ME 8.42 Habitat Protection.** Avoid disturbance of plant and animal communities, wildlife corridors and biotic resource areas when identifying alignments for new roadways, or for improvements to existing roadways and other transportation system improvements.	**Consistent.** Project consistency with the MSHCP is outlined in Chapter 5.3 *Biological Resources* of this DEIR.
ME 8.44 Air Quality. Incorporate specific requirements of the General Plan Air Quality Element into transportation plans and development proposals where applicable.	**Consistent.** Impacts related to air quality are detailed in Section 5.2, *Air Quality*. This section details mitigation measures needed to comply with local and regional air quality plans.
ME 8.45 Non-Motorized Transportation. Encourage the use of alternative non-motorized transportation and the use of non-polluting vehicles.	**Consistent.** Transit routes can provide an alternative mode of transportation for motorists. The provision of a concentrated employment center is an opportunity to partner with Riverside Transit Agency (RTA) to explore the feasibility of expanding public transportation options for workers and visitors of the Specific Plan area.
ME 8.46. Runoff Control. Implement National Pollutant Discharge Elimination System Best Management Practices relating to construction of roadways to control runoff contamination from affecting the groundwater supply.	**Consistent.** Impacts related to runoff from roadway construction is detailed in Section 5.8, *Hydrology and Water Quality.* This section details mitigation measures needed for adverse impacts to be at less-than-significant levels.
Conservation and Open Space Element	
COS 1 – Biological resources	
COS 1.1 Habitat Conservation. Conserve key habitats, including existing wetlands and California native plant communities, with a focus on protecting and restoring the following endangered species habitats:	**Consistent.** Least Bell's vireo was observed onsite during focused surveys in 2017, and onsite vegetation communities represent suitable nesting habitat for common, as well as special-status resident and migratory bird/raptor species. Section 5.3, *Biological Resources,* details mitigation measures that shall be implemented on site to conserve populations of least Bell's vireo.

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1. Conserve alluvial fan sage scrub associated with the Santa Ana River to support key populations of Santa Ana River woollystar (*Eriastrum densifolium sanctorum*). 2. Conserve clay soils to support key populations of many-stemmed liveforever plants (*Dudleya multicaulis*) known to occur along the Jurupa Valley portion of the Santa Ana River. 3. Conserve known populations of least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*) along the Santa Ana River. 4. Conserve large intact habitat areas consisting of coastal sage scrub, chaparral, and grasslands to support known locations of coastal California gnatcatcher (*Polioptila californica*). 5. Conserve grassland and coastal sage scrub supporting known populations of San Bernardino kangaroo rat (*Dipodomys merriami parvus*) in the Jurupa Mountains. 6. Conserve grasslands adjacent to sage scrub for foraging habitat for raptors. 7. Conserve riparian areas, including river basin, creeks, streams, vernal springs, seeps and other natural water features.	
COS 1.2 Protection of Significant Trees. Protect and preserve significant trees, as determined by the City Council upon the recommendation of the Planning Commission. Significant trees are those trees that make substantial contributions to natural habitat or to the urban landscape due to their species, size, or rarity. In particular, California native trees should be protected. **COS 1.3 Other Significant Vegetation.** Maintain and conserve superior examples of vegetation, including: agricultural wind screen plantings, street trees, stands of mature native and non-native trees, and other features of ecological, aesthetic, and conservation value.	**Consistent:** A tree survey of portions of the site identified native trees. Section 5.3, *Biological Resources,* details a tree replacement mitigation measure to assure the protection of native trees. This mitigation measure also applies to mature native and nonnative trees and street trees.
COS 1.4 Soil Conservation and Landform Modification. Public and private development projects shall be designed to prevent soil erosion, minimize landform modifications to avoid habitat disturbance, and conserve and reuse on-site soils.	**Consistent:** Per the Specific Plan, a grading plan would be prepared for City review and approval. Typical grading activities would consist of clearing and grubbing, demolition of existing structures, and moving surface soils to construct building pads, driveways, and internal vehicular routes. Grading plans for each phase shall be reviewed and approved by the City of Jurupa Valley prior to the issuance of grading permits. All grading plans and activities shall conform to the City's grading ordinance and dust and erosion control requirements. The required landscaping plan shall also include strategies to minimize soil erosion.
COS 2 – Wildlife habitats	
COS 2.1 MSHCP Implementation. Implement provisions of the MSHCP when conducting review of development applications, General Plan amendments/zoning changes, transportation, or other infrastructure projects that are covered activities in the MSHCP.	**Consistent.** Project consistency with the MSHCP is outlined in Section 5.3, *Biological Resources,* of this DEIR.
COS 2.3 Biological Reports. Require the preparation of biological reports to assess the impacts of development and provide mitigation for impacts to biological resources when reviewing discretionary development projects with the potential to affect adversely wildlife habitat.	**Consistent:** See response to Policies COS 1.1, 1.2, 2.1 and 2.2 above.

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Applicable Policies	Project Consistency Analysis
COS 2 – Water resources	
COS 3.3 Water Quality. Employ the best available practices for pollution avoidance and control and encourage others to do the same. "Best available practices" means actions and equipment that result in the highest water quality, considering available equipment, life-cycle costs, social and environmental side effects, and the regulations of other agencies.	**Consistent:** A hydrology and water quality report was prepared for the proposed project and is included as Appendix H of this DEIR. As summarized in Section 5.8, *Hydrology and Water Quality*, future development of the project would require compliance with the Construction General Permit Water Quality Order 2009-0009-DWQ (as amended by Order No. 2010-0014-DWQ and 2012-006-DWQ), which requires the preparation and implementation of a stormwater pollution prevention plan (SWPPP). A SWPPP estimates sediment risk from construction activities to receiving waters, and specifies best management practices (BMPs) that would be implemented by the project to minimize pollution of stormwater. Overall, the proposed Specific Plan would include temporary SWPPP controls to address and mitigate water quality during construction and permanent low impact development BMP measures to address and mitigate water quality post-development.
COS 3.4 Water Conservation Systems. Encourage the installation of water-conserving systems such as dry wells and graywater systems, where feasible, especially in new developments. The installation of cisterns or infiltrators shall also be encouraged to capture rainwater from roofs for irrigation in the dry season and to reduce runoff during heavy storms. **COS 3.5 Site Water Collection and Retention.** Consider requiring design practices such as permeable parking bays and porous parking lots with bermed, landscaped storage areas for rainwater detention as a condition of development approval, **COS 3.6 Landscaping with California Native Plants.** Encourage the use of California native plants for drought-resistant landscape planting.	**Consistent:** See response to Policy LUE 11.4 above.
COS 3.8 Wastewater Treatment. Encourage the use of innovative and creative techniques for wastewater treatment.	**Consistent:** The former Riverside Cement Plant facility utilized septic tanks. Development of the proposed project would include an annexation into the Rubidoux Community Services District's (RCSD) wastewater service area. The Specific Plan area would connect to existing RCSD sewer infrastructure along Rubidoux Boulevard and Brown Avenue.
COS 3.9 Pollution Discharge. Minimize pollutant discharge into storm drainage systems and natural drainage and aquifers. **COS 3.12 Drainage Systems in Development Projects.** Require that developers and designers incorporate natural drainage systems into development projects where appropriate and feasible. **COS 3.13 Storm Water Retention.** Retain storm water at or near the site of generation for percolation into the groundwater to conserve it for future uses and to mitigate adjacent flooding.	**Consistent:** See response to Policy COS 3.3 above. The proposed project would include an onsite storm water collection, detention, and potentially retention/re-use system consisting of a series of drainage inlet structures, piped conveyance systems and water quality treatment systems. The onsite detention basins would be designed to ensure that post-development flows do not exceed the capacity of the existing Riverside County Flood Control and Water Conservation District storm drainage infrastructure systems.
COS 4 – Agricultural resources	
COS 4.2 Agricultural Land Conversion. Discourage the conversion of productive agricultural lands to urban uses unless the property owner can demonstrate overarching Community-wide benefits or need for conversion.	**Consistent:** As detailed in Chapter 8, *Impacts Determined Not to Be Significant*, the City of Jurupa Valley determined that one environmental impact category was not significantly affected by or did not affect the

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	proposed project. Agriculture and Forestry Resources is not discussed in detail in this DEIR.
COS 5 – Renewable energy resources	
COS 5.5 Energy Efficiency and Green Building. Encourage energy-efficient "green buildings" as addressed by the U.S. Green Building Council's LEED® (Leadership in Energy and Environmental Design) Program or through other similar programs. **COS 5.6 Energy Efficiency Incentives.** Support standards, incentives and innovative technologies that encourage and allow developers, designers, and property owners to design, build, and operate buildings to achieve energy savings that exceed Title 24 requirements of the California Building Code.	**Consistent:** See response to Policy LUE 11.4 above.
COS 6 – Non-renewable resources	
COS 6.2 Compliance with SMARA. Require that the operation and reclamation of surface mines be consistent with the California Department of Conservation's Surface Mining and Reclamation Act (SMARA) and with the Municipal Code. **COS 6.5 Buffers.** Require that new non-mining land uses adjacent to existing mining operations be designed to provide a buffer between the new development and the mining operations. The buffer distance shall be based on an evaluation of noise, aesthetics, drainage, operating conditions, biological resources, topography, lighting, traffic, operating hours, and air quality.	**Consistent:** The former Riverside Cement Plant facility and quarry closed in 2014. Therefore, no existing cement production or mining operations occur. The proposed project would not conflict with any SMARA regulations and would not need to be buffered from existing mining operations.
COS 7 – Cultural and paleontological resources	
COS 7.1 Preservation of Significant Cultural Resources. Identify, protect, and, where necessary, archive significant paleontological, archaeological, and historical resources. **COS 7.3 Development Review.** Evaluate project sites for archaeological sensitivity and for a project's potential to uncover or disturb cultural resources as part of development review. **COS 7.4 Site Confidentiality.** Protect the confidentiality and prevent inappropriate public exposure or release of information on locations or contents of paleontological and archaeological resource sites.	**Consistent:** A cultural resources assessment was prepared for the proposed project and is included as Appendix E of this DEIR. A summary of the findings is provided in Sections 5.4, *Cultural Resources*, 5.5, *Geology and Soils*, and 5.16, *Tribal Cultural Resources*. Cultural resources onsite and within a ½-mile-radius of the project site were identified and evaluated for significance. The locations of significant resources are kept confidential.
COS 7.5 Native American Consultation. Refer development projects for Native American tribal review and consultation as part of the environmental review process, in compliance with state law.	**Consistent:** Per Senate Bill 18 and Assembly Bill 52 requirements, the City consulted with applicable Native American tribal representatives. A summary of the consultation efforts is included in Section 5.16, *Tribal Cultural Resources*.
COS 7.6 Non-Development Activities. Prohibit activities that could disturb or destroy cultural resource sites, such as off-road vehicle use, site excavation or fill, mining, or other activities on or adjacent to known sites, or the unauthorized collection of artifacts. **COS 7.7 Qualified archaeologist present**. Cease construction or grading activities in and around sites where archaeological resources are discovered until a qualified archaeologist knowledgeable in Native American cultures can determine the	**Consistent:** As concluded in Sections 5.4, *Cultural Resources*, and 5.16, *Tribal Cultural Resources*, mitigation measures are provided to ensure grading activities associated with the proposed development would not adversely impact known and unknown cultural and tribal cultural resources onsite. The mitigation measures require a qualified archaeologist onsite to evaluate any potentially significant cultural resources that may be uncovered during grading and construction activities and development of a mitigation plan.

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significance of the resource and recommend alternative mitigation measures. **COS 7.8 Native American Monitoring.** Include Native American participation in the City's guidelines for resource assessment and impact mitigation. Native American representatives should be present during archaeological excavation and during construction in an area likely to contain cultural resources. The Native American community shall be consulted as knowledge of cultural resources expands and as the City considers updates or significant changes to its General Plan. **COS 7.9 Archaeological Resources Mitigation.** Require a mitigation plan to protect resources when a preliminary site survey finds substantial archaeological resources before permitting construction. Possible mitigation measures include presence of a qualified professional during initial grading or trenching; project redesign; covering with a layer of fill; and excavation, removal and curation in an appropriate facility under the direction of a qualified professional.	Additionally, the tribal cultural resources mitigation measures would require the project applicant to coordinate with applicable Native American tribes to develop a tribal monitoring agreement. Development of a treatment plan should significant tribal cultural resources be found onsite is also required.
COS 7.10 Historically significant buildings. Prohibit the demolition or substantial alteration of historically significant buildings and structures unless the City Council determines that demolition is necessary to remove an imminent threat to health and safety and other means to eliminate or reduce the threat to acceptable levels are physically infeasible. Additional unlisted historic resources may also be present and must be evaluated and protected, pursuant to CEQA requirements.	**Consistent:** As described in Chapter 5.4 Cultural Resources, impacts to historically significant buildings are considered potentially significant and require mitigation. One of the three preservation alternatives will be implemented to mitigate this impact.
COS 8 – Open space and recreation resources	
COS 8.1 Environmental Resource Protection. Preserve and maintain open space that protects environmental resources and protects public health and safety.	**Consistent:** Approximately 71 acres in the southern portion of the project site would be remediated and redeveloped into an open space area. The remediation of the site due to its previous use as a quarry for mining operations would protect public health and safety from hazardous materials that have collected onsite and would also redevelop it into a safe and preserved open space area for public use.
COS 8.5 Parkland Implementation Strategies. Require new development to provide funding and/or long-term implementation strategies for the acquisition and improvement of active and passive parks, open space, and recreational sites, when appropriate.	Prior to the issuance of a building permit, the project applicant shall pay required park development impact fees to the Jurupa Area Recreation and Park District pursuant to District Ordinance No. 01-2007 and 02-2008.
COS 9 – Scenic resources	
COS 9.1 Protect scenic resources, especially skylines, undeveloped ridgelines, rocky hillsides, river view corridors, and outstanding scenic vistas not designated for urban uses from development, and maintain those resources in their current patterns of use. **COS 9.3 Urban development.** Implement the following aesthetic principles and encourage other agencies with jurisdiction to do so: 1. Design Context. Urban development should be designed to reflect its architectural, environmental, and historical context. This does not necessarily prescribe a specific style, but requires	**Consistent:** As analyzed in Section 5.1, *Aesthetics*, the proposed project would be developed in compliance with the development standards and design guidelines detailed in the Specific Plan. These include allowable land uses, maximum lot coverage, minimum lot sizes, maximum building heights, landscaping setbacks, and building setbacks. Also included are off-street parking and loading standards, landscaping requirements, bicycle parking requirements, outdoor storage standards, lighting requirements, walls/fences/screening requirements, sign standards, and recreation area standards. The proposed design guidelines are intended to create high-quality development in the Agua Mansa Commerce Park that complements and integrates into the community and adds value to

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deliberate design choices that acknowledge human scale, natural site features, and neighboring urban development, and that are compatible with historical and architectural resources. Plans for sub-areas of the city and within the three village centers may require certain distinctive architectural styles. 2. Utilities and Signs. In and near public streets, public spaces and parks, and important scenic resources, features that clutter, degrade, intrude on, or obstruct views should be avoided. Necessary features, such as utility and communication equipment, and traffic equipment and signs should be designed, finished with a matte, earth-toned color, and placed so as to not impinge upon or degrade scenic views, consistent with the primary objective of safety. New billboard and electronic signs within scenic corridors shall be prohibited, and existing billboard signs should be removed when possible. 3. Streetscapes and Major Roadways. In the acquisition, design, construction, or significant modification of major roadways (highways/ regional routes and arterial streets), the City will promote the creation of "streetscapes" and linear scenic parkways or corridors that promote the City's visual quality and character, enhance adjacent uses, and integrate roadways with surrounding districts. To accomplish this, the City will: • Establish streetscape design standards for major roadways. • Encourage the creation and maintenance of planted medians and widened parkway landscaping. • Retain mature trees in the public right of way. • Emphasize the planting and maintenance of California native tree species of sufficient height, spread, form, and horticultural characteristics to create the desired streetscape canopy, shade, buffering from adjacent uses, and other desired streetscape characteristics. • Encourage the use of water-conserving landscaping, street furniture, decorative lighting and paving, arcaded walkways, public art, and other pedestrian-oriented features to enhance streetscape appearance, comfort, and safety. • Encourage and, where possible, require under-grounding of overhead utility lines and structures. **COS 9.4 View Protection in New Development.** The City will include in all environmental review and carefully consider effects of new development, streets and road construction, grading and earthwork, and utilities on views and visual quality.	the City; create a functional and sustainable place that ensures the Agua Mansa Commerce Park is competitive regionally and is appropriate for the Jurupa Valley community; establish criteria for building design and materials, landscape design, and site design that provides guidance to developers, builders, architects, landscape architects, and other professionals preparing plans for construction; and incorporate construction and landscape standards and design guidelines that promote energy and water conservation strategies. There are no City-designated scenic corridors near the project site; thus, development of the proposed project would not impact any scenic corridors. However, as concluded in Section 5.1, *Aesthetics*, development of the project also would not impact other scenic resources in the area, including scenic vistas, hillsides, and skylines.
COS 10 – Dark skies	
COS 10.1 Outdoor Lighting. Require outdoor lighting to be shielded and prohibit outdoor lighting that: 1. Operates at unnecessary locations, levels, and times 2. Spills onto areas off-site or to areas not needing or wanting illumination 3. Produces glare (intense line-of-site contrast) 4. Includes lighting frequencies (colors) that interfere with astronomical viewing	**Consistent:** Lighting requirements are detailed in Section 3.7 of the Specific Plan. Specifically, outdoor lighting shall be provided for all parking areas, truck courts, vehicular and pedestrian circulation, building exteriors, service areas, courtyards, arcades, and seating areas. All pedestrian walkways, building entries, and pathways shall be illuminated to provide pedestrian orientation and clearly identify a safe and secure route between parking areas and points of entry to the building. Service area and security lighting shall be directed to those areas within the limits of the service area.

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COS 10.3 Public Facilities, Buildings, and Streets. Use outdoor light-shielding measures for new and existing lighting fixtures, including signs, to minimize light trespass and glare while enhancing safety and aesthetics. **COS 10.4 Commercial and Industrial Buildings.** Require that site lighting for commercial and industrial uses is unobtrusive and constructed or located so that only the intended area is illuminated, off-site glare is prevented, and adequate safety is provided.	All exterior lighting fixtures shall be directed downward to illuminate pedestrian pathways and parking areas and avoid unnecessary glare and light pollution. However, up-lighting effects to promote nighttime identity and character are allowed provided such exterior lighting features utilize indirect or hidden lighting sources for wall washing, featuring of architectural elements, landscaping, entries, and pedestrian areas. Pole-mounted, building-mounted, or tree-mounted lighting fixtures shall be no more than 30 feet in height to minimize direct glare beyond the parking lot or service area. Future projects shall ensure zero light spill off site. The proposed design guidelines also encourage exterior building lighting that enhances the Specific Plan design theme to provide consistency through clean, contemporary designs. Pedestrian walkways and building entries should be illuminated for safety with subdued, warm-white tones. Lighting should also be used to create visual interest and special effects in coordination with the character and function of the area.
Air Quality Element	
AQ 2 – Sensitive receptors	
AQ 2.1 Site Plan Designs. Require City land use planning efforts and site plan designs to protect people and land uses sensitive to air pollution, using barriers and/or distance from emissions sources, and protect sensitive receptors form polluting sources, wherever possible. **AQ 2.2 Pollution Control Measures.** Strongly encourage the use of pollution control measures such as landscaping, vegetation and other materials that trap particulate matter or control pollution	**Consistent:** The Specific Plan requires setbacks from the perimeter roadways to protect sensitive receptors from air quality and noise impacts, and requires landscaping focused along public roadways to promote water conservation and water retention, improve air quality, and provide a buffer to adjacent areas. Landscaping trees are also encouraged to be grouped together to minimize the visual impact to surrounding uses, minimize noise propagation, and improve air quality.
AQ 3 – Stationary source pollutions	
AQ 3.1 Efficient Building Materials/Equipment. Encourage the use of building materials/methods and heating equipment that are efficient and reduce emissions. **AQ 3.2 Centrally Heated Facilities.** Encourage centrally heated facilities to utilize automated time clocks or occupant sensors to control heating. **AQ 3.3 Stationary Pollution Reduction.** Require stationary pollution sources to prevent the release of toxic pollutants through the following: 1. Design features; 2. Operating procedures; 3. Preventive maintenance; 4. Operator training; and 5. Emergency response planning **AQ 3.4 Emissions Mitigation.** Require every project to mitigate any of its anticipated emissions that exceed allowable levels as established by the SCAQMD, the US EPA, and CARB, to the greatest extent possible.	**Consistent:** The Specific Plan states the following under the sustainable construction and technology concepts: • All new construction, building additions, and alterations must conform with the State of California's Green Building Code (CALGreen) or the Building Code in effect at the time of permit issuance. • Development projects should be designed and constructed to consist of energy-efficient buildings to reduce air, water, and land pollution and the environmental impacts associated with energy production and consumption. • Passive design techniques should be used to improve building energy performance through use of skylights, building orientation, landscaping, natural ventilation, natural daylighting, energy efficient light fixtures (e.g., florescent and LED lightings), and paint colors. • Shade structures and trees that produce large canopies should be used to reduce heat island effects. In addition, roof and paving materials should be utilized that possess a high level of solar reflectivity. • Recycled and environmentally friendly building material should be used to the maximum extent possible. As analyzed in Section 5.2, *Air Quality*, construction and operations of the proposed project would generate air quality pollutants, but mitigation is provided to ensure these emissions are minimized to the extent possible

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	in an effort to reduce emissions below the local and regional significance thresholds set by SCAQMD.
AQ 3.5 Fugitive Dust Reduction Measures. Apply, as appropriate, measures contained in the County's Fugitive Dust Reduction to the entire City. **AQ 3.6 Grading in High Winds.** Suspend all grading when wind speeds exceed 25 miles per hour.	**Consistent:** Development associated with the Specific Plan would be required to comply with SCAQMD's Rule 403 related to minimizing fugitive dusts. This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust, and requires best available control measures to be applied to earth moving and grading activities.
AQ 4 – Particulate matter	
AQ 4.2 Particulate Matter. Reduce particulate matter from agriculture, construction, demolition, debris hauling, street cleaning, utility maintenance, railroad rights of way, and off-road vehicles to the maximum extent possible.	**Consistent:** As analyzed in Section 5.2, *Air Quality*, air quality reduction measures during construction and demolition would be implemented on site. Particulate matter emissions generated during construction and demolition would not exceed the SCAQMD regional threshold.
AQ 4.3 Electric Service Units. Require the installation and use of electric service units at truck stops and distribution centers for heating and cooling truck cabs, and particularly for powering refrigeration trucks, in lieu of idling of engines for power. **AQ 4.4 Natural Gas/Electric Vehicles.** Support efforts to encourage the use of natural gas and electric vehicles in distribution centers.	**Consistent:** The Specific Plan includes sustainable technology concepts and development standards related to energy conservation.
AQ 5 – Energy efficiency and conservation	
AQ 5.1 Reduce Solid Waste. Utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.	**Consistent:** During the construction phase, the project applicant is proposing to reuse as much of the demolition debris as feasible, recycle what can be recycled, and dispose of the remaining debris. During the operational phase, all businesses associated with the proposed project would be required to comply with Assembly Bill 341 and 1826, which would help divert commercial solid waste and organic waste from landfills.
AQ 5.2 Energy Conservation. Encourage advanced energy conservation techniques and the incorporation of energy-efficient design elements for private and public developments, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling, and offer incentives, as appropriate.	**Consistent:** See response to Policy LUE 11.4 above.
AQ 6 – Jobs and housing	
AQ 6.7 Job Creation. Emphasize job creation and reductions in vehicle miles traveled to improve air quality over other less efficient methods. **AQ 6.9 Mixed-Use Land Use.** Support new mixed-use land use patterns with employment centers and community centers, which encourage community self-sufficiency and containment, promote efficient modes of travel, and help reduce automobile dependency.	**Consistent:** Buildout of the proposed project would introduce up to 964 jobs in the project area and help reduce vehicle miles traveled by providing jobs and retail services near residential areas. The Agua Mansa Commerce Park would have a mix of industrial, business park, retail, and open space uses, creating an employment and community center in the northeastern portion of Jurupa Valley.
AQ 6.11 Non-Polluting Transportation. Encourage and promote the use of non-polluting alternative modes of transportation such as natural gas and electric vehicles and bicycles.	**Consistent:** The Specific Plan requires the industrial and business park areas to provide bicycle parking amenities and encourages providing electric vehicle charging stations.

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AQ 9 – Climate change	
AQ 9.5 GHG Thresholds. Utilize the SCAQMD Draft GHG thresholds to evaluate development proposals until the City adopts a Climate Action Plan (CAP).	**Consistent:** See Section 5.6, *Greenhouse Gas Emissions*, of this DEIR. The GHG analysis methodology utilizes the SCAQMD's thresholds.
Noise Element	
NE 1 – Land use compatibility	
NE 1.1 Land Use/Noise Compatibility. Utilize the Land Use/Noise Compatibility Matrix, Figure 7-3, to determine the compatibility of proposed development, including General Plan amendments, specific plan amendments, village plans, and rezonings, with existing land uses and/or noise exposure due to transportation sources. **NE 1.2 New Development and Stationary Noise Sources.** New development of noise-sensitive land uses near existing stationary noise sources may be permitted only where their location or design allows the development to meet the standards listed in Figure 7-3. **NE 1.3 New or Modified Stationary Noise Sources.** Noise created by new stationary noise sources, or by existing stationary noise sources that undergo modifications that may increase noise levels, shall be mitigated so as not exceed the noise level standards of Figure 7-3. This policy does not apply to noise levels associated with agricultural operations existing in 2017.	**Consistent:** The noise study for the project included in Appendix I utilizes the Land Use/Noise Compatibility Matrix to determine the compatibility of the proposed development with existing land uses and/or noise exposure due to transportation sources.
NE 1.5 Noise-Sensitive Uses. Consider the following uses noise-sensitive and discourage these uses in areas in excess of 65 CNEL: schools, hospitals, assisted living facilities, mental care facilities, residential uses, libraries, passive recreational uses, and places of worship. **NE 1.6 Protection of Noise-Sensitive Uses.** Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise-producing land uses cannot be relocated, then measures such as building techniques, setbacks, landscaping, and noise walls should be considered.	**Consistent:** The noise study for the project included in Appendix I proposes mitigation measures to reduce the potentially significant project specific traffic noise impact to noise-sensitive uses. Namely, the existing residential homes adjacent to El Rivino Road east of Cactus Avenue (between Cactus Avenue and Hall Avenue). Mitigation measures include rubberized asphalt hot mix pavement and off-site noise barriers. It should be noted that off-site traffic noise impacts are significant and unavoidable even with the implementation of mitigation measures.
NE 1.9 Acoustic Site Planning and Design. Incorporate acoustic site planning into the design and placement of new development, particularly large scale, mixed-use, or master planned development, including building orientation, berming, special noise-resistant walls, window and door assemblies, and other appropriate measures.	**Consistent:** The Specific Plan shall group trees to minimize noise impact to surrounding neighborhoods, and shall provide evergreens and berms to create a buffer for the truck entrances and truck courts. Furthermore, setbacks, and orienting truck courts away from immediate residents mitigates noise impacts. The nearest residential community to the west is over 1,000 feet (0.2 miles) from the western edge of the Specific Plan. To the north across El Rivino Road in unincorporated San Bernardino County residences are over 360 feet away from the truck entrances and truck courts which are buffered by significant setbacks with berms landscaped with trees and other vegetation.
NE 2 – Mobile noise sources	
NE 2.2 Commercial Truck Deliveries. Require commercial or industrial truck delivery hours be limited to least-sensitive times of the day when adjacent to noise-sensitive land uses, unless there	**Consistent:** Project (including truck delivery noise) plus ambient noise levels are shown to remain below 65 dBA Leq , and the project daytime operational (stationary-source) noise level increase of up to 0.3 dBA Leq

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is no feasible alternative or there are overriding transportation benefits, as determined by the Planning Director.	and nighttime operational (stationary-source) noise level increase of up to 0.3 dBA Leq are below the 3 dBA Leq threshold , therefore resulting in a less than significant impact.
NE 2.6 Noise Contours. Check all proposed development projects for possible location within roadway, railroad, and airport noise contours.	**Consistent:** The Jurupa Valley General Plan's Noise Element identifies the main roads in the vicinity of the site, Rubidoux Boulevard and Agua Mansa Road, with future noise contours at buildout consistent with the planned commercial and industrial land uses.
NE 3 – Stationary noise sources	
NE 3.1 Noise Analysis. Require that a noise analysis be conducted by an acoustical specialist for all proposed development projects that have the potential to generate significant noise near a noise-sensitive land use, or on or near land designated for noise-sensitive land uses, and ensure that recommended mitigation measures are implemented.	**Consistent:** A noise analysis was prepared by Urban Crossroads and is included as Appendix I in this DEIR. As summarized in Section 5.11, *Noise*, upon implementation of mitigation measures, project-related noise impacts would be less than significant.
NE 3.2 Truck Loading, Shipping, and Parking. Require that the loading, shipping or parking facilities of commercial and industrial land uses that abut or are within 200 feet of residential parcels, be located and designed to minimize potential noise impacts upon residents. Overnight commercial truck parking areas shall be regulated in the Zoning Ordinance as a commercial use.	**Consistent:** See response to Policies LUE 3.13 and 11.14 above.
NE 3.3 Noise Buffers. Require major stationary noise-generating sources to install noise buffering or reduction mechanisms within their facilities to reduce noise generation levels to the lowest level practical as a condition of the approval or renewal of project entitlements.	**Consistent:** Project operational stationary-source noise would not result in a substantial temporary/periodic, or permanent increase in ambient noise levels in the project vicinity above levels existing without the project and impacts in these regards will be less than significant.
NE 3.6 Commercial Truck Idling. Restrict truck idling near noise sensitive receptors.	The project will require building operators to ensure (by contract specifications) that equipment, including heavy-duty equipment, motor vehicles, and portable equipment, will be turned off when not in use for more than five minutes. Truck idling shall not exceed five minutes. All facilities will post signs requiring that trucks shall not be left idling for more than five minutes pursuant to Title 13 of the California Code of Regulations, Section 2485. Nighttime (after 10:00 PM) truck idling would not be permitted.
NE 4 – Ground-borne vibration	
NE 4.2 Vibration Producing Land Uses. Avoid the placement of vibration-producing land uses adjacent to or within one-quarter mile of sensitive receptors. **NE 4.3 Truck Idling.** Restrict truck idling near sensitive vibration receptors.	The noise study for the project indicates that impacts to sensitive receptors due to construction and operational vibration are less than significant.
Community Safety, Services, and Facilities Element	
CSSF 1 – Community safety	
CSSF 1.1 Fault Rupture Hazards. When reviewing new development, minimize fault rupture hazards through enforcement of Alquist-Priolo Earthquake Fault Zoning Act provisions and the following requirements: 1. Require geologic studies or analyses for new, critical structures, such as schools, medical facilities, senior or disabled housing, or other high-risk occupancies located within 0.5 mile of all active or potentially active faults.	**Consistent:** A geotechnical report was prepared for the proposed project and is included as Appendix F of this DEIR. As summarized in Section 5.5, *Geology and Soils*, the closest known fault to the project site is the Rialto-Colton Fault, located approximately four miles northeast. The closest active fault is the San Jacinto Fault located approximately five miles northeast of the site. Since the project site is outside of a designated Earthquake Fault Studies Zones, a geologic trenching study is not required.

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2. Require geologic trenching studies for new developments within all designated Earthquake Fault Studies Zones, unless adequate evidence is presented and accepted by the City Engineer or a Building Official. The City may also require geologic trenching for new development located outside designated fault zones for especially critical or vulnerable structures or lifelines. 3. Require that critical infrastructure, including roads, bridges, and utilities be designed to resist, without failure, their crossing of a fault, if fault rupture occurs. 4. Encourage and support efforts by the geologic research community to better define the locations and risks of County faults. Such efforts could include data sharing and database development with regional entities, state and local governments, private organizations, utility agencies, or universities. **CSSF 1.2 Geologic Investigations.** Require geological and geotechnical investigations as part of the environmental and development review process. This requirement shall apply to the development of any structure proposed for human occupancy or to unoccupied structures whose damage could cause secondary hazards in areas with potential for earthquake-induced liquefaction, landslides, or settlement. **CSSF 1.4 Structural Damage.** Utilize the latest approaches to minimize damage to structures located in areas determined to have a high liquefaction potential during seismic events.	However, the geotechnical report does provide recommendations that minimize geologic hazard impacts during project construction and operations. All development would also be required to comply with current California Building Code regulations.
CSSF 1.5 Hillside Development. Encourage and, where possible require, mitigation of potential erosion, landslide, and settlement hazards for existing public and private development located on unstable hillside areas, especially slopes with recurring failures where City property or public right-of-way is threatened from slope instability, or where considered appropriate and urgent by the City Engineer, CAL FIRE, or County Sheriff's Department.	**Consistent:** See response to Policy LUE 9.1 above.
CSSF 1.6 Flood Risk. In reviewing new construction and substantial improvements within the 100-year flood-plain, the City shall disapprove projects that cannot minimize the flood risks to acceptable levels in areas mapped by FEMA or as determined by site-specific hydrologic studies for areas not mapped by FEMA. The City shall: 1. Prohibit the construction, location, or substantial improvement of structures in areas designated as floodways, except upon approval of a plan that provides that the proposed development will not result in any significant increase in flood levels during the occurrence of a 100-year flood; and 2. Prohibit the filling or grading of land for nonagricultural purposes and for non-authorized flood control purposes in areas designated as floodways, except upon approval of a plan, which provides that the proposed development will not result in any significant increase in flood levels during the occurrence of a 100-year flood discharge.	**Consistent:** The project site is not located within a 100-year flood plain. Therefore, development associated with the Specific Plan would not adversely impact existing floodways. Additionally, no structures for human housing or employment would be constructed within a flood plain.

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CSSF 1.7 Floodway Alteration. Require that any alterations of the floodway utilize naturalized edge treatments as outlined in the Conservation and Open Space Element (Policies 3.16 and 3.17). **CSSF 1.9 Permanent Structures.** Prohibit construction of permanent structures for human housing or employment to the extent necessary to convey floodwaters without property damage or risk to public safety. Agricultural, recreational, or other similar, non-habitation uses are allowable if flood control and groundwater recharge functions are maintained.	
CSSF 1.15 Regional Storm Drain System. All proposed development projects shall address and mitigate any adverse impacts on the carrying capacity of local and regional storm drain systems.	**Consistent:** See response to Policy COS 3.3 above. Development projects associated with the Specific Plan would be required to comply with the NPDES program, which requires preparing a SWPPP and implementing applicable BMPs that reduce stormwater runoff and impacts to local and regional storm drain systems.
CSSF 1.23 Fire Prevention. Develop and enforce construction and design standards that ensure that proposed development incorporates fire prevention features through the following: 1. All proposed construction shall meet minimum standards for fire safety as defined in the City Building or Fire Codes, or by City zoning, or as dictated by the Building Official or the Transportation Land Management Agency based on building type, design, occupancy, and use. 2. In addition to the fire safety provisions of the Uniform Building Code and the Uniform Fire Codes, apply additional standards for high risk, high occupancy hospital and health care facilities, dependent care, emergency operation centers, and other essential or "lifeline" facilities, per county or state standards. These shall include assurance that structural and nonstructural architectural elements of the building will not: a. impede emergency egress for fire safety staffing/personnel, equipment, and apparatus; nor b. hinder evacuation from fire, including potential blockage of stairways or fire doors. 3. Proposed development in Hazardous Fire areas shall provide secondary public access, unless determined unnecessary by CAL FIRE or City Building Official. **CSSF 1.24 Adjacent Natural Vegetation.** Development that adjoins large areas of native vegetation will require drought tolerant landscaping that blends with the natural vegetation to the greatest extent possible. **CSSF 1.25 Wildfire Hazards.** Encourage and, as resources allow, support CAL FIRE and other agency efforts to reduce wildfire hazards and improve fire-fighting capacity to successfully respond to multiple fires.	**Consistent:** The project site is not located in a CAL FIRE-designated very high fire hazard severity zone. However, all buildings developed in accordance with the Specific Plan would comply with all California Fire Code and Uniform Building and Fire Codes regulations. Additionally, drought-tolerant and native planting is encouraged in the Specific Plan's development standards and design guidelines.
CSSF 1.26 Gas Shutoff. Require automatic natural gas shutoff earthquake sensors in high-occupancy industrial and commercial facilities and encourage their installation in all residences.	**Consistent:** Automatic natural gas shutoff earthquake sensors would be installed in all the proposed industrial and commercial buildings as required by the City. Compliance with this standard condition would be confirmed prior to issuance of occupancy permits.

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CSSF 1.31 Federal/State Laws. Comply with federal and state laws regarding the management of hazardous waste and materials. **CSSF 1.32 Hazardous Waste Storage/Disposal.** Identify, assess, and mitigate safety hazards from the storage, use, and disposal of hazardous materials through the development review process.	**Consistent:** A Phase I and II environmental site assessment were prepared for the project and are included as appendices to the Remedial Investigation Report (see Appendix G of this DEIR). Development associated with the proposed project would be required to comply with all federal, state and local regulations related to the handling of hazards and hazardous materials. Section 5.7, Hazards and Hazardous Materials, provides a comprehensive analysis of existing and proposed uses of hazardous materials onsite.
CSSF 1.37 Hazardous Waste Handling. Require businesses, utilities, and industrial facilities that handle hazardous materials to: 1. install automatic fire and hazardous materials detection, reporting, and shut-off devices; and 2. install an alternative communication system in the event power is out or telephone service is saturated following an earthquake.	**Consistent:** Both the federal government (Code of Federal Regulations) and the State of California (California Health and Safety Code) require all businesses that handle more than a specified amount—or "reporting quantity"—of hazardous or extremely hazardous materials to submit a hazardous materials business plan to its Certified Unified Program Agency, which is the County of Riverside Department of Environmental Health. The preparation, submittal, and implementation of a business plan is required by any business that handles a hazardous material or a mixture containing a hazardous material in specified quantities.
CSSF 2 – Provide a high level of community services and facilities to serve the existing and future needs of Jurupa Valley	
CSSF 2.7 Community Safety. Coordinate with the Riverside County Sheriff's Department on an ongoing basis to ensure the continued safety of the City. **CSSF 2.12 CPTED.** Incorporate CPTED principles in the design of new development to encourage natural surveillance and reduce crime.	**Consistent:** See response to Policies LUE 6.4 and 11.18 above.
CSSF 2.13 Fire Safety Techniques. Incorporate fire-safety techniques in new development. **CSSF 2.14 Fire Department Review.** Involve the Fire Department in the review of development applications in fire prone areas. **CSSF 2.16 Adequate Facilities.** Work with the Fire Department to ensure the provision of adequate fire stations, personnel, and equipment to meet the City's needs over time.	**Consistent:** See response to Policy LUE 6.4 above. The project site is not designated in a fire prone area by CAL FIRE or the Riverside County Fire Department.
CSSF 2.44 Drought-Tolerant Landscaping. Require the use of drought-tolerant landscaping in all new development.	**Consistent:** See response to Policy LUE 11.4 above.
CSSF 2.45 Reclaimed Water. Encourage the development and use of reclaimed water for landscape irrigation and other uses. **CSSF 2.49 Water Conservation Ordinance.** Implement and enforce the City's Landscape Water Conservation Ordinance.	**Consistent:** The Rubidoux Community Services District does not have recycled water; however, water conservation landscaping strategies would be implemented onsite. Landscaping plans would be required to comply with the City's Landscape Water Conservation ordinance and would be confirmed during the plan check review process.

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CSSF 2.51 Adequate Wastewater Conveyance. Work with the Jurupa Community Services District and the Rubidoux Community Services District to ensure sufficient wastewater conveyance and pumping capacity to meet the existing and future needs of the City. **CSSF 2.52 Septic Systems.** Work with the Jurupa Community Services District to convert areas of the City relying on septic systems to municipal wastewater service. **CSSF 2.54 Wastewater Treatment Capacity.** Encourage efforts of the City of Riverside and the Western Riverside County Regional Wastewater Authority (WRCRWA) to provide adequate wastewater treatment capacity to serve the existing and future needs of the City. **CSSF 2.55 Fair-Share Costs.** Require new development to contribute fair-share costs for the provision of wastewater infrastructure and treatment.	**Consistent:** See response to Policy LUE 12.1 above. As analyzed in Section 5.17, *Utilities and Service Systems*, the Rubidoux Community Services District's wastewater systems and the City of Riverside's Regional Water Quality Control Plant (WQCP) would be able to adequately serve the wastewater generated by development of the proposed project. The former Riverside Cement Plant facility currently runs on a septic system. Therefore, the proposed Specific Plan would convert the site's septic system to a municipal wastewater system.
CSSF 2.58 New Development. Require new development to implement on-site measures to clean and contain storm water runoff.	**Consistent:** See response to Policy COS 3.3 above. Development projects associated with the Specific Plan would be required to comply with the NPDES program, which requires preparing a SWPPP and implementing applicable BMPs that reduce stormwater runoff and impacts to local and regional storm drain systems.
CSSF 2.61 Waste Reduction. Encourage the diversion of waste from landfills through reduction, reuse, and recycling efforts. **CSSF 2.62 Waste Management.** Encourage new development to employ construction waste management techniques to divert construction materials and debris away from landfills. **CSSF 2.67 Waste Diversion.** Achieve at least the minimum construction and demolition waste diversion requirement of 75%.	**Consistent:** See response to Policies LUE 12.1 and AQ 5.1 above.
Environmental Justice Element	
EJ 1 – Meaningful public input and capacity building	
EJ 1.1 Public Participation. Ensure that affected residents have the opportunity to participate in decisions that affect their health. **EJ 1.2 Facilitate Community Involvement**. Facilitate the involvement of residents, businesses, and organizations in all aspects of the planning process. **EJ 1.4 Public Meetings.** Schedule public meetings on key issues affecting the public at times and locations most convenient to community members. **EJ 1.5 Communication Techniques.** Utilize a variety of communication techniques and social media tools to convey information to the public.	**Consistent:** Public participation, public meetings, and translation services are part of the City's procedures for this project. All public review documents are available at the City of Jurupa Valley Planning Department, on the City's website, and at the Louis Rubidoux Library. The City will conduct community outreach with the surrounding neighborhood during the entitlement process. Additionally, the drafting and adoption of the Agua Mansa Commerce Park Specific Plan DEIR incorporated an appropriate level of public participation and community engagement utilizing the City's available communication tools within the immediate vicinity. The City of Jurupa Valley issued a Notice of Preparation (NOP) on July 19, 2017 (see Appendix A). The public was provided with a 30-day public review period to comment on the NOP, from July 19 to August 17, 2017. In addition, a

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EJ 1.6 Translation Services. Provide translation and interpretation services at public meetings on issues affecting populations whose primary language is not English. Translation time should not be taken from the person's time limit for comments.	scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall to elicit comments on the scope of the DEIR.
EJ 1.7 Public Awareness. Support efforts to raise the public's awareness of the importance of a healthy environment and physical activity.	**Consistent:** The Development Plan of the Specific Plan weaves together the proposed land uses that encourage healthy active living made possible through its menu of permitted land uses and plans for infrastructure that integrates with the City's mobility planning for active transportation.
EJ 1.9 Tribal Consultation. Consult with Native American Tribes early in the process on issues that could affect culturally significant areas.	**Consistent:** In compliance with Senate Bill 18 and Assembly Bill 52, the City of Jurupa Valley has notified applicable Native American tribes of the proposed project and provided consultation opportunities in regard to cultural resources and tribal cultural resources that could be adversely impacted by development of the proposed project. See Sections 5.4, *Cultural Resources*, and 5.16, *Tribal Cultural Resources*, for additional information.
EJ 1.11 Environmental Screening. Identify those areas of the City most vulnerable to environmental hazards through CalEnviroScreen, the Environmental Justice Screening Model (EJSM), or other model.	**Consistent:** The overall concept of the Agua Mansa Commerce Park Specific Plan intertwines environmental remediation with the creation of a framework to develop several employment-rich areas within and adjacent to several disadvantaged communities as identified by CalEnviroScreen 3.0.
EJ 2 – Land use and the environment	
EJ 2.5 Residential Buffers. Require that zoning regulations provide adequate separation and buffering of residential and industrial uses.	**Consistent:** The project site is adjacent to residential communities to the north, east, and west, but is within an established community of heavy industrial, heavy manufacturing, warehousing, and distribution centers of the Agua Mansa Industrial Corridor. The Specific Plan truck routing uses the established path already existing and used by Agua Mansa's established warehouse and distribution facilities; no new truck roads or routes are being proposed. Various strategies to minimize the impact of trucks are observed in the Specific Plan include use of the Business Park with Retail Overlay as a buffer for residents across from Rubidoux Boulevard, setbacks, berming, landscaping, and orienting truck courts away from immediate residents. Within the Industrial Park designation, motorized and non-motorized vehicles such as golf carts and hostlers would be utilized to efficiently carry out important service functions within a large area. The Specific Plan land use plan, development standards, and design guidelines recommend a number of buffering techniques appropriate for the site's context. The Site Plan and Landscape Plan propose a landscape berm with trees along El Rivino Road. Buildings 1 & 2 are setback more than 200 feet from El Rivino Road.
EJ 2.7 Latest Technologies. Give preference in approving commercial and industrial development to those projects that incorporate the latest technologies to reduce diesel emissions.	**Consistent:** The proposed land uses and design guidelines incorporate sustainable design strategies related to the latest advances in technology. Sustainable construction and technology concepts in the proposed design guidelines include the following: • All new construction, building additions, and alterations should conform to the State of California's Green Building Code (CALGreen) or the Building Code in effect at the time of permit issuance. • Development projects should be designed and constructed to consist of energy-efficient buildings to reduce air, water, and land pollution and

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	the environmental impacts associated with energy production and consumption. • Passive design techniques should be used to improve building energy performance through use of skylights, building orientation, landscaping, natural ventilation, natural daylighting, energy efficient light fixtures (e.g., florescent and LED lightings), and paint colors. • Shade structures and trees that produce large canopies should be used to reduce heat island effects. In addition, roof and paving materials should be utilized that possess a high level of solar reflectivity. • Recycled and other environmentally friendly building materials should be used to the maximum extent practicable. The Specific Plan also allows for facilities and technologies that would provide non-diesel fueling sources, vehicles, and facilities. Overall, the Specific Plan reduces the demand for diesel-fueled vehicles as allowed by technological trends and consistent with diesel and non-stationary source regulations by state and federal authorities.
EJ 2.9 Access to Decision-making Process. Ensure that low income and minority populations have equal access and influence in the land use decision-making process through such methods as bilingual notices, posting bilingual notices at development sites, and conducting public information meetings with interpreters.	**Consistent:** See response to Policy EJ 1.1 above.
EJ 2.17 Brownfield Sites. Promote the remediation and reuse of contaminated brownfield sites within the City, with priority given to those near environmental justice populations.	**Consistent:** A major effort in the proposed project is to clean up the environmental damage caused by decades of site contamination from the former Riverside Cement Plant and quarry operations, and the intent to provide approximately 71 acres of land designated as Open Space.
EJ 2.18 Energy Efficiency. Support programs to promote the use of energy efficiency products and renewable energy systems.	**Consistent:** The Specific Plan's Sustainability Design Guidelines call for elements that improve energy performance through passive energy efficient architecture such as skylights, LED lighting, cool roofs, drought-tolerant landscape, low-impact development (LID), and energy efficient light fixtures. All new construction, building additions, and alterations will conform to the CALGreen or the Building Code in effect at the time of permit issuance.
EJ 2.19 Green Building Techniques. Encourage public and private development to incorporate green building techniques, such as construction waste management practices, optimization of energy efficiency measures, and avoidance of toxic chemicals.	**Consistent:** See response to Policies EJ 2.7 and EJ 2.18.
EJ 3 – Mobility and active living	
EJ 3.2 Access. Increase access to shopping, jobs, and healthcare facilities for low-income and minority populations.	**Consistent:** The proposed development would generate approximately 965 jobs in an area dominated by low-income and minority populations. The proposed industrial and business parks and retail overlay would include jobs related to research and development, professional offices, limited industrial, light manufacturing uses, retail and personal services, food services, and convenience stores.
EJ 3.5 Transit Routes. Encourage transit providers to establish and maintain routes to jobs, shopping, schools, parks, and healthcare facilities that are convenient to low-income and minority populations.	**Consistent:** The project would encourage transit providers to establish transit facilities, such as bus stops and shelters to access its planned employment and commercial centers, open spaces, and park area.
EJ 3.7 Walking and Bicycling. Explore measures to encourage walking and bicycling in the City as part of daily physical activities.	**Consistent:** Within the Specific Plan boundary, an on-site trail is proposed along the southern portion of Rubidoux Boulevard, between the

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EJ 3.8 Alternative Modes of Transportation. Promote the use of alternative modes of transportation. **EJ 3.11 Bicycle Facilities.** Require new commercial and industrial development to provide bicycle facilities on-site.	CalPortland building and the intersection of Rubidoux Boulevard and Production Circle (see Figure 3.7). The northern portion of the Rubidoux Boulevard streetscape will include a sidewalk, connecting the proposed on-site trail to Rubidoux Boulevard and then north to its intersection with El Rivino Road. Across Rubidoux Boulevard to the west is where an equestrian trail is planned that will follow along Castellano Road and Andalusia Avenue. The project also includes the addition of sidewalks and bicycle lanes along El Rivino Road, Rubidoux Boulevard, and Hall Avenue. All pedestrian sidewalks shall be developed in accordance with ADA standards and City sidewalk requirements per the City's Engineering Department. Transit routes can also provide an alternative mode of transportation for motorists and a primary mode for the transit dependent. The provision of a concentrated employment center is an opportunity to partner with Riverside Transit Agency to explore the feasibility of expanded public transportation options for workers and visitors of the Specific Plan area. Table 4.5 of the Specific Plan also includes bicycle parking requirements for each of the proposed land use types. Bicycle parking spaces would be provided in the form of bicycle racks and/or bicycle lockers. Bicycle parking shall be provided in a convenient, highly visible, and well-lit area within 100 feet of a building entrance.
EJ 3.12 Healthy Living. Support the efforts of Healthy Jurupa Valley and others to promote active living and healthy choices.	**Consistent:** The Specific Plan responds to surrounding communities that are historically underserved by a variety of much-needed services by proposing land uses that encourage a diverse and comprehensive set of uses that promote health, mobility, open spaces, public services, arts and cultural venues, and environmental stewardship.
Healthy Communities Element	
HC 2 – Access to healthy foods and nutrition	
HC 2.4 Restaurant Options. Encourage full-service restaurants offering a variety of healthy food choices to locate within the City.	**Consistent:** The potential retail overlay would allow up to 25,000 square feet of retail use, such as personal services, food services, restaurants, and convenience stores. Thus, full-service restaurants would be permitted in the Specific Plan area.
HC 4 – Land use and mobility	
HC 4.9 Streetscape Amenities. Require new development to include streetscape amenities such as sidewalks that are separated from the roadway by landscaping and parkways with street trees, trails, hitching posts (where appropriate), pedestrian waiting shelters, and other features that enhance safety, walkability, neighborhood appeal, and help commercial neighborhoods stay clean, safe and attractive.	**Consistent:** Chapters 3 and 4 of the Specific Plan include development standards and design guidelines for streetscape development. The Specific Plan encourages landscaping that softens hardscapes and buildings, creates continuity among individual development sites within the Specific Plan area, defines entryways, and creates distinct visual identity. For example, shade trees should be planted along pedestrian paths, streetscapes, and within public gathering spaces to provide shade and visual comfort. Landscaping should be used to identify, define, and enhance pedestrian paths and public gathering spaces, and to provide variety, texture, color, and seasonal interest. Clustering larger buildings around courtyards, arcades, and open plazas is encouraged to enhance aesthetics and create a sense of community within the industrial and business park areas. Additionally, pedestrian amenities, such as tables, benches, and shaded gathering spaces are proposed in the open space area. In addition to the Specific Plan, the site plan proposes new sidewalks that are separated from the roadway by landscaping with trees.

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HC 4.20 Concurrent Park Development. Require that development of parks, trails, and open space facilities occur concurrently with new development consistent with City and outside agency requirements and, when feasible, that they are located near other community facilities such as schools, senior centers, and recreation centers.	**Consistent:** The proposed Specific Plan includes approximately 71 acres of open space in the southern portion of the project site (see Figure 5.1-2, Conceptual Landscape Plan). The potential for development of the open space area as a park with recreational features is dependent on the environmental remediation of the brownfield site given its previous use as a limestone quarry. Should a recreational park be feasible in the open space area, the project applicant would prepare a Park Development Plan and additional environmental analysis for review and approval by the City.
HC 4.21 Multi-Use Features. Incorporate design features into the multi-use trail and park network that reflect the unique equestrian characteristics of the community. **HC 4.24 Regional Trails.** Ensure that regional trail plans are implemented at the development plan and Specific Plan level.	**Consistent:** See response to Policy HC 4.8 above.
HC 6 – Urban forestry	
HC 6.2 Low Water Requirements. Prioritize and strategically plant trees in the public right of way that have low water requirements and are well adapted to the City's semi-arid climate, especially California native species. **HC 6.3 Landscape Improvements.** Strive to incorporate existing mature trees and native vegetation into existing and new development, particularly expansive parking lots.	**Consistent:** According to Table 3.8 of the Specific Plan, all projects would be required to provide and maintain landscaping and irrigation in compliance with the landscaping requirements of the Specific Plan. The landscape plan shall be designed with the efficient use of water, and plants shall be California native and/or drought tolerant species. Parking lot landscaping should be designed to reduce associated heat buildup, improve aesthetics, and integrate into onsite landscape design and adjacent streetscapes. A plant palette is also included as Table 5.1 of the Specific Plan and features water-efficient, drought-tolerant species native to the region.
Economic Sustainability Element	
ES 1 – Economic development and fiscal sustainability	
ES 1.2 Economic Development Strategy. Seek out selective development opportunities that will bring private capital investment into the community, provide skilled and professional labor, and increase median income and property values. Ensure that land use, capital improvement, and fiscal management decisions are consistent with the City's Economic Development Strategy, are guided by the General Plan, and emphasize mid- and long-term development of the local economy, rather than focus on short-term goals or individual projects.	**Consistent:** Development in accordance with the proposed Specific Plan would begin with remediating the former Riverside Cement Plant and quarry onsite, which would eliminate a large barrier to economic development in the project area. The proposed industrial, business park, and retail buildings would provide long-term job opportunities for Jurupa Valley residents. The proposed industrial park would allow high-cube logistics warehouse uses, fulfillment centers, e-commerce centers, warehousing and distribution, and research and development uses. The business park and retail overlay would allow research and development, professional offices, limited industrial, light manufacturing uses, retail and personal services, food services, and convenience stores. These uses would bring private capital investment into the City and provide skilled and professional job opportunities.
ES 1.4 Fair Share. Ensure that new development pays its fair share of facilities and infrastructure costs.	**Consistent:** As detailed in Sections 5.13, *Public Services*, 5.15, *Transportation and Traffic*, and 5.17, *Utilities and Service Systems*, the project applicant would be responsible for paying its fair share of facilities and infrastructure costs as required to mitigate the project's impacts on existing resources.
ES 2 – Industrial base	
ES 2.1 Industrial Expansion. Expand and diversify the City's industrial base by encouraging clean industry, including job-rich	**Consistent:** See response to Policy ES 1.2 above.

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Applicable Policies	Project Consistency Analysis
manufacturing and assembly uses, research and development, and point-of-sale fulfillment centers. **ES 2.2 Job Growth.** Encourage industrial uses that provide well-paying skilled and professional jobs.	
ES 2.4 Jobs-Housing Balance. Assign high priority to City initiatives, investments, Council decisions, and the allocation of City resources, and development approvals that improve the jobs/housing ratio by expanding local job opportunities for residents and housing opportunities for employees.	**Consistent:** As detailed in Section 5.12, *Population and Housing*, buildout of the proposed Specific Plan would introduce up to 964 jobs (see Table 5.12-8), thereby increasing the City's anticipated jobs-housing ratio from 1.07 to 1.10 by 2040.
ES 3 – Retail commercial base	
ES 3.1 Business Retention. Support programs and activities that help retain high quality businesses that provide needed goods, services, and/or jobs for the community or regions. **ES 3.2 New Business Attraction.** Attract new commercial enterprises that balance and diversify the commercial base and provide needed goods and services. These could include the introduction of new commercial and institutional sectors such as medical, educational, and visitor-serving uses.	**Consistent:** See response to Policy ES 1.2 above.
ES 3.3 Opportunity Areas. Actively promote development in the Opportunity Areas that achieves General Plan goals and is consistent with Community Values.	**Consistent:** Figure 11-9, *Economic Opportunity Areas*, of the City's general plan identifies the project site as part of the Northeast Industrial Opportunity Area 5 (OA-5). Various sites in OA-5 have been identified for industrial and commercial uses, including the former Riverside Cement Plant site. This area is considered to have a low potential for fiscal revenue generation but a medium potential for job creation (Jurupa Valley 2017). Thus, development of the project site as industrial and business parks with a potential retail overlay in accordance with the Agua Mansa Commerce Park Specific Plan would be consistent with this policy.
ES 5 – Workforce development	
ES 5.1 Employee Commuting. Reduce the number of Jurupa Valley residents who commute to other areas for work by expanding and diversifying the City's job base. **ES 5.5 Promote Living Wage Jobs.** Promote the development of quality jobs for local residents, especially those with living wages and career ladders. **ES 5.7 Diverse Job Opportunities.** Help promote job opportunities for people of all income levels, including low-income residents.	**Consistent:** See response to Policies ES 1.2 and ES 2.4 above. By increasing job opportunities within Jurupa Valley, current residents would be able to find jobs within the City and eliminate the need to commute to neighboring cities for work. Additionally, the permitted uses allowed under the Specific Plan would introduce a wide range of job types, including professional businesses, research and development, logistic centers, warehousing, manufacturing, and retail services.
ES 6 – Special Economic Opportunity Areas	
ES 6.1 Opportunity Areas. Ensure that City economic initiatives, budgeting, and land use actions for designated Opportunity Areas are consistent with the 2017 General Plan Land Use Element's vision of these areas in terms of balancing the commercial/industrial base, attracting economically and environmentally sustainable development and meeting residents' needs.	**Consistent:** See response to Policies ES 1.2, ES 2.4, ES 3.3, and ES 5.1 above.

Table 5.9-2 City of Jurupa Valley General Plan Consistency Analysis

Applicable Policies	Project Consistency Analysis
ES 6.2 Address Voids. Ensure that City initiatives, budgeting, and capital improvement programs give high priority to attracting high quality retail and industrial businesses that fill identified economic "voids" with businesses with growth potential in the Jurupa Valley trade area. **ES 6.3 Infrastructure.** Ensure that City initiatives, budgeting, and capital improvement programs give a high priority to improving the economic attractiveness and development feasibility of designated Opportunity Areas, consistent with the City's vision for these areas, and encourage community service districts and other responsible agencies to do likewise.	

Source: City of Jurupa Valley General Plan, September 2017.

Western Riverside County Multiple-Species Habitat Conservation Plan

The project site is located partially within three Western Riverside County MSHCP Criteria Cells (21, 22 and 55) and several MSHCP sensitive species survey areas. As analyzed in Section 5.3, Biological Resources, the proposed project would be consistent with the Western Riverside County MSHCP. The project's consistency with the MSHCP is analyzed in the "MSHCP Consistency and Determination of Equivalent or Superior Preservation" (DBESP) report (see Appendix D of this DEIR). Appropriate mitigation measures are provided in Section 5.3, Biological Resources, to ensure project consistency with the MSHCP. With implementation of the mitigation measures this impact would be less than significant.

Level of Significance before Mitigation: Impact LU-2 would be less than significant.

5.9.6 Cumulative Impacts

As stated in Section 4, *Environmental Setting*, Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed where they are significant. It further states that this discussion shall reflect the level and severity of the impact and the likelihood of occurrence, but not in as great a level of detail as that necessary for the project alone. Section 15355 of the Guidelines defines cumulative impacts to be "...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts represent the change caused by the incremental impact of a project when added to other proposed or committed projects in the vicinity.

The CEQA Guidelines (Section 15130 [b][1]) state that the information utilized in an analysis of cumulative impacts should come from one of two sources:

A. A list of past, present and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency.

B. A summary of projections contained in an adopted General Plan or related planning document designed to evaluate regional or area-wide conditions.

Implementation of the proposed project is consistent with the applicable goals and policies of the SCAG 2016 RTP/SCS and the City of Jurupa Valley General Plan as illustrated above in Tables 5.9-1 and 5.9-2. Implementation of the proposed project would allow for the City of Jurupa Valley to meet the stated objectives of the proposed project and respond to market demand for development opportunities within the City.

The projected growth conditions in the City by 2035 include conversion of a total of 4,494 acres of vacant developable land with a mixture of rural and suburban land uses, which is 16.1 percent of the total area in the City. Future growth is expected to add a maximum of 14,332 new residential units and maximum of 36.6 million square feet of new nonresidential building (Jurupa Valley 2017). The 2017 General Plan is also consistent with the RTP/SCS related to land use. The proposed Specific Plan is also consistent with the goals of the Jurupa Valley General Plan, as stated in the Agua Mansa Commerce Park Specific Plan, in Appendix B of this DEIR.

However, because the project does not propose residential uses or contribute directly to increased population, the cumulative impacts of land use when considering the proposed project are not significant. As with the proposed project, cumulative projects would be subject to compliance with regional and local plans reviewed in this section. Therefore, implementation of cumulative development in accordance with the SCAG RTP/SCS, City of Jurupa Valley General Plan would not combine with the proposed Project to result in cumulatively considerable land use impacts.

5.9.7 Level of Significance Before Mitigation

Impacts LU-1, and LU-2 are less than significant.

5.9.8 Mitigation Measures

No mitigation measures required.

5.9.9 Level of Significance After Mitigation

Less than significant levels.

5.9.10 References

Jurupa Valley, City of. 2017, September. City of Jurupa Valley General Plan.

Southern California Association of Governments (SCAG). 2016, April. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf.

5.10 MINERAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential project impacts on mineral resources from the Agua Mansa Commerce Park Specific Plan project (proposed project). Mineral resources have been identified within Riverside County, and more specifically, within the Jurupa Valley area, and therefore are evaluated to determine the potential effects of project implementation.

Minerals are defined as any naturally occurring chemical elements or compounds formed from inorganic processes and organic substances. Minable minerals or an "ore deposit" is defined as a deposit of ore or mineral having a value materially in excess of the cost of developing, mining, and processing the mineral and reclaiming the project area.

5.10.1 Environmental Setting

5.10.1.1 REGULATORY BACKGROUND

State

Surface Mining and Reclamation Act

The regulatory setting regarding mineral resources consists of the California Geological Survey Mineral Resources Project, as authorized under the Surface Mining and Reclamation Act of 1975 (SMARA) (California Public Resources Code Sections 2710 et seq.), including designation of Mineral Resource Zones.

Mineral Resource Classification

The California Geological Survey (CGS) Mineral Resources Project provides information about California's nonfuel mineral resources. The Mineral Resources Project classifies lands throughout the state that contain regionally significant mineral resources as mandated by SMARA. Nonfuel mineral resources include metals such as gold, silver, iron, and copper; industrial metals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt, and dimension stone; and construction aggregate, including sand, gravel, and crushed stone. Development generally results in a demand for minerals, especially construction aggregate. Urban preemption of prime deposits and conflicts between mining and other uses throughout California led to passage of the SMARA, which requires all cities and counties to incorporate in their General Plans the mapped designations approved by the State Mining and Geology Board.

The classification process involves six distinct steps:

1. **Determination of Study Boundary:** Study areas may be a county, a portion of a county, or a Production-Consumption (P-C) region that may contain parts of one or more counties. P-C regions were selected such that the majority (95 percent) of the construction aggregate produced in the region is consumed in the region.

2. **Establishment of Mineral Resource Zones (MRZs):** Based on geologic appraisals, lands within the study area are classified as:

- **MRZ-1:** Adequate information indicates that no significant mineral deposits are present or likely to be present.
- **MRZ-2:** Adequate information indicates that significant mineral deposits are present or adequate information indicates that significant inferred resources are present.
- **MRZ-3:** The significance of mineral deposits cannot be determined from the available data.
- **MRZ-4:** Insufficient data to assign any other MRZ designation.
- **SZ Areas:** Containing unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance.

3. **IRA Areas:** County or State Division of Mines and Geology Identified Areas where adequate production and information indicates that significant minerals are present.
4. **Identification of Sectors:** Lands known to contain significant concrete grade aggregate resources (areas classified as MRZ-2 in Step 2 above) are evaluated to determine if current uses of these lands preclude mining.
5. **Calculation** of resource tonnages within Sectors.
6. **Forecast** of 50-Year Needs and the life expectancy of current reserves (CGS, 2008).

Regional Policies

There are no regional policies that are applicable to the topic of mineral resources in Jurupa Valley.

City General Plan Policies

The site is not used for mineral extraction. As such, there are no policies applicable to this issue.

5.10.1.2 EXISTING CONDITIONS

Historically, mineral extraction has been an important component of Jurupa Valley's economy. Western Riverside County supports extensive deposits of clay, limestone, iron, sand, and aggregates. Along with agricultural production, mineral extraction plays an important role in the county's economy. Activities associated with the conservation, extraction, and processing of mineral resources are important in meeting the needs of both the county and many dependent industries outside of the county, and allowing for the continuation of regional growth. However, mineral resources are nonrenewable, and careful management of known and suspected mineral deposits is required to ensure that these resources are not depleted through waste, exploitation, and/or encroaching urbanization. Presently, the most economically valuable mineral resources found and extracted within the county are those that are used as building materials and in their manufacture: clay, limestone, sand and gravel, specialty sands, and rock. Most of the economically valuable mineral deposits known to occur in the county are located along Interstates 15, 215, and 60.

Mineral Resource Zones

While the majority of Jurupa Valley is classified as MRZ-3, two major areas in the city are identified as MRZ-2: the eastern portion of the city following the Santa Ana River, and an area in the northwestern corner of the city. There is one area designated as MRZ-1 located in the eastern portion of the City (see Figure 5.10-1, *Mineral Resource Zones*). County mapping data indicates the "upper" third of the Sana Ana River within the city boundaries is considered a significant source of construction aggregate (i.e., sand and gravel) (Jurupa Valley 2017). In addition to the State Mining and Geology Board's (SMGB) established MRZs, the CGS has also designated Aggregate Mineral Resource areas in the county (see Figure. 5.10-2). As shown in Figure 5.10-1, *Mineral Resource Zones*, the western portion of the project site is designated MRZ-2. However, the site is not designated by the CGS as containing regionally significant PCC-grade aggregate resources (see Figure 5.10-2). As a former cement plant facility, the southern portion of the site was mined for many years for deposits of clay, limestone, iron, sand, and aggregates. However, there are no longer any active mines in this area. Additionally, the river and adjacent lands in this area are designated Public/Quasi-Public Land in the county's general plan.

San Bernardino County Production-Consumption Region

The project site is located within the San Bernardino County P-C Region, which spans parts of southwestern San Bernardino County and parts of western Riverside County. The anticipated consumption of aggregate in the San Bernardino P-C Region for the next 50 years (through the year 2057) is estimated to be 1,131 million tons, of which 735 million tons must be PCC quality. There remains an estimated 5,986 million tons of unpermitted PCC-grade aggregate resources in the San Bernardino P-C Region (CGS 2008).

Mines

The Crestmore Quarry (Mine ID 91-33-0026) in the southern portion of the project site is listed on the Mines Online database maintained by the California Department of Conservation Division of Mine Reclamation. Its primary product is quartz crystal, and it is owned by the Riverside Cement Company. The mine is closed and inactive; however, reclamation activities have not started (DOC 2017).

Other mines near the project site include the closed Pacific Ride Industrial Park Mine (Mine ID 91-33-0059) and the Avalon Mine (Mine ID 91-33-0002). The inactive Pacific Ride Industrial Park Mine is approximately 0.7 mile west of the project site and is an open pit owned by Pacific Equipment Company. The active Avalon Mine is approximately 0.7 mile southwest of the project site and is an open pit owned by Proficiency Rubidoux LLC, with primary products including sand, gravel, and decomposed granite (DOC 2017).

5.10.2 Notice of Preparation (NOP)/Scoping Comments

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of mineral resources.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.10.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to mineral resources are based on criteria contained in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

M-1 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.

M-2 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.

5.10.4 Applicable Policies and Design Features

5.10.4.1 PLANS, POLICIES, AND PROGRAMS

No existing plans, policies, or programs are applicable to the proposed project's impacts to mineral resources.

5.10.4.2 PROJECT DESIGN FEATURES

There are no project design features that apply to mineral resources.

5.10.5 Environmental Impacts

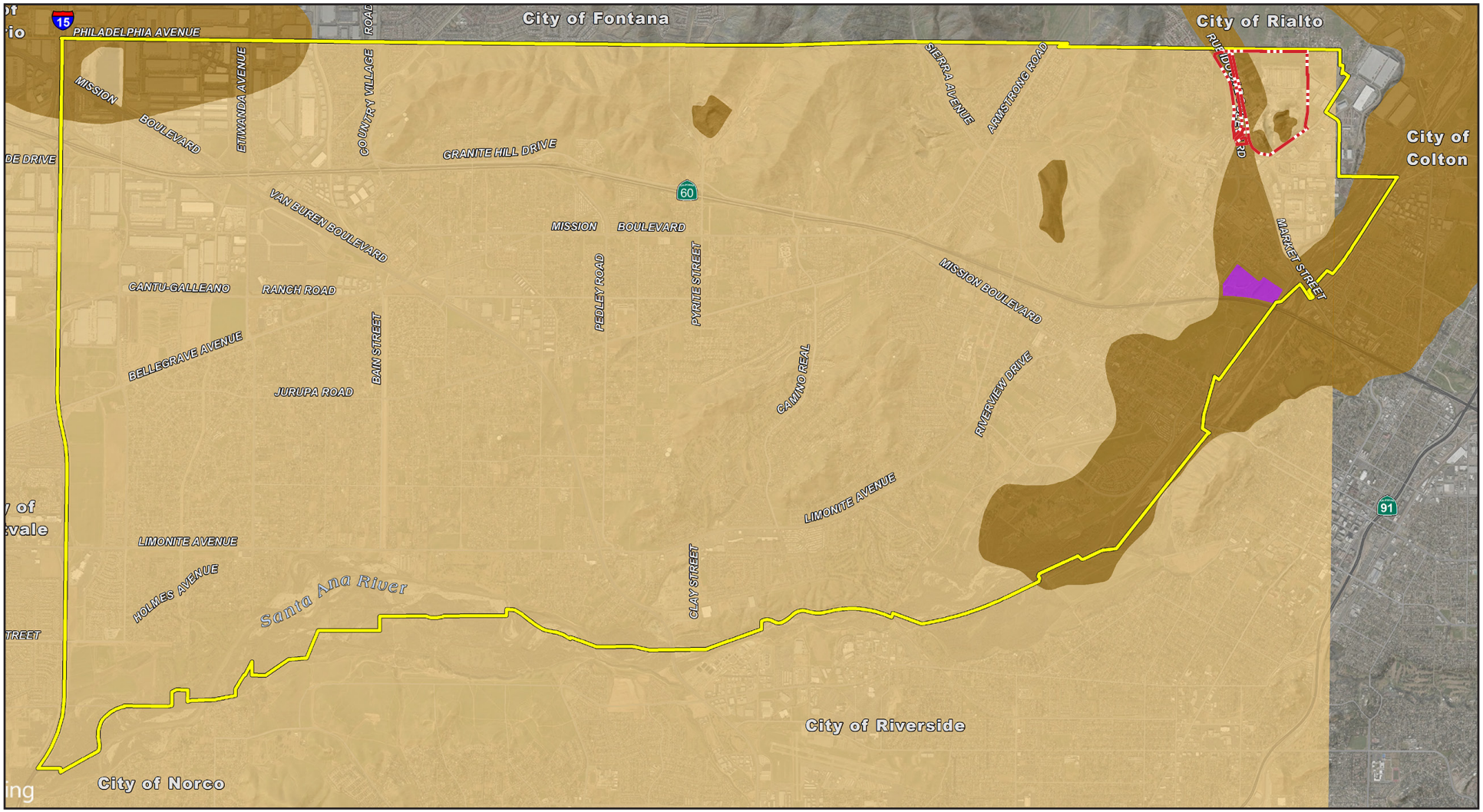
The following impact analysis addresses thresholds of significance that are considered potentially significant impacts.

Impact M-1 Threshold: Would 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?

As stated above, most of Jurupa Valley is designated MRZ-3. The only areas designated MRZ-2—areas where geologic data indicate that significant mineral resources are present—are in the most northwestern corner of the city and in the eastern portion of the city along the Santa Ana River, which includes the northwestern portion of the project site (see Figure 5.10-1, *Mineral Resource Zones*). However, the State Mining Board does not designate the project site as a regionally significant PCC-grade aggregate resource (Figure 5.10-2). The City's General Plan does not designate the site as a mineral resource land use designation that allows for mineral extraction on the basis of the SMARA classification, or an area held in reserve for future mining activities (Jurupa Valley 2017). The area is classified as MRZ-2 and MRZ-3.

Figure 5.10-1 - Mineral Resouce Zones

5. Environmental Analysis



Agua Mansa Commerce Park Specific Plan Area Boundary

Jurupa Valley City Boundary

MRZ-1 Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources

MRZ-2 Areas where available geologic data indicate significant PCC-Grade aggregate resources are present

MRZ-3 Areas containing known or inferred mineral occurrences of undetermined mineral resource significance

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Scale (Feet)

Source: City of Jurupa Valley, 2017

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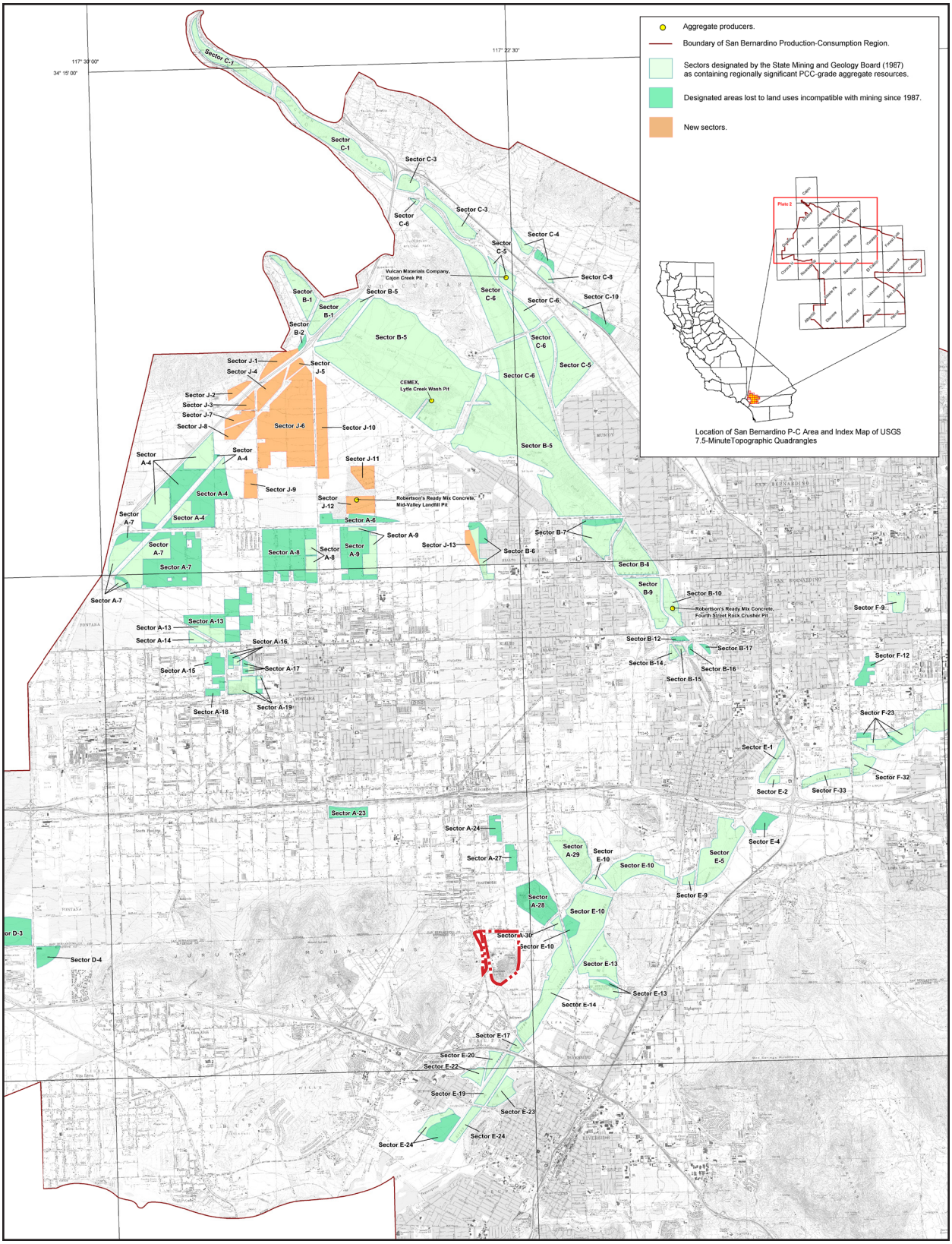
Figure 5.10-2 - Aggregate Resource Sector Map for Northern San Bernardino P-C



Source: California Geologic Survey, 2008

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Development of the proposed Specific Plan would redevelop the site from a former cement plant and mine into industrial and business parks with open space. The Specific Plan proposes development of an industrial park and business park with retail overlay use in the northwestern portion of the site that is designated MRZ-2. Most of this area is already built up with buildings and structures associated with the Riverside Cement Plant, including an administrative building, cement-bagging building, a research and development building, silos and sheds, etc. The MRZ-2 area onsite also encompasses a segment of the Union Pacific Railroad right-of-way that transects the western portion of the site. This northwestern area of the site was never utilized for mining of mineral resources. Mining operations occurred in the southern portion of the site in the Crestmore mine, which consisted of a mine and four quarries. The mining operations terminated in the 1980s and the cement plant operations ceased in 2014. The site is no longer utilized for the mining of mineral resources and, according to the Mines Online database maintained by the California Department of Conservation Division of Mine Reclamation, the Crestmore mine is listed as closed and inactive (DOC 2017).

Further, the City's General Plan includes a land use designation for Open Space-Mineral Resources that would allow for mineral extraction and processing facilities per the SMARA classification. Areas held in reserve for future mining activities also fall under the Open Space-Mineral Resources designation. However, the site is not designated Open Space-Mineral Resources (see Figure 5.10-3).

Since the former Riverside Cement Plant buildings and structures currently occupy the areas onsite designated MRZ-2 and MRZ-3, the site is not designated as a regionally significant PCC-grade resource, the Crestmore mine is closed and inactive, and the site is not designated for mineral extraction or held in reserve for future mining activities, redevelopment of the site into the proposed Agua Mansa Commerce Park would have less than significant impacts to mineral resources.

Level of Significance before Mitigation: Impact M-1 would be less than significant.

Impact M-2 Threshold: Would 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?

See response to Impact M-1, above.

Level of Significance before Mitigation: Impact M-2 would be less than significant.

5.10.6 Cumulative Impacts

Cumulative impacts refer to incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The geographic area for cumulative analysis for minerals would be the San Bernardino P-C.

As population levels increase in the region, greater demand for aggregate and other mineral materials will be placed on mineral resources, especially sand and gravel. Similarly, development pressures in areas where these materials are known or expected to occur would result in the loss of availability of these mineral resources. The anticipated consumption of aggregate in the San Bernardino P-C Region for the next 50 years (through the

year 2057) is estimated to be 1,131 million tons, of which 735 million tons must be PCC quality. There remains an estimated 5,986 million tons of unpermitted PCC-grade aggregate resources in the San Bernardino P-C Region (CGS 2008).

Mineral resource development within the San Bernardino P-C will be conducted in line with SMARA, which requires all cities and counties to incorporate into their General Plans the mapped designations approved by the State Mining Board. Both the County and the City's General Plan policies require future development to coordinate carefully between proposed mining and existing development, or between existing mining and proposed development. These programmatic goals, policies, and programs will help reduce the cumulative impacts between mining and development within the city to less than significant levels.

5.10.7 Level of Significance Before Mitigation

Impacts M-1 and M-2 are less than significant.

5.10.8 Mitigation Measures

No mitigation measures are required.

5.10.9 Level of Significance After Mitigation

Impacts would be less than significant.

5.10.10 References

California Department of Conservation (DOC). 2017. Mines Online. http://maps.conservation.ca.gov/mol/index.html.

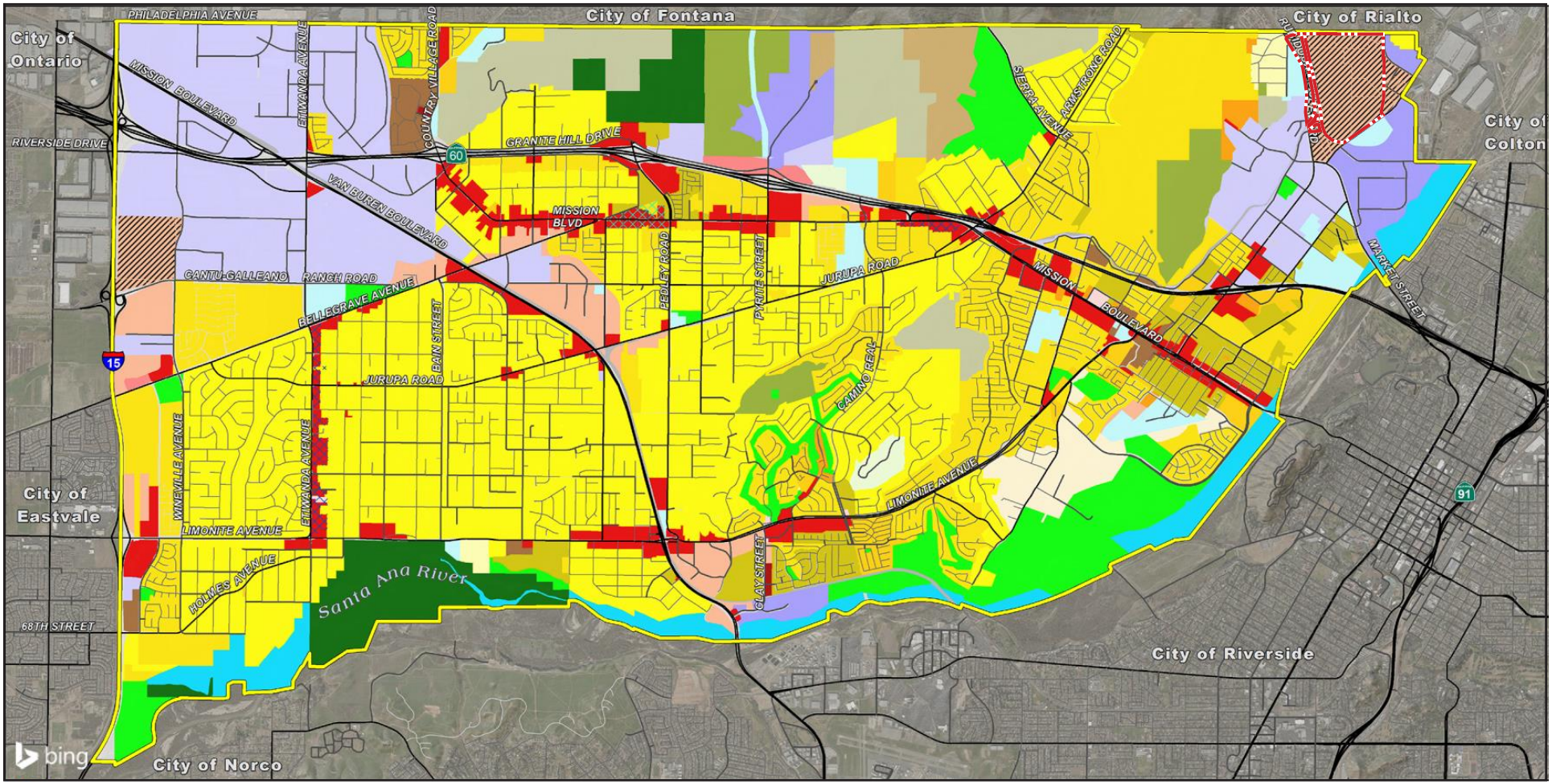
California Geologic Survey (CGS). 2008. Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the San Bernardino Production-Consumption Region: San Bernardino and Riverside Counties, California. Special Report 206. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_206/SR_206_Text.pdf.

Jurupa Valley, City of. 2017, June. City of Jurupa Valley 2017 General Plan. http://www.jurupavalley.org/Departments/Development-Services/Planning/General-Plan.

Riverside County. 2015, December. Riverside County 2015 General Plan. http://planning.rctlma.org/Portals/0/genplan/general_Plan_2017/elements/OCT17/Ch03_Land_Use_July2017.pdf?ver=2017-10-06-093429-517.

Figure 5.10-3 - Jurupa Valley General Plan Land Use Plan

5. Environmental Analysis



Residential
- City of Jurupa Valley
- Agua Mansa Commerce Park Specific Plan Area Boundary
- Community Development
- Village Center
- RR - Farm
- EDR - Ranch
- VLDR - Rural Neighborhood
- LDR - Country Neighborhood
- MDR - Medium Density Residential
- MHDR - Medium High Density Residential
- HDR - High Density Residential
- VHDR - Very High Density Residential
- HHDR - Highest Density Residential

Commercial
- CR - Commercial Retail
- CT - Commercial Tourist
- CO - Commercial Office
- CN - Commercial Neighborhood

Open Space
- OS-C - Conservation
- OS-CH - Conservation Habitat
- OS-R - Open Space Recreation
- OS-MIN - Mineral Resources
- OS-RUR - Open Space Rural
- OS-W - Water

Industrial
- LI - Technology and Innovation
- HI - Heavy Industrial

Business Park/Other
- BP - Business Park
- BP-SP - Business Park - Specific Plan
- PF - Public Facilities
- Rail - Railroad

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Scale (Feet)

Source: City of Jurupa Valley, 2017

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5.11 NOISE

This section discusses the fundamentals of sound; examines federal, state, and local noise guidelines, policies, and standards; reviews noise levels at existing receptor locations; evaluates potential noise impacts associated with the Agua Mansa Commerce Park Specific Plan project (proposed project); and provides mitigation to reduce noise impacts at sensitive residential locations. This evaluation uses procedures and methodologies as specified by Caltrans and the Federal Highway Administration (FHWA).

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the proposed project to result in noise impacts.

The following analysis is based in part on information obtained from:

- *Agua Mansa Commerce Park Specific Plan Noise Impact Analysis*, Urban Crossroads Inc., January 28, 2019

A complete copy of the study is included in the technical appendices to this Draft EIR (Volume II, Appendix I).

5.11.1 Environmental Setting

5.11.1.1 SOUND FUNDAMENTALS

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in Hertz [Hz] or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the loudness of sound is the decibel (dB). Changes of 1 to 3 dB are detectable under quiet, controlled conditions and changes of less than 1 dBA are usually indiscernible. A 3 dB change in noise levels is considered the minimum change that is detectable with human hearing in outside environments. A change of 5 dB is readily discernable to most people in an exterior environment whereas a 10 dBA change is perceived as a doubling (or halving) of the sound.

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all and are "felt" more as a vibration. Similarly, while people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz. Since the human ear is not equally sensitive to sound at all frequencies, a special frequency dependent rating scale is usually used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise is defined as unwanted sound, and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, the State of California, and many local governments have established criteria to protect public health and safety and to prevent disruption of certain human activities.

Sound Measurement

Sound intensity is measured through the A-weighted measure to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies.

Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale, representing points on a sharply rising curve. On a logarithmic scale, an increase of 10 dB is 10 times more intense than 1 dB, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud).

Sound levels are generated from a source and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. This phenomenon is known as "spreading loss." For a single point source, sound levels decrease by approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by on-site operations from stationary equipment or activity at a project site. If noise is produced by a line source, such as highway traffic, the sound decreases by 3 dB for each doubling of distance in a hard site environment. Line source noise in a relatively flat environment with absorptive vegetation decreases by 4.5 dB for each doubling of distance.

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called L_{eq}), or alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. For example, the L50 noise level represents the noise level that is exceeded 50 percent of the time. Half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_2, L_8 and L_{25} values represent the noise levels that are exceeded 2, 8, and 25 percent of the time or 1, 5, and 15 minutes per hour. These "L" values are typically used to demonstrate compliance for stationary noise sources with a city's noise ordinance, as discussed below. Other values typically noted during a noise survey are the L_{min} and L_{max}. These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law requires that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or Day-Night Noise Level (L_{dn}). The CNEL descriptor requires that an artificial increment of 5 dBA be added to the actual noise level for the hours from 7:00 p.m. to 10:00 p.m. and 10 dBA for the hours from 10:00 p.m. to 7:00 a.m. The L_{dn} descriptor uses the same methodology except that there is no artificial increment added to the hours between 7:00 p.m. and 10:00 p.m. Both descriptors give roughly the same 24-hour level with the CNEL being only slightly more restrictive (i.e., higher).

Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects our entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, and thereby affecting blood pressure, functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA could result in permanent hearing damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 190 dBA will rupture the eardrum and permanently damage the inner ear.

5.11.1.2 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.

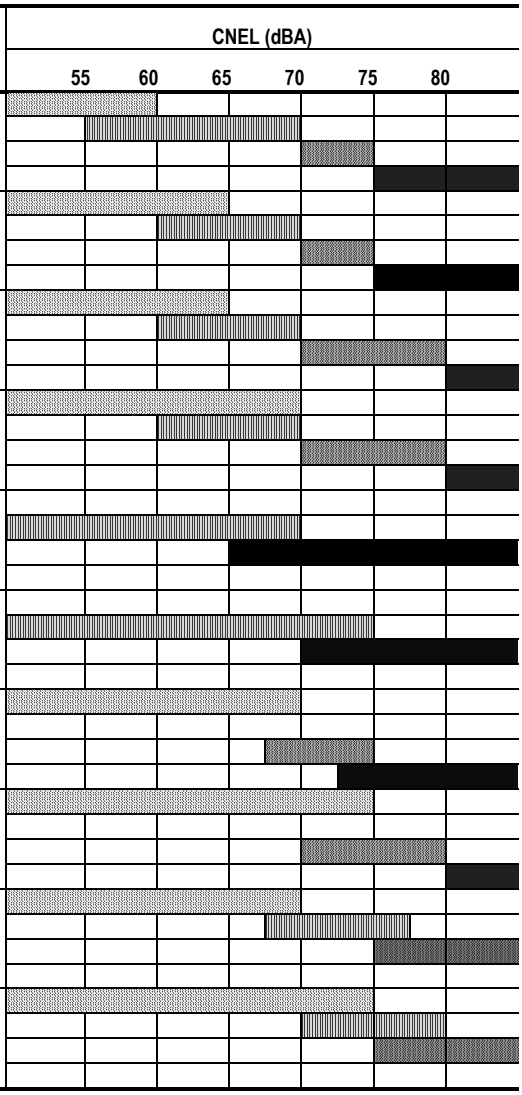
State of California

California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a general plan that includes a noise element which is to be prepared per guidelines adopted by the Governor's Office of Planning and Research. The purpose of the noise element is to limit the exposure of the community to excessive noise levels.

Table 5.11-1 identifies normally acceptable, conditionally acceptable, and clearly unacceptable noise levels for various land uses. A conditionally acceptable designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design. By comparison, a normally acceptable designation indicates that standard construction can occur with no special noise reduction requirements.

5. Environmental Analysis
NOISE

Table 5.11-1 Community Noise and Land Use Compatibility



Explanatory Notes

Normally Acceptable:
With no special noise reduction requirements assuming standard construction.

Normally Unacceptable:
New construction is discouraged. If new construction does not proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Conditionally Acceptable:
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features included in the design.

Clearly Unacceptable:
New construction or development should generally not be undertaken.

Source: California Office of Noise Control. *Guidelines for the Preparation and Content of Noise Elements of the General Plan.* February 1976. Adapted from the US EPA Office of Noise Abatement Control, Washington D.C. Community Noise. Prepared by Wyle Laboratories. December 1971.

Green Building Standards Code

The 2016 Green Building Standards Code contains mandatory measures for nonresidential building construction in Section 5.507, Environmental Comfort. These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when nonresidential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, and other areas where noise contours are not readily available. If the development falls within an airport or freeway 65 dBA CNEL noise contour, the combined sound transmission class (STC) rating of the wall and roof-ceiling assemblies must be at least 50. For developments in areas where noise contours are not readily available and the noise level exceeds 65 dBA Leq for any hour of operation, a wall and roof-ceiling combined STC rating of 45, and exterior windows with a minimum STC rating of 40 are required (Section 5.507.4.1).

Local Noise Standards

City of Jurupa Valley General Plan Noise Element

The City of Jurupa Valley General Noise Element specifies the maximum allowable exterior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports, and railroads. In addition, the noise element identifies several policies to minimize the impacts of excessive noise levels throughout the community, and establishes noise level requirements for all land uses. The Land Use/Noise Compatibility Matrix, Figure 7-3 of the General Plan, identifies guidelines to describe categories of compatibility, not specific noise standards. The noise-sensitive residential land use in the project study area is considered normally acceptable with unmitigated exterior levels of less than 60 dBA CNEL and conditionally acceptable with noise levels approaching 70 dBA CNEL. For industrial land uses, exterior noise levels approaching 70 dBA CNEL are considered normally acceptable, and noise levels ranging from 70 dBA CNEL to 80 dBA CNEL are considered conditionally acceptable. For conditionally acceptable exterior noise levels, new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and the needed noise insulation features are included in the design.

City of Jurupa Valley Operational Noise Standards

Chapter 11.05 of the City of Jurupa Valley Municipal Code sets stationary-source (operational) exterior noise limits for residential uses in the project study area of 55 dBA Leq for daytime hours of 7:00 a.m. to 10:00 p.m., and 45 dBA Leq during the noise-sensitive nighttime hours of 10:00 p.m. to 7:00 a.m. However, consistent with guidance received from the City of Jurupa Valley, dated December 19, 2018, the noise study was prepared to evaluate potential impacts based on 65 dBA Leq daytime (7:00 a.m. to 10:00 p.m.) and 45 dBA Leq nighttime (10:00 p.m. to 7:00 a.m.) exterior noise level standards. The City of Jurupa Valley noise-related CEQA thresholds guidance is provided in Appendix 3.1 of the Noise Study (Appendix I).

Construction Noise Standards

To control noise impacts associated with the construction of the proposed project, the City of Jurupa Valley has established limits to the hours of operation. Section 11.05.020 of the Municipal Code states that noise sources associated with any private construction activity within one-quarter of a mile from an inhabited

dwelling are exempt from the noise regulations if construction activity occurs between the hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and 7:00 a.m. and 6:00 p.m. during the months of October through May.

Per City of Jurupa Valley guidance, the daytime and nighttime 8-hour construction noise level standards are 80 dBA Leq and 70 dBA Leq, respectively. These standards are consistent with Federal Transit Administration (FTA) guidance for construction noise analysis.

County of San Bernardino General Plan Noise Element

The County of San Bernardino has adopted a general plan noise element to limit the exposure of the community to excessive noise levels. The most common sources of environmental noise in San Bernardino County are associated with roads, airports, railroad operations, and industrial activities. To address these noise sources, the following goals have been identified in the noise element:

- **N 1.** The County will abate and avoid excessive noise exposures through noise mitigation measures incorporated into the design of new noise-generating and new noise-sensitive land uses, while protecting areas within the County where the present noise environment is within acceptable limits.
- **N 1.5.** Limit truck traffic in residential and commercial areas to designated truck routes; limit construction, delivery, and through-truck traffic to designated routes; and distribute maps of approved truck routes to County traffic officers.
- **N 2.** The County will strive to preserve and maintain the quiet environment of mountain, desert, and other rural areas.

County of San Bernardino Noise Standards

Title 8 of the Development Code contains the noise level limits for mobile, stationary, and construction-related noise sources. Section 83.01.080(d), Table 83-3, contains the County's mobile noise source standards. Based on these standards, there are no exterior or interior noise level standards for the industrial warehouse use of the project and existing uses in the project study area. Exterior transportation (mobile) noise level standards for residential land uses in the project study area are shown to be up to 65 dBA CNEL with mitigation.

Operational Noise Standards

Section 83.01.080(c) of the County Development Code establishes the noise level standards for stationary noise sources. For residential properties, the exterior noise level shall not exceed 55 dBA Leq during daytime hours (7:00 a.m. to 10:00 p.m.) and shall not exceed 45 dBA Leq during the nighttime hours (10:00 p.m. to 7:00 a.m.) for both the whole hour, and for not more than 30 minutes in any hour. These standards shall apply for a cumulative period of 30 minutes in any hour, and the standard plus 5 dBA cannot be exceeded for a cumulative period of more than 15 minutes in any hour, or the standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour, or the standard plus 15 dBA for a cumulative period of more than 1 minute in any hour, or the standard plus 20 dBA for any period of time. Appendix 3.2 of the Noise Study (Appendix I) includes the County Code noise standards.

City of Rialto General Plan Safety and Noise Element

The safety and noise element establishes policies to guard against the creation of any new noise and land use conflicts, and to minimize the impact of existing noise sources on the community. The element does not contain specific transportation-related noise standards; however, it does provide land use compatibility guidelines for future development and the future noise contour boundaries for major roadways in Rialto. The "Rialto Noise Guidelines for Land Use Planning" matrix indicates that light industrial land uses, such as the project site, are considered normally acceptable with exterior noise levels below 70 dBA CNEL and conditionally acceptable with noise levels below 75 dBA CNEL. Noise-sensitive residential land uses are considered normally acceptable with exterior noise levels below 60 dBA CNEL and conditionally acceptable with noise levels below 65 dBA CNEL. For conditionally acceptable land uses, new development should be undertaken only after detailed analysis of noise reduction requirements.

City of Rialto Operational Noise Standards

The City of Rialto Municipal Code does not identify specific stationary-source exterior noise level standards. Therefore, to evaluate potential impacts at adjacent sensitive receiver, exterior noise level thresholds are based on the County of San Bernardino Development Code.

City of Riverside General Plan Noise Element

The City of Riverside adopted a noise element to identify noise conflicts and to reduce existing and potential noise impacts. The noise element contains objectives and policies to achieve and maintain noise levels compatible with various types of land uses. The "Noise/Land Use Noise Compatibility Criteria" in the noise element provides guidelines to evaluate the land use compatibility of transportation-related noise. Based on the land use noise compatibility categories, residential land use is considered normally acceptable with unmitigated exterior noise levels of less than 60 dBA CNEL and conditionally acceptable with noise levels approaching 65 dBA CNEL. Industrial land uses are considered normally acceptable with exterior noise levels approaching 70 dBA CNEL and conditionally acceptable with exterior noise level of up to 80 dBA CNEL. For conditionally acceptable land use, new construction or development should be undertaken only after a detailed analysis of noise reduction requirements, and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Vibration Standards

To analyze vibration impacts originating from the operation and construction of the Agua Mansa Commerce Park Specific Plan, vibration-generating activities are evaluated against standards identified by the City of Jurupa Valley as a threshold of 0.2 inches per second (in/sec) peak-particle velocity (PPV) during either long-term operation or construction of the project.

Agua Mansa Industrial Corridor Specific Plan

While the project is proposing to be removed from the Agua Mansa Industrial Corridor Specific Plan (AMICSP), the existing AMICSP document, prepared in July 1986, identifies development standards related to industrial uses. Page 4-16 of the AMICSP document indicates that residentially zoned property exterior noise

level standards are 55 dBA during daytime hours and 50 dBA during nighttime hours. While the daytime standard identified in the AMICSP is lower than the daytime threshold in guidance from the City of Jurupa Valley for the purpose of this analysis, the nighttime noise level threshold identified by the City's threshold guidance of 45 dBA Leq represents a more conservative threshold during the noise-sensitive nighttime hours at sensitive residential uses. The noise study by Urban Crossroads (2019) was prepared consistent with the City of Jurupa Valley's guidance for CEQA noise thresholds of significance and evaluates project noise level compliance based on the 2018 guidance received from the City of Jurupa Valley; therefore, it does not rely on the AMICSP standards.

5.11.1.3 EXISTING NOISE ENVIRONMENT

As part of Urban Crossroads' Agua Mansa Commerce Park Specific Plan Noise Impact Analysis, 24-hour noise level measurements were taken at 10 locations in the project study area. The receiver locations were selected to describe and document the existing noise environment in the project study area. Noise measurement locations are shown in Figure 5.11-1. Table 5.11-2 summarizes long-term measurements results.

Table 5.11-2 Noise Measurements along Local Roadways

Location	Jurisdiction	Distance to Project Boundary (feet)	Description	Energy Noise Level dBA L_{eq}		CNEL
				Daytime	Nighttime	
L1	County of SB	1,075	Located near existing residential homes northwest of the Project site.	61.6	59.1	66.2
L2	Jurupa Valley	40	Located near existing residential homes on El Rivino Road north of the Project site.	59.6	58.8	65.5
L3	County of SB	740	Located near existing residential homes on El Rivino Road northeast of the Project site.	60.8	58.1	65.3
L4	Jurupa Valley	170	Located on Agua Mansa Road east of the Project site near existing industrial uses.	70.6	70.7	77.3
L5	Jurupa Valley	2,290	Located on Wilson Street near an existing residential home and industrial uses.	63.7	62.4	69.1
L6	Jurupa Valley	80	Located on Agua Mansa Road south of the Project site near existing industrial uses.	71.4	70.1	76.9
L7	Jurupa Valley	3,000	Located on Hall Avenue near existing residential homes south of the Project site.	64.2	60.1	67.8
L8	Jurupa Valley	2,995	Located on 24th Street near Avalon Park south of the Project site.	62.3	60.2	67.1
L9	Jurupa Valley	925	Located on Andalusia Avenue west of the Project site near existing residential homes.	50.6	49.6	56.5
L10	Jurupa Valley	240	Located on Castellano Road west of the Project site near existing residential homes.	59.2	58.7	65.4

Notes: "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.; "SB" = San Bernardino

Figure 5.11-1 - Noise Measurement Locations

5. Environmental Analysis

Project Boundary

Noise Measurement Locations

0 1,400
Scale (Feet)

Source: Urban Crossroads, 2019

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On-Road Vehicles

Noise from motor vehicles is generated by engine vibrations, the interaction between tires and the road, and the exhaust system. Reducing the average motor vehicle speed reduces the noise exposure of receptors adjacent to the road. Each reduction of five miles per hour reduces noise by about 1.3 dBA.

In order to assess the potential for mobile-source noise impacts, it is necessary to determine the noise currently generated by vehicles traveling through the project area. Average daily traffic volumes were based on the existing daily traffic volumes provided by Urban Crossroads. The results of this modeling indicate that average noise levels along arterial segments currently range from approximately 58 dBA to 77 dBA CNEL as calculated at a distance of 50 feet from the centerline of the road. Interstate routes would have noise levels that range from 66 dBA to 82 dBA CNEL at the edge of the roadway. Noise levels for existing conditions along analyzed roadways are presented in Table 5.11-2.

5.11.2 Notice of Preparation / Scoping Comments

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of noise.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509 to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.11.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to noise are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would result in:

N-1 Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

N-2 Generation of excessive groundborne vibration or groundborne noise levels.

N-3 For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

City of Jurupa Valley

Chapter 11.05 of the City of Jurupa Valley Municipal Code sets stationary-source (operational) exterior noise limits for residential uses in the project study area of 55 dBA Leq for daytime hours of 7:00 a.m. to 10:00 p.m., and 45 dBA Leq during the noise-sensitive nighttime hours of 10:00 p.m. to 7:00 a.m. However, consistent with

guidance received from the City of Jurupa Valley, dated December 19th, 2018, this the noise study was prepared to evaluate potential impacts based on 65 dBA Leq daytime (7:00 a.m. to 10:00 p.m.), and 45 dBA Leq nighttime (10:00 p.m. to 7:00 a.m.) exterior noise level standards. The City of Jurupa Valley noise-related CEQA thresholds guidance is provided in Appendix 3.1 of the Noise Study (Appendix I).

Construction Thresholds

Based on the Federal Transit Administration (FTA 2018), Transit Noise and Vibration Impact Assessment Manual, construction noise is not to exceed 80 dBA Leq daytime (7:00 a.m. to 10:00 p.m.) and 70 dBA Leq nighttime (10:00 p.m. to 7:00 a.m.)

Transportation Noise Thresholds

Based on guidance dated December 19, 2018, provided by the City of Jurupa Valley, the following significance criteria is used to assess potential off-site traffic noise impacts at noise-sensitive uses:

- When the Project creates a noise increase of 3 dBA CNEL or greater at existing noise-sensitive land uses when increasing the without Project off-site traffic noise level to 65 dBA CNEL or above.
- When the Project creates a noise increase of 3 dBA CNEL or greater at existing and future commercial uses when increasing the without Project off-site traffic noise level to 70 dBA CNEL or above.

Stationary Thresholds

Stationary Noise Standards

For the purpose of this Noise Impact Analysis a threshold must be determined to evaluate the operational noise level increases related to the Project. As such, the criteria previously discussed and provided by the City of Jurupa Valley for off-site traffic noise is used with the equivalent noise level metrics to describe stationary-source noise levels at nearby sensitive uses and commercial uses, as follows:

- When the Project creates a 3 dBA Leq or greater operational (stationary-source) noise level increase at existing and future noise-sensitive land uses or commercial uses, increasing the noise level to 65 dBA Leq or above (City of Jurupa Valley guidance received December 19, 2018).

City of Rialto

The City of Rialto Municipal Code does not identify specific stationary-source exterior noise level standards. Therefore, to evaluate potential impacts at adjacent sensitive receiver locations per CEQA Guidelines, in Rialto, exterior noise level thresholds are identified based on the County of San Bernardino Development Code.

County of San Bernardino

The County of San Bernardino County Code, Title 8 Development Code, Section 83.01.080(c) establishes the noise level standards for stationary noise sources. For residential properties the exterior noise level shall not exceed 55 dBA Leq during daytime hours (7:00 a.m. to 10:00 p.m.) and shall not exceed 45 dBA Leq during the

nighttime hours (10:00 p.m. to 7:00 a.m.) for both the whole hour, and for not more than 30 minutes in any hour. These standards shall apply for a cumulative period of 30 minutes in any hour, and the standard plus 5 dBA cannot be exceeded for a cumulative period of more than 15 minutes in any hour, or the standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour, or the standard plus 15 dBA for a cumulative period of more than 1 minute in any hour, or the standard plus 20 dBA for any period of time. Appendix 3.2 of the Noise Study (Appendix I) includes the County Code noise standards.

Vibration Thresholds

Per the FTA criteria, the threshold for architectural damage for buildings with reinforced concrete, steel, or timber (i.e., concrete industrial buildings) is 0.5 in/sec PPV, and for buildings with non-engineered timber and masonry (i.e., residential buildings), the criterion is 0.2 in/sec PPV.

5.11.4 Applicable Policies and Design Features

5.11.4.1 PLANS, POLICIES, AND PROGRAMS

There are no plans, policies, or programs specific to noise. Applicable requirements are detailed under Regulatory Framework.

5.11.4.2 PROJECT DESIGN FEATURE

There are no applicable project design features related to noise.

5.11.5 Environmental Impacts

Impact N-1	**Threshold: Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Construction Noise Levels

Project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. Construction typically occurs in numerous stages. Construction stages for this project are: demolition, site preparation, grading, building construction, paving, and architectural coating.

This construction noise analysis was prepared using reference noise level measurements taken by Urban Crossroads (see Appendix I) to describe the typical construction activity noise levels for each stage of project construction. The construction reference noise level measurements represent a list of typical construction activity noise levels. Noise levels generated by heavy construction equipment can range from approximately 68 dBA to more than 80 dBA when measured at 50 feet. However, these noise levels diminish with distance from the construction site at a rate of 6 dBA per doubling of distance. For example, a noise level of 80 dBA measured at 50 feet from the noise source to the receiver would be reduced to 74 dBA at 100 feet, and to 68 dBA at 200

feet. The construction stages used in this analysis are consistent with the air quality impact analysis prepared for the project by Urban Crossroads (see Section 5.2, *Air Quality*, of this DEIR).

The project construction noise level impacts at the nearby sensitive receiver locations as shown on Figure 5.11-2, were calculated using the reference construction equipment noise levels. Table 5.11-3 provides a summary of the construction noise levels by stage at the nearby noise-sensitive receiver locations, and Table 5.11-4 provides a daytime and nighttime noise levels summary. Based on the stages of construction, the noise impacts associated with the proposed project are expected to create temporarily high noise levels at the nearby receiver locations. To assess the worst-case construction noise levels, this analysis shows the highest noise impacts when the equipment with the highest reference noise level is operating at the closest point from primary construction activity to each receiver location.

Table 5.11-3 Unmitigated Construction Equipment Noise Level Summary (dBA Leq)

Receiver Location[1]	Construction Noise Levels by Stage						
	Demolition	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Construction Noise Level[2]
R1	62	62	62	50.6	54	49.9	62
R2	69	69	69	57.6	61	56.9	69
R3	62.8	62.8	62.8	51.4	54.8	50.7	62.8
R4	57.6	57.6	57.6	46.2	49.6	45.5	57.6
R5	46.3	46.3	46.3	34.9	38.4	34.2	46.3
R6	43.8	43.8	43.8	32.4	35.8	31.7	43.8
R7	46.6	46.6	46.6	35.2	38.6	34.5	46.6
R8	54.3	54.3	54.3	42.9	46.3	42.2	54.3
R9	58.2	58.2	58.2	46.8	50.3	46.1	58.2
R10	70.2	70.2	70.2	58.8	62.2	58.1	70.2

[1] Noise receiver locations are shown on Figure 5.11-2.
[2] Estimated construction noise levels during peak operation conditions.

Table 5.11-4 Unmitigated Daytime and Nighttime Construction Equipment Noise Level Summary (dBA L_{eq})

Receiver Location[1]	Construction Noise Levels by Stage	
	Highest Daytime Construction Noise Levels	Nighttime Construction Noise Levels (Concrete Pours)
R1	62	54
R2	69	61
R3	62.8	54.8
R4	57.6	49.6
R5	46.3	38.4
R6	43.8	35.8
R7	46.6	38.6
R8	54.3	46.3
R9	58.2	50.3
R10	70.2	62.2

[1] Noise receiver locations are shown in Figure 5.11-2.

The highest construction noise levels at the potentially impacted receiver locations will satisfy the City of Jurupa Valley 80 dBA Leq daytime and 70 dBA Leq nighttime thresholds during temporary project construction activities. The noise impact due to unmitigated project construction noise levels is, therefore, less than significant.

Operational Stationary Noise

To analyze noise impacts originating from a designated fixed location or private property such as the proposed project site, stationary-source (operational) noise—such as the expected roof-top air conditioning units, idling trucks, delivery truck activities, backup alarms, as well as loading and unloading of dry goods, and parking lot vehicle movements—is typically evaluated against standards established under a city's municipal code. Although the project site is in the City of Jurupa Valley, sensitive receivers are also located in the adjacent jurisdiction of the County of San Bernardino (north). Therefore, to accurately describe the potential operational (stationary-source) noise levels, this analysis presents the appropriate operational (stationary source) noise standards for each of the noise-sensitive receiver locations within their respective jurisdictions.

To estimate the project operational (stationary-source) noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed project. Projected noise levels assume the worst-case noise environment—with the roof-top air conditioning units, idling trucks, delivery truck activities, backup alarms, loading and unloading, parking lot vehicle movements, and regional park activities all operating simultaneously. These noise level impacts will likely vary throughout the day. Reference noise level measurements can be found in Appendix I. Project plus ambient noise levels are predicted to remain below 65 dBA Leq, and the project daytime operational (stationary-source)

noise level increase of up to 0.3 dBA Leq and nighttime operational (stationary-source) noise level increase of up to 0.3 dBA Leq are below the 3 dBA Leq threshold, therefore resulting in a less than significant impact.

Traffic Noise

To assess the off-site transportation CNEL noise level impacts associated with the proposed project, noise contours were developed based on the traffic analysis in DEIR Appendix K. Noise contour boundaries represent equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise contours were developed for both development scenarios as described in Chapter 3, *Project Description:*

- **Alternative 1.** 200,000 square feet (SF) business park, no retails, up to 64,000 SF research and development, and 70.9 acre open space area.
- **Alternative 2.** 150,000 SF business park, 25,000 SF retail, up to 64,000 SF research and development, and 70.9 acre open space area.

Each of these alternatives were also evaluated with an optional circulation plan (noted as 1A and 2A). Under the optional circulation plan, connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard would not be possible. This is in the event that access across the railroad spur line is not granted. Trip distribution for the project would then be altered slightly relative to the proposed plan.

The developed noise contours represent the following scenarios:

- Existing Without / With Alternative 1 / With Alternative 1A / With Alternative 2 / With Alternative 2A:
  - This scenario refers to the existing noise conditions, without and with the proposed project.
- Opening Year 2020 Without / With Alternative 1 / With Alternative 1A / With Alternative 2 / With Alternative 2A:
  - This scenario refers to the background noise conditions in Year 2020 without and with the proposed project plus ambient growth. This scenario corresponds to Year 2020 conditions and includes all cumulative projects identified in the traffic impact analysis.
- Year 2035 Without / With Alternative 1 / With Alternative 1A / With Alternative 2 / With Alternative 2A:
  - This scenario below refers to the background noise conditions at future Year 2035 without and with the proposed Project plus ambient growth. This scenario corresponds to Year 2035 conditions and includes all cumulative projects identified in the traffic impact analysis.

Figure 5.11-2 - Sensitive Receiver Locations

5. Environmental Analysis

Project Boundary

Receiver Locations

Distance from Receiver to Project Site Boundary (in feet)

0 1,400
Scale (Feet)

Source: Urban Crossroads, 2019

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Existing Plus Project Traffic Noise

The Existing plus Project traffic noise levels have been analyzed, but this scenario would not actually occur since the project would not be fully constructed and operational until Opening Year 2020. The Existing without Project exterior noise levels are expected to range from 68.2 to 79.5 dBA CNEL along roadways study segments, without accounting for any noise attenuation features such as noise barriers or topography (see Table 7-1 of Appendix I).

The traffic noise level increase due to the project over existing conditions would be the same for each alternative development scenario (1, 1A, 2, and 2A). The existing plus project noise level would

would range from 68.6 to 79.9 dBA CNEL. The project-related noise level increase would range from 0.0 to 3.1 dBA CNEL.

Opening Year 2020 Project Traffic Noise Level Contributions

The Opening Year 2020 without Project exterior noise levels are expected to range from 69.4 to 80.2 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography.

Opening Year 2020 with Project Alternative 1 Off-Site Traffic Noise Level Increase

Opening Year 2020 with Project Alternative 1 conditions will range from 69.7 to 80.6 dBA CNEL. Project Alternative 1 off-site traffic noise level increases will range from 0.0 to 2.3 dBA CNEL. Based on the significance criteria, the land uses adjacent to the study-area roadway segments would experience a less than significant impact.

Opening Year 2020 With Project Alternative 1A Off-Site Traffic Noise Level Increases

Opening Year 2020 with Project Alternative 1A conditions will range from 69.7 to 80.6 dBA CNEL. Project Alternative 1A off-site traffic noise level increases will range from 0.0 to 3.2 dBA CNEL. The 3.2 dBA CNEL increase is at a non-sensitive land use. Based on the significance criteria, the land uses adjacent to the study-area roadway segments would experience a less than significant impact.

Opening Year 2020 With Project Alternative 2 Off-Site Traffic Noise Level Increases

Opening Year 2020 with Project Alternative 2 conditions will range from 69.7 to 80.5 dBA CNEL. Project Alternative 2 off-site traffic noise level increases will range from 0.0 to 2.3 dBA CNEL. Based on the significance criteria the land uses adjacent to the study-area roadway segments would experience a less than significant impact.

Opening Year 2020 With Project Alternative 2A Off-Site Traffic Noise Level Increases

Project Alternative 2A conditions will range from 69.7 to 80.5 dBA CNEL. Project Alternative 2A off-site traffic noise level increases will range from 0.0 to 3.5 dBA CNEL. Based on the significance criteria, the land uses adjacent to the study-area roadway segments would experience a less than significant impact.

Opening Year 2035 Project Traffic Noise Level Contributions

Year 2035 With Project Alternative 1 Off-Site Traffic Noise Level Increase

Year 2035 with Project Alternative 1 conditions will range from 69.7 to 81.1 dBA CNEL. Project Alternative 1 off-site traffic noise level increases will range from 0.0 to 2.2 dBA CNEL. Based on the significance criteria, the land uses adjacent to the study-area roadway segments would result in a less than significant impact.

Year 2035 With Project Alternative 1A Off-Site Traffic Noise Level Increases

Year 2035 with Project Alternative 1A conditions will range from 69.7 to 81.1 dBA CNEL. Project Alternative 1A off-site traffic noise level increases will range from 0.0 to 3.0 dBA CNEL. Based on the significance criteria, the land uses adjacent to the study-area roadway segments would result in a less than significant impact.

Year 2035 With Project Alternative 2 Off-Site Traffic Noise Level Increases

Year 2035 with Project Alternative 2 conditions will range from 69.7 to 81.1 dBA CNEL. Project Alternative 2 off-site traffic noise level increases will range from 0.0 to 2.1 dBA CNEL. Based on the significance criteria, the land uses adjacent to the study-area roadway segments would result in a less than significant impact.

Year 2035 With Project Alternative 2A Off-Site Traffic Noise Level Increases

Year 2035 with Project Alternative 2A conditions will range from 69.7 to 81.1 dBA CNEL. Project Alternative 2A off-site traffic noise level increases will range from 0.0 to 3.2 dBA CNEL. Based on the significance criteria, the land uses adjacent to the study-area roadway segments would result in a less than significant impact.

Level of Significance before Mitigation: Less than significant.

Impact N-2	**Threshold: Would the project generate excessive groundborne vibration or groundborne noise levels?**

This analysis focuses on the potential ground-borne vibration associated with vehicular traffic and construction activities. Ground-borne vibration levels from automobile traffic are generally overshadowed by vibration generated by heavy trucks that roll over the same uneven roadway surfaces. However, due to the rapid drop-off rate of ground-borne vibration and the short duration of the associated events, ground-borne vibration from vehicular traffic is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity.

However, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used. Ground vibration levels associated with various types of construction equipment are summarized on Table 5.11-5. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the human response (annoyance) using the following vibration assessment methods defined by the FTA. To describe the human response (annoyance) associated with vibration impacts, the FTA provides the following equation: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

Table 5.11-5 Normally Compatible Community Vibration Levels

Equipment	PPV (in/sec) at 25 feet
Small Bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large Bulldozer	0.089
Vibratory Roller	0.21

Source: Federal Transit Administration (FTA), Transit Noise and Vibration Impact Assessment, September 2018.

Operational Vibration

To assess the potential vibration impacts from truck haul trips associated with operational activities, the City of Jurupa Valley threshold for vibration of 0.2 in/sec PPV is used. Truck vibration levels are dependent on vehicle characteristics, load, speed, and pavement conditions. Typical vibration levels for the Agua Mansa Commerce Park Specific Plan heavy truck activity at normal traffic speeds will approach 0.004 in/sec PPV and 0.003 in/sec RMS at 25 feet based on the FTA's Transit Noise Impact and Vibration Assessment (2018). Trucks on site will be travelling at very low speeds so it is expected that delivery truck vibration impacts at nearby homes would not exceed the 0.2 in/sec PPV threshold, and therefore, would result in a less than significant impact.

Level of Significance before Mitigation: Less than significant.

Impact N-3 Threshold: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The closest airports to the project site are Flabob Airport and Riverside Municipal Airport approximately 3 and 6.5 miles southwest of the site, respectively. Given the distance, the project site is not located within the airport land use plan of either Flabob or Riverside Municipal Airports.

Level of Significance before Mitigation: Impact N-3 will cause no impact.

5.11.6 Cumulative Impacts

If the construction of the project were to overlap with related projects in the project site vicinity, noise could combine to result in significant cumulative impacts. However, the closest planned and approved construction project (Market Street Commercial) is over 4,000 feet from the project. At this distance, cumulative impacts would be no greater than those described in Impact N-1. Therefore, the project would not contribute to a significant cumulative noise impact from construction noise.

A significant cumulative traffic noise increase would be identified if project traffic were calculated to contribute 3 dBA or more under Year 2035 With Project conditions to a significant traffic noise increase over Year 2035 Without Project conditions. As shown in the noise impact analysis in Appendix I, cumulative traffic noise increase is projected to be:

- Year 2035 With Project Alternative 1
  - 2.2 dBA CNEL increase at nearest sensitive land use.
- Year 2035 With Project Alternative 1A
  - 3.0 dBA CNEL increase, however that is at a nonsensitive land use.
  - A 2.2 dBA CNEL increase at nearest sensitive land use.
- Year 2035 With Project Alternative 2
  - 2.1 dBA CNEL increase at nearest sensitive land use.
- Year 2035 With Project Alternative 2A
  - 3.2 dBA CNEL, however that is at a nonsensitive land use.
  - A 2.2 dBA CNEL increase at nearest sensitive land use.

None of the cumulative alternative scenarios result in a 3 dB or more increase at the nearest sensitive land uses; therefore this impact would be less than significant.

5.11.7 Level of Significance Before Mitigation

Impact N-3 will cause no impact.

Upon implementation of regulatory requirements, the following impacts would be less than significant: N-1, and N-2

5.11.8 Mitigation Measures

No mitigation is required.

5.11.9 Level of Significance After Mitigation

All impacts would be less than significant.

5.11.10 References

Urban Crossroads. 2019, January 28. Agua Mansa Commerce Park Specific Plan Noise Impact Analysis City of Jurupa Valley.

5.12 POPULATION AND HOUSING

This section of the Draft Environmental Impact Report (DEIR) examines the potential for socioeconomic impacts of the Agua Mansa Commerce Park Specific Plan project (proposed project) including changes in population, employment, and housing.

5.12.1 Environmental Setting

5.12.1.1 REGULATORY BACKGROUND

State

California Housing Element Law

California planning and zoning law requires each city and county to adopt a General Plan for future growth (California Government Code § 65300). This plan must include a housing element that identifies housing needs for all economic segments and provides opportunities for housing development to meet that need. At the state level, the Housing and Community Development Department (HCD) estimates the relative share of California's projected population growth that would occur in each county based on California Department of Finance population projections and historical growth trends. These figures are compiled by HCD in a Regional Housing Needs Assessment (RHNA) for each region of California. Where there is a regional council of governments, the HCD provides the RHNA to the council. The council then assigns a share of the regional housing need to each of its cities and counties. The process of assigning shares gives cities and counties the opportunity to comment on the proposed allocations. The HCD oversees the process to ensure that the council of governments distributes its share of the state's projected housing need.

State law recognizes the vital role local governments play in the supply and affordability of housing. To that end, California Government Code requires that the housing element achieve legislative goals to:

- Identify adequate sites to facilitate and encourage the development, maintenance, and improvement of housing for households of all economic levels, including persons with disabilities.
- Remove, as legally feasible and appropriate, governmental constraints to the production, maintenance, and improvement of housing for persons of all incomes, including those with disabilities.
- Assist in the development of adequate housing to meet the needs of low and moderate income households.
- Conserve and improve the condition of housing and neighborhoods, including existing affordable housing. Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability.
- Preserve for lower income households the publicly assisted multifamily housing developments in each community.

California housing element laws (Government Code Sections 65580 to 65589) require that each city and county identify and analyze existing and projected housing needs in its jurisdiction and prepare goals, policies, and programs to further the development, improvement, and preservation of housing for all economic segments of the community, commensurate with local housing needs.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) represents Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. It is a regional planning agency and serves as a forum for addressing regional issues concerning transportation, the economy, community development, and the environment.

Regional Transportation Plan/Sustainable Communities Strategy

On April 7, 2016, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). SCAG has placed a greater emphasis than ever on sustainability and integrated planning, and the RTP/SCS vision encompasses three principles that collectively work as the key to the region's future: mobility, economy, and sustainability. The RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the California and National Ambient Air Quality Standards. It provides a blueprint for improving quality of life for residents by providing more choices for where they will live, work, and play and how they will move around (SCAG 2016).

5.12.1.2 EXISTING CONDITIONS

Population

The population of the City of Jurupa Valley and Riverside County from the 2000 and 2010 U.S. Census and the 2017 California Department of Finance estimates are shown in Table 5.12-1. Note that the City of Jurupa Valley was incorporated in July 2011; before that it was part of unincorporated Riverside County. Thus, no population data is available for Jurupa Valley from the 2000 and 2010 U.S. Census.

Table 5.12-1 City of Jurupa Valley and Riverside County Population, 2000–2016

	2000	2010	2017	Change, 2000–2017	Percent Change, 2000–2017
City of Jurupa Valley	—	—	101,315	–	–
Riverside County	1,545,387	2,189,641	2,384,783	839,396	54.3%

Sources: U.S. Census 2000, 2010; DOF 2017.

There are no existing dwelling units onsite; thus no residents live within the Specific Plan area.

Population Forecast

Taking into account a combination of recent and past trends, technical assumptions, and local or regional growth policies, SCAG is able to generate regional growth forecasts for counties and their cities. SCAG's population forecast for 2040 for the City of Jurupa Valley and Riverside County are shown in Table 5.12-2 and compared to 2010 and 2012 populations. SCAG's forecast shows the City growing at a much slower pace than Riverside County overall.

Table 5.12-2 City of Jurupa Valley and Riverside County Population Forecast

	2010	2012	2040	Change, 2012–2040	Percent Change, 2012–2040
City of Jurupa Valley	—	97,000	114,500	17,500	18.0%
Riverside County	2,189,641	2,245,100	3,183,700	938,600	41.8%

Source: SCAG 2016.

Housing

Estimated available housing, including unit type characteristics, in the City of Jurupa Valley and Riverside County is detailed in Table 5.12-3.

Table 5.12-3 City of Jurupa Valley and Riverside County Housing Units

Housing Unit Type	City of Jurupa Valley	Riverside County
Single-Family Detached	21,316	569,146
Single-Family Attached	1,026	51,672
Multi-Family	3,237	134,372
Mobile Homes	1,967	79,462
Total	**27,546**	**834,652**
Average Household Size	3.94	3.25
Vacancy Rate	7.5%	14.0%

Source: DOF 2017.

There are no existing dwelling units onsite.

Regional Housing Needs Assessment

The RHNA is mandated by state housing law as part of the periodic process of updating housing elements of local general plans. State law requires that housing elements identify RHNA targets set by HCD to encourage each jurisdiction in the state to provide its fair share of very low, low, moderate, and above moderate income housing. The RHNA does not promote growth, but provides a long-term outline for housing in the context of local and regional trends and housing production goals.

SCAG determines total housing need for each community in southern California based on three general factors: 1) the number of housing units needed to accommodate future population and employment growth; 2) the

number of additional units needed to allow for housing vacancies; and 3) the number of very low, low, moderate, and above moderate income housing units needed in the community. Additional factors include tenure, the average rate of units needed to replace housing units demolished, and other factors.

The City of Jurupa Valley's RHNA allocation for the 2014–2021 period is shown in Table 5.12-4. The City is required to ensure that sufficient sites are planned and zoned for housing and available to accommodate its need, and to implement proactive programs that facilitate and encourage the production of housing commensurate with its housing needs.

Table 5.12-4 City of Jurupa Valley RHNA Allocation, 2014–2021

Household Income Category	Target (Units)
Extremely Low Income	204
Very Low Income	205
Low Income	275
Moderate Income	307
Above Moderate Income	721
Total	**1,712**

Source: Jurupa Valley 2017.

Housing Forecast

SCAG forecasts the number of households in the City of Jurupa Valley to increase by 5,400 units between 2012 and 2040, as shown in Table 5.12-5. Household forecasts for Riverside County are provided as a comparison.

Table 5.12-5 City of Jurupa Valley and Riverside County Households Forecast

	2012	2040	Change, 2012–2040	Percent Change, 2012–2040
City of Jurupa Valley	25,000	30,400	5,400	21.6%
Riverside County	694,400	1,048,500	354,100	51.0%

Source: SCAG 2016.

Employment

Based on the U.S. Census 2011–2015 American Community Survey 5-Year Estimate, there are 39,907 workers in the City of Jurupa Valley and 920,603 workers in Riverside County (Census 2015). The Riverside Cement Plant ceased operations in 2014, and there are no employees onsite.

Employment Projections

SCAG employment projections for the City of Jurupa Valley and Riverside County for 2040 are shown in Table 5.12-6. Note that Riverside County is anticipated to have a substantial increase in workforce between 2012 and 2040.

Table 5.12-6 City of Jurupa Valley and Riverside County Employment Projections

	2012	2040	Change, 2012–2040	Percent Change, 2012–2040
City of Jurupa Valley	24,500	32,600	8,100	33.1%
Riverside County	616,700	1,174,300	557,600	90.4%

Source: SCAG 2016.

Jobs-Housing Balance

The jobs-housing ratio is a general measure of the total number of jobs and housing units in a defined geographic area, without regard to economic constraints or individual preferences. The balance of jobs and housing in an area—in terms of the total number of jobs and housing units as well as the type of jobs versus the price of housing—has implications for mobility, air quality, and the distribution of tax revenues. The jobs/housing ratio is one indicator of the project's effect on growth and quality of life in the project area.

SCAG applies the jobs-housing ratio at the regional and subregional levels to analyze the fit between jobs, housing, and infrastructure. A major focus of SCAG's regional planning efforts has been to improve this balance. Jobs-housing goals and ratios are advisory only. No ideal jobs-housing ratio is adopted in state, regional, or city policies. The American Planning Association (APA) is an authoritative resource for community planning best practices, including recommendations for assessing jobs-housing ratios. Although the APA recognizes that an ideal jobs-housing ratio will vary from jurisdiction to jurisdiction, its recommended target for an appropriate jobs-housing ratio is 1.5, with a recommended range of 1.3 to 1.7 (Weltz 2003).

As shown in Table 5.12-7, the jobs-housing ratio in Jurupa Valley is forecast to become more balanced between 2012 and 2040, from 0.98 to 1.07. The jobs-housing ratio in Riverside County is estimated to increase from 0.89 to 1.12 during the same period and would also become more balanced.

Table 5.12-7 Jobs-Housing Balance

	Year	Employment	Households	Jobs-Housing Ratio
Jurupa Valley	2012	24,500	25,000	0.98
	2040	32,600	30,400	1.07
Riverside County	2012	616,700	694,400	0.89
	2040	1,174,300	1,048,500	1.12

Source: SCAG 2016.

5.12.2 Notice of Preparation (NOP)/Scoping Comments

A Notice of Preparation (NOP) for the proposed Project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of population and housing.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.12.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to population and housing are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

P-1 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).

P-2 Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

5.12.4 Applicable Policies and Design Features

5.12.4.1 PLANS, POLICIES, AND PROGRAMS

No existing PPPs are applicable to population and housing impacts of the proposed project.

5.12.4.2 PROJECT DESIGN FEATURES

No existing PDFs are applicable to population and housing impacts of the proposed project.

5.12.5 Environmental Impacts

The following impact analysis addresses thresholds of significance that are considered to have potentially significant impacts.

Impact P-1	**Threshold: Would the project induce substantial population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

The proposed project does not include any residential development that may increase the amount of housing and the number of residents in Jurupa Valley. Therefore, no direct impact would occur related to population and housing. Project-related infrastructure improvement would be provided to mitigate site specific impacts. The Project does not propose to extend public roads, or to install any on-site or offsite infrastructure facilities that would be oversized or constructed to accommodate other businesses or homes. Improvements would not increase public utility infrastructure capacity or extend roadways that would induce housing and population growth.

Under Alternative 1 (no retail), the proposed project would introduce approximately 965 jobs, and under Alternative 2 (retail overlay), the project would generate approximately 953 jobs at full buildout (see Table 5.12-8).

Table 5.12-8 Estimated Employment at Specific Plan Buildout

Land Use	Buildout	Employment Generation Factor[1]	Employees
Alternative 1 (Retail Overlay)			
Industrial Park	4,216,000 SF	1 per 5,000 SF	844
Business Park with Retail Overlay	200,000 SF	1 per 2,000 SF	100
Research and Development[2]	41,000 SF	1 per 2,000 SF	21
Open Space	70.9 acres	0	0
		Total	**965**
Alternative 2 (No Retail)			
Industrial Park	4,216,000 SF	1 per 5,000 SF	844
Business Park with Retail Overlay	150,000 SF	1 per 2,000 SF	75
Research and Development[2]	41,000 SF	1 per 2,000 SF	13
Retail	25,000 SF	1 per 2,000	21
Open Space	70.9 acres	0	0
		Total	**953**

1 Employment generation factors were obtained from the Utility Report prepared by Langan (see Appendix L of this DEIR).
2 It should be noted that only 41,000 SF of the 64,000 SF for research and development are included in this analysis since 23,000 SF already exist on-site and are not associated with the addition of employees.

Based on SCAG's employment forecasts, the City of Jurupa Valley is anticipated to increase employment by 8,100 jobs between 2012 and 2040 (see Table 5.12-5 and 5.12-7). The increase in jobs generated by the project under Alternative 1 (no retail) and Alternative 2 (retail overlay) are both within SCAG's employment forecast for Jurupa Valley. Thus, impacts to employment growth would be less than significant.

Additionally, buildout of the proposed project would also improve the City's jobs-housing balance by adding up to 965 jobs, thus increasing the City's jobs-housing balance from 1.07 to 1.10 by 2040.

Overall, no impacts would occur to population and housing, and impacts to employment and jobs-housing balance would be beneficial and less than significant.

Level of Significance before Mitigation: Impact P-1 would be less than significant.

Impact P-2 Threshold: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The project site is currently occupied by the closed Riverside Cement plant and quarry. There is no existing housing, and no residents live onsite. Therefore, development in accordance with the Specific Plan would not displace any housing or people that may necessitate the construction of replacement housing elsewhere.

Level of Significance before Mitigation: Impact P-2 will cause no impact.

5.12.6 Cumulative Impacts

Cumulative population and housing impacts are assessed relative to the City of Jurupa Valley General Plan buildout assumptions and SCAG's RTPS/SCS population, housing, and employment projections. SCAG provides projections for net increases in population, housing, and employment in the City of Jurupa Valley and Riverside County (see Table 5.12-5 and 5.12-7). Development activity in the City includes residential, commercial, and industrial/warehousing projects (see Table 4.1 in Section 4.0, *Environmental Setting*). Most of the proposed development is consistent with the City of Jurupa Valley's General Plan and would therefore be expected to be consistent with SCAG's growth projections.

Population, Housing, and Employment

The Avalon Court and Emerald Ridge projects, which have been approved by the City, would add 1,363 dwelling units. The New Rio Vista Specific Plan, which is being processed, would add 1,299 dwelling units. Assuming an average household size of 3.94, a cumulative population increase of 10,488 is anticipated. This is within the population projection of 17,500 for the City of Jurupa Valley (see Table 5.12-2).

The proposed Specific Plan would not directly result in an increase of population or housing; thus it would not cumulatively contribute to an increase in population or housing growth in Jurupa Valley.

Anticipated commercial projects include the Market Street Commercial shopping center and the RCSD Headquarters. Using the employment generation factors in Table 5.12-8, these two projects would create 24 jobs.[1] Additionally, industrial projects totaling 18 acres are approved or pending approval by the City. A total of 157 jobs would be generated from these industrial/warehouse projects.[2]

The proposed project and pending and approved projects in the City of Jurupa Valley would generate up to 1,145 new jobs. Based on SCAG's employment forecasts, the City of Jurupa Valley is projected to increase employment by 8,100 jobs between 2012 and 2040 (see Tables 5.12-5 and 5.12-7). The cumulative increase in jobs would be within SCAG's employment forecast for Jurupa Valley. Thus, cumulative impacts to employment growth would be less than significant.

5.12.7 Level of Significance Before Mitigation

- Impact P-1 would be less than significant.
- Impact P-2 would have no impact.

[1] An employment generation rate of 1 employee to 2,000 SF was used. The total square footage of commercial is 47916 SF (1.1 acres).

[2] An employment generation rate of 1 employee to 5,000 SF was used. The total square footage of industrial/warehousing is 784,040 SF (18 acers).

5.12.8 Mitigation Measures

No mitigation measures are required.

5.12.9 Level of Significance After Mitigation

Impacts would be less than significant.

5.12.10 References

California Department of Finance (DOF). 2017, May. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2017 with 2010 Census Benchmark. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.

Langan Engineering and Environmental Services, Inc. 2017, August 18. Utility Report for Agua Mansa Commerce Park, Jurupa Valley, California.

Southern California Association of Governments (SCAG). 2016, April. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf.

US Census Bureau (Census). 2000. Riverside County: Profile of General Demographic Characteristics: 2000. Census 2000 Summary File 1 (SF 1) 100-Percent Data.

———. 2010. Riverside County: Profile of General Demographic Characteristics: 2010. Census 2010 Summary File 1 (SF 1) 100-Percent Data.

Weltz, Jerry. 2003. Jobs-Housing Balance. Planning Advisory Service Report Number 516. American Planning Association.

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5.13 PUBLIC SERVICES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts to fire protection, emergency services and police protection services, school services, and library services in the City of Jurupa Valley from implementation of the Agua Mansa Commerce Park Specific Plan project (proposed project). The analysis in this section is based, in part, on service provider questionnaire responses, included as Appendix J of this DEIR. Park services are addressed in Section 5.14, *Recreation*. Public and private utilities and service systems, including water, wastewater, and solid waste services and systems, are addressed in Section 5.17, *Utilities and Service Systems*.

5.13.1 Fire Protection and Emergency Services

The information in this section is based partly on a written service questionnaire response by Dexter Galang, Fire Facilities Planner, Riverside County Fire Department, dated September 14, 2017. A copy of this response is included in Appendix J of this DEIR.

5.13.1.1 ENVIRONMENTAL SETTING

Regulatory Background

International Fire Code

The International Fire Code is a model code regulating minimum fire-safety requirements for new and existing buildings, facilities, storage, and processes. The code includes specialized, technical, fire- and life-safety regulations, with topics addressing fire-department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, use and storage of hazardous materials, protection of emergency responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings.

State

California Fire Code

The California Fire Code (CFC; Title 24 California Code of Regulations, Part 9) is based on the 2015 International Fire Code and includes amendments from the State of California fully integrated into the code. The California Fire Code has fire safety–related building standards that are referenced in other parts of Title 24 of the California Code of Regulations. Fire access road requirements are set forth in CFC Section 503; water supply requirements for fire flow are set forth in CFC Appendix B; and fire hydrant spacing requirements are in CFC Appendix C. The current 2016 CFC took effect in January 2017; the CFC is updated on a three-year cycle.

California Health and Safety Code Sections 13000 et seq.

Sections 13000 et seq. of the California Health and Safety Code include regulations for building standards (also in the California Building Code), fire-protection and -notification systems, fire-protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire-suppression training.

Local

City of Jurupa Valley Municipal Code

The California Fire Code is adopted, with certain amendments, by the City of Jurupa Valley in Chapter 8.10 of the City's Municipal Code.

Riverside County Fire Protection and Emergency Medical Master Plan

The Rubidoux Community Service District is under contract with the Riverside County Fire Department (RCFD) and the California Department of Forestry and Fire Protection (CAL FIRE) to receive fire protection services.

The County of Riverside adopted the Riverside County Fire Protection and Emergency Medical Master Plan in 1987. General Plan Policy CSSF 1.28, Fire Protection Master Plan, states: "Continue to utilize the Riverside County Fire Protection Master Plan and Jurupa Emergency Response Plan as the base documents to implement the goals and objectives of the Community Safety Element."

According to the adopted Riverside County Fire Protection Master Plan (1987), the standard for the establishment of a new fire station is the development of 2,000 dwelling units or 3.5 million square feet of commercial or industrial uses (RCFD 2009). The Fire Department is currently meeting this standard (Emerald Ridge DEIR 2016). Replacement of the 1987 Master Plan is underway, and this update process is being guided by the Riverside County Fire Department Strategic Plan (RCFD 2009). According to the Riverside County Fire Department Strategic Master Plan 2009-2029 a Standards of Cover document will be adopted in the future (RCFD 2009). The Fire Protection and Emergency Medical Master Plan established fire response criteria throughout the County and divided the County into four designation areas: "Heavy Urban," "Urban," "Rural," and "Outlying." Based on the definitions for these designations provided in the Fire Protection and Emergency Medical Master Plan, the project would be considered "Urban-Category II." This classification requires a fire station to be within three roadway miles of all areas of the project, with a full first-alarm assignment team operating on the scene of a fire within 15 minutes of dispatch.

Existing Conditions

The California Department of Forestry and Fire Protection/Riverside County Fire Department (CAL FIRE/RCFD) provide fire and emergency services to the Rubidoux Community Service District. The Specific Plan area is currently outside of the Rubidoux Community Service District's service area; however, the site's surrounding uses are served by Rubidoux Community Service District. The annexation of the project site into the Rubidoux Community Service District's fire service area is currently under review with the Riverside County Local Agency Formation Commission (LAFCO).

Stations, Staffing and Equipment

As shown on Figure 5.13-1, *Fire and Police Services*, CAL FIRE/RCFD has four local fire stations in Jurupa Valley, with the closest being the Rubidoux Fire Station 38 approximately two miles southwest of the project site (see Table 5.13-1). The Rubidoux Station 38 would be the first station to respond to any calls for service at the project site.

Table 5.13-1 CAL FIRE/RCFD Fire Stations in Jurupa Valley

Fire Station	Equipment	Staffing	Distance to Project Site
Pedley Station 16 9270 Limonite Avenue Jurupa Valley, CA 92509	Type 1 Engine	• 3-person crew providing Paramedic Service	6.5 miles west
Glen Avon Station 17 10400 San Sevaine Way Jurupa Valley, CA 91752	Type 1 Engine Urban Search Rescue Water Rescue Aerial Truck	• 3-person crew providing Paramedic Service on Engine • 2-person crew providing Paramedic Service on Urban Search Rescue • 4-person crew providing Paramedic Service on Aerial Truck	7.1 miles west
West Riverside Station 18 7545 Mission Boulevard Jurupa Valley, CA 92509	Type 1 Engine Type 3 Engine Medic Squad	• 3-person crew providing Paramedic Service on Engines • 2-person crew providing Paramedic Service on Medic Squad	3.5 miles west
Rubidoux Station 38 5721 Mission Boulevard Jurupa Valley, CA 92509	Type 1 Engine	• 3-person crew providing Paramedic Service	2 miles southwest

Source: Galang 2017.

Call Statistics and Response Times

According to the RCFD 2016 Annual Report, there were a total of 10,342 calls for service, averaging 28.3 responses per day in Jurupa Valley. Table 5.13-2 shows the 2016 emergency responses based on call types; the majority of the emergency responses (72.5 percent) were for medical aid.

Table 5.13-2 City of Jurupa Valley Call Statistics (2016)

Call Types	Number of Calls	Percentage of Total
Commercial Fire	11	0.1%
False Alarms	735	7.1%
Hazardous Materials	35	0.3%
Medical	7,502	72.5%
Multifamily Dwelling Fire	3	0.0%
Other Fire/Miscellaneous	166	1.6%
Public Service Assistance	365	3.5%
Residential Fire	23	0.2%
Rescue	3	0.0%
Standby	210	2.0%
Traffic Collision	1,149	11.1%
Vehicle Fire	71	0.7%
Wildland Fire	52	0.5%
TOTAL	**10,342**	**100.0%**

Source: Riverside County Fire Department/ CAL FIRE 2016 Annual Report.

More specifically, Rubidoux Station 38 had 2,923 calls for service in 2016 and averaged 8.0 responses per day (see Table 5.13-3). Similar to citywide statistics, the majority of responses (73.0 percent) were for medical aid.

Table 5.13-3 Rubidoux Station 38 Call Statistics (2016)

Call Types	Number of Calls	Percentage of Total
Commercial Fire	4	0.1%
False Alarms	192	6.6%
Hazardous Materials	7	0.2%
Medical	2,133	73.0%
Multifamily Dwelling Fire	1	0.0%
Other Fire/Miscellaneous	69	2.4%
Public Service Assistance	101	3.5%
Residential Fire	14	0.5%
Rescue	0	0.0%
Standby	59	2.0%
Traffic Collision	303	10.4%
Vehicle Fire	22	0.8%
Wildland Fire	18	0.6%
TOTAL	**2,923**	**100.0%**

Source: Riverside County Fire Department/CAL FIRE 2016 Annual Report.

Currently, RCFD does not have any level of service deficiencies in the project area, and there are no plans for new fire stations or expansions to existing facilities in the project area (Galang 2017).

5.13.1.2 NOTICE OF PREPARATION (NOP)/SCOPING COMMENTS

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of public services.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.13.1.3 THRESHOLDS OF SIGNIFICANCE

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to public services are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

FP-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain

acceptable service ratios, response times or other performance objectives for fire protection services.

5.13.1.4 APPLICABLE POLICIES AND DESIGN FEATURES

Plans, Policies, or Programs

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to fire and emergency services. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP FP-1 The project applicant shall comply with all applicable Riverside County Fire Department codes, ordinances, and standard conditions regarding fire prevention and suppression measures relating to water improvement plans, fire hydrants, automatic fire extinguishing systems, fire access, access gates, combustible construction, water availability, and fire sprinkler systems.

PPP FP-2 The project shall comply with the City's Municipal Code Chapter 3.75, which requires payment of a development impact fee to the City to assist in providing revenue that the City can use to improve public facilities and/or to offset the incremental increase in the demand for public services that would be created by the project. Prior to the issuance of a certificate of occupancy or final inspection, whichever comes first, the project applicant shall pay fees in accordance with Municipal Code Chapter 3.75.

PPP FP-3 The proposed project will be designed and constructed in accordance with the California Fire Code as adopted, with certain amendments, by the City of Jurupa Valley in Chapter 8.10 of the City's Municipal Code.

Project Design Features

There are no project design features that apply to fire protection and emergency services.

5.13.1.5 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are considered potentially significant impacts.

Impact FP-1	**Threshold: Would the project result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.**

Buildout of the Agua Mansa Commerce Park Specific Plan would allow two development options:

- **Alternative 1:** 4,216,000 SF of Industrial Park, 200,000 SF of Business Park, up to 64,000 Research and Development, and 70.9-acre Open Space District.
- **Alternative 2:** 4,216,000 SF of Industrial Park, 150,000 SF of Business Park, 25,000 SF retail, up to 64,000 SF of Research and Development, and 70.0-acre Open Space District.

The introduction of approximately 4.5 million square feet of industrial and business park use would increase demand for fire and emergency services in the project area. The project site would be served by RCFD fire stations in the City, with Rubidoux Station 38 providing first response to the project site. According to RCFD, there are currently no deficiencies in level of service in the project area (Galang 2017). However, new fire stations may be required if projected call volumes and response times increase to unacceptable levels. The Riverside County Fire Master Plan also requires a new fire station be constructed for all new commercial and/or industrial projects over three million square feet, which would be the case for the proposed project under either Alternative 1or Alternative 2 development. In place of a new fire station, developers may pay development impact fees to mitigate the effects on fire services in the project area.

Individual development projects in the Specific Plan area would be reviewed by the City of Jurupa Valley and RCFD and would be required to comply with the requirements in effect at the time building permits are issued. The additional personnel, building, and materials costs for fire services and facilities in the City due to new developments in accordance with the proposed project would be offset through the payment of the RCFD's required development impact fees. Furthermore, the City's general fund would gradually grow in rough proportion to development from property and sales tax generated by retail, industrial, and business park uses anticipated from Specific Plan buildout. Therefore, the proposed project would generate additional revenue for the City that would be available for necessary service improvements to provide adequate fire facilities, equipment, and personnel for the proposed project.

In addition, during the development review and permitting process, the RCFD would review and approve development plans to ensure that adequate access, traffic circulation, water, and hydrant systems are provided during development of the Specific Plan to serve the needs of the RCFD. Furthermore, all development projects in the City of Jurupa Valley are required to comply with the most current adopted fire codes, building codes, and nationally recognized fire and life safety standards of the City of Jurupa Valley, Riverside County, and the State of California.

Level of Significance before Mitigation: With implementation of PPP FP-1, PPP FP-2, and PPP FP-3, Impact FP-1 would be less than significant.

5.13.1.6 CUMULATIVE IMPACTS

The area considered for cumulative impacts is the City of Jurupa Valley, in the service areas of RCFD fire stations 16, 17, 18, and 38. Between 2012 and 2040 the population of Jurupa Valley is forecast to increase by about 17,500 or 18 percent, and employment by about 8,100 or 33 percent, as shown in Table 5.13-4. All four Jurupa Valley stations are in RCFD Battalion 14, which also includes two other stations—Station 19 in the Community of Highgrove in unincorporated Riverside County, and Station 27 in the City of Eastvale.

Currently, RCFD does not have any level of service deficiencies in the project area, and there are no plans for new fire stations or expansions to existing facilities in the project area (Galang 2017).

Table 5.13-4 Population and Employment Forecasts, City of Jurupa Valley

	2012	2040	Net Increase, 2012–2040	Percentage Increase, 2012–2040
Population	97,000	114,500	17,500	18.0%
Employment	24,500	32,600	8,100	33.1%

Source: SCAG 2016.

Cumulative growth anticipated in the region would generate increased tax revenues to cities in Riverside County and within the City of Jurupa Valley, and some of those revenues would be available to fund the construction of new or expanded fire stations, purchase additional equipment, or hire more staff to meet the needs of new developments. The additional revenue generated by the new growth and development in the region and locally within the City will help to offset some of the adverse effects of development, such as a strain on public services. Therefore, cumulative impacts associated with public service resources would be less than significant.

5.13.1.7 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of PPP FP-1, PPP FP-2, and PPP FP-3, Impact FP-1 would be less than significant.

5.13.1.8 MITIGATION MEASURES

No mitigation measures are required.

5.13.1.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.13.2 Police Protection

The information in this Section is based partly on a written service questionnaire response by Captain Daniel Hedge, Riverside County Sheriff's Department, dated March 14, 2018. A copy of this response is included in Appendix J of this DEIR.

5.13.2.1 ENVIRONMENTAL SETTING

Regulatory Background

City of Jurupa Valley Municipal Code

City of Jurupa Valley Municipal Code Section 8.01.020, General Regulations, states that no building permit shall be issued by the Chief Building Official for any structure if the construction thereof will violate the provisions of any state law or city ordinance, including Chapter 5.65, 8.10, 8.15, and 8.45, and Titles 9 and 16.

Existing Conditions

Riverside County Sheriff's Department

The City of Jurupa Valley contracts for police services with the Riverside County Sheriff's Department (RCSD), which serves unincorporated areas of Riverside County; 17 cities; and one Native American tribal community. RCSD is organized into three divisions: Field Operations; Corrections; and Administration, Coroner, and Courts. Total staff in 2017 was 3,729 full-time positions (Riverside County 2017). Patrol and traffic officers and detectives are all in the Field Operations Division. The Field Operations Division staff in 2015 included 1,139 deputies and corporals (KPMG 2016). RCSD responded to 864,959 calls for service in 2015, the latest year for which data are available. Service calls in 2015 are categorized by urgency:

- P1 (immediate threat to life/property): 9,227
- P2 (urgent, not life threatening): 266,996
- P3, P4, and P5 (past, nonemergency circumstances): 588,736 (KPMG 2016).

Jurupa Valley Station

RCSD has 49 sworn officers and 2 nonsworn personnel staffed to serve the City of Jurupa Valley; they operate out of the Jurupa Valley Station at 7477 Mission Boulevard, approximately 3.4 miles southwest of the project site (see Figure 5.13-1, *Fire and Police Services*). This station serves the cities of Jurupa Valley, Norco, Eastvale, and unincorporated Riverside County areas of Coronita, El Cerrito, Highgrove, Home Gardens and Lake Hills. There are two other police agencies in the Jurupa Valley Station's service area: the police departments of the cities of Riverside and Corona.

Response Times

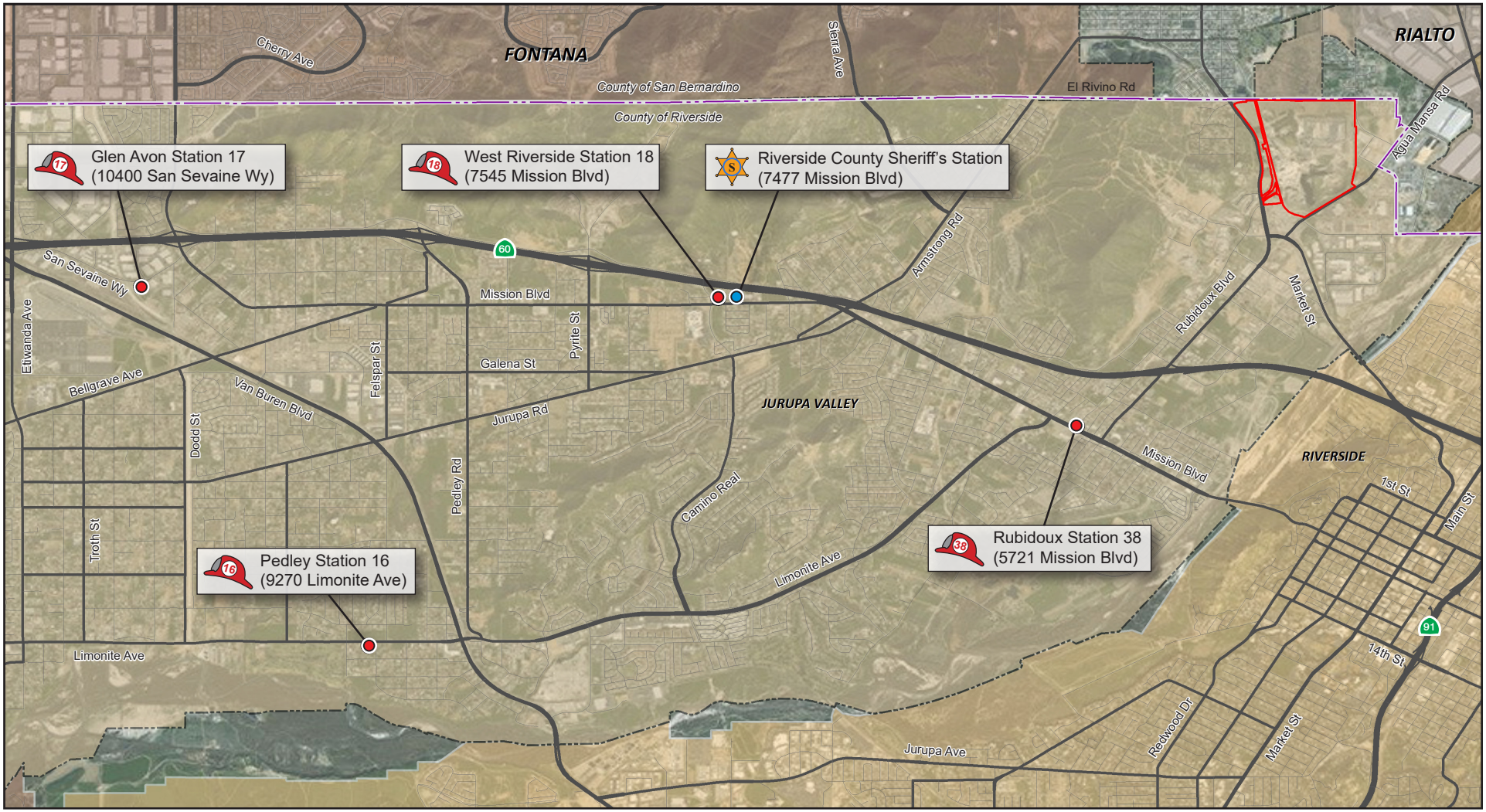
RCSD's response time goal for emergency service calls is a safe and timely response; and the goal for nonemergency calls is a safe and reasonable response. Average response times for emergency calls in the Jurupa Valley Station service area in January 2018 were 5.87 minutes, and average times for nonemergency calls were 28.53 minutes.

Funding

RCSD operations are funded by the County's General Fund, which is funded mostly through state and federal funds and property and sales taxes; charges for services (largely charges to contract cities); and other intergovernmental (state and federal) revenues (Riverside County 2017).

Figure 5.13-1 - Fire and Police Services

5. Environmental Analysis



Agua Mansa Commerce Park Specific Plan Area Boundary

City Boundary

0 1
Scale (Miles)

Source: ESRI, 2017

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5.13.2.2 NOTICE OF PREPARATION (NOP)/SCOPING COMMENTS

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of public services.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.13.2.3 THRESHOLDS OF SIGNIFICANCE

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to police services are based on criteria contained in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

PP-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services.

5.13.2.4 APPLICABLE POLICIES AND DESIGN FEATURES

Plans, Policies, and Programs

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to police services. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP PP-1 The project shall pay the City's Development Impact Fee, which provides revenue that the City can use to improve public facilities and/or offset the incremental increase in the demand for public services that would be created by the project. Prior to the issuance of a Certificate of Occupancy or final inspection, whichever comes first, the project applicant shall pay fees in accordance with Municipal Code Chapter 3.75.

Project Design Features

There are no project design features that apply to police protection.

5.13.2.5 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are considered potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact PP-1	**Threshold: Would the project result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services.**

Specific Plan buildout would introduce up to 988 workers and about 4.5 million square feet of industrial and commercial uses to the project site, thus increasing demands for police services. The RCSD stated that it could provide police services to the proposed project and did not identify any additional resources (staff, new or expanded stations, or patrol cars) that would be needed to serve the project. The RCSD identified that project development could cause traffic congestion on roadways near the project site, which could lengthen RCSD response times, and called for widened roadways and additional streetlights in the area. Project traffic impacts and mitigation measures are addressed in Section 5.15, *Transportation and Traffic*, of this DEIR.

Operation of the proposed project would generate sales taxes and property taxes, some of which would be allocated for the RCSD. Project applicants would also pay development impact fees to the City, some of which would be allocated for police services.

Level of Significance before Mitigation: With implementation of PPP PP-1, Impact PP-1 would be less than significant.

5.13.2.6 CUMULATIVE IMPACTS

The area considered for cumulative impacts is the RCSD's Jurupa Valley Station service area, consisting of the cities of Jurupa Valley, Norco, Eastvale, and unincorporated Riverside County areas of Coronita, El Cerrito, Highgrove, Home Gardens, and Lake Hills. The population of the City of Jurupa Valley, for instance, is forecast to increase by 18 percent (17,500 persons) between 2012 and 2040, and employment in the City is forecast to increase by 33 percent (8,100 jobs) (SCAG 2016). Other projects in the service area would add residents, workers, visitors, and structures to RCSD's service area, increasing demands for police services and thus requiring additional RCSD staff, stations, and equipment. Other projects would pay sales taxes, property taxes, and development impact fees; parts of each would be allocated for police operations and police facilities. Cumulative impacts would be less than significant after payments of such taxes and fees, and project impacts would not be cumulatively considerable.

5.13.2.7 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of PPP PP-1, Impact PP-1 would be less than significant.

5.13.2.8 MITIGATION MEASURES

No mitigation measures would be required.

5.13.2.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.13.3 Schools Services

The proposed project would consist of an industrial park, business park with retail overlay, and open space. There are no proposed residences onsite; thus, the project would not introduce any new permanent residents that may attend schools serving the project area.

Furthermore, school districts levy a fee against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities necessitated by the development. (Ed. Code, § 17620(a)(1).) On January 24, 2018, the State Allocation Board adjusted the maximum level-one industrial fee to be $0.61 per square foot. Development fees authorized by SB 50 are deemed by Section 65996 of the California Government Code to be "full and complete school facilities mitigation."

The impact of the project on school services would therefore be less than significant and would not be cumulatively considerable.

5.13.4 Library Services

Library services in the City of Jurupa Valley are provided by the Riverside County Library System, which includes two branch libraries in Jurupa Valley—Louis Rubidoux Library and Glen Avon Library. However, the project would not introduce any new permanent residents that may become patrons of the aforementioned libraries. Thus, no direct or cumulative impact would occur to library services.

5.13.5 References

Galang, Dexter (Fire Facilities Planner). 2017, September 14. Service Provider Questionnaire Response. Riverside County Fire Department Strategic Planning Division.

Hedge, Daniel (Captain). 2018, March 14. Questionnaire Response. Riverside County Sheriff's Department.

KPMG. 2016, March. Criminal Justice System Review: County of Riverside. http://www.riversidesheriff.org/pdf/BOS_Item_16-03_KPMG-PublicSafetyReview.pdf.

Riverside County. 2017, November. Adopted Budget Fiscal Year 2017/18. https://countyofriverside.us/Portals/0/Government//Budget%20Information/17-18/FY17-18%20Adopted%20Budget.pdf.

Riverside County Fire Department (RCFD). 2009, November. Strategic Plan 2009-2029. http://www.rvcfire.org/stationsAndFunctions/AdminSppt/StrategicPlanning/Documents/StrategicPlan2009.pdf

———. 2016. Riverside County Fire Department/CAL FIRE 2016 Annual Report. http://www.rvcfire.org/OURDEPARTMENT/PIOEducation/Documents/2016%20AR.PDF.

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5.14 RECREATION

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Agua Mansa Commerce Park Specific Plan project (proposed project) to impact public parks and recreational facilities. The analysis in this section is based, in part, on service provider questionnaire responses included as Appendix J of this DEIR.

5.14.1 Environmental Setting

5.14.1.1 REGULATORY BACKGROUND

State

California Public Park Preservation Act: California Public Resources Code Sections 5400 et seq.

The primary instrument for protecting and preserving parkland is California's Public Park Preservation Act of 1971. Under the Public Resources Code, cities and counties may not acquire any real property that is in use as a public park for any nonpark use unless compensation, land, or both are provided to replace the parkland acquired. This ensures no net loss of parkland and facilities.

Quimby Act: California Government Code Section 66477

The 1975 Quimby Act (California Government Code Section 66477) authorizes cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities. A 1982 amendment (AB 1600) requires agencies to clearly show a reasonable relationship between the public's need for the recreation facility or parkland, and the type of development project upon which the fee is imposed. Cities and counties with a high ratio of park space to inhabitants can set a standard of up to five acres per 1,000 people for new development. Cities and counties with a lower ratio can only require the provision of up to three acres of park space per 1,000 people. The calculation of a city or county's park space to population ratio is based on a comparison of the population count of the last federal census to the amount of city/county-owned parkland.

5.14.1.2 EXISTING CONDITIONS

Parks and recreational facilities in the City of Jurupa Valley are provided by Riverside County Regional Park and Open-Space District (Riverside County Parks) and the Jurupa Area Recreation and Park District (JARPD).

Riverside County Parks

Riverside County Parks is divided into three bureaus—Parks and Recreation, Resources, and the Business Operations Bureau. The Parks and Recreation Bureau operates and maintains regional parks, sports facilities, special events facilities, and camping reservations throughout Riverside County.

The Rancho Jurupa Park and Rancho Jurupa Regional Sports Park, both in Jurupa Valley and the closest county parks to the project site, are operated and maintained by Riverside County Parks. There are no current plans

for new or expanded parks that would serve the project site. Further from the project site, the Riverside County Park is currently beginning construction on several segments of the Santa Ana River Trail, some of which are in the City of Jurupa Valley (McDonough 2017).

Jurupa Area Recreation and Park District

The JARPD provides parks and recreational facilities for residents in the 91752 and 92509 zip code areas—that is, the City of Jurupa Valley and part of the City of Eastvale immediately west of Jurupa Valley. JARPD operates 21 parks in Jurupa Valley and four parks in the City of Eastvale, and is developing four additional parks in Jurupa Valley (JARPD 2017). JARPD provides youth sports, special events, childcare, after-school programs, summer camps, community classes, and reservations for ball fields, picnics, and facilities.

JARPD parks near the project site include Avalon Park, Veterans Memorial Park, and Glen Avon Heritage Park. Currently, there are no plans for new parks that would serve the project site. However, Avalon Park is the closest to the site and has renovation plans that include new sports field lighting, updated irrigation system, security lighting, parking lot improvements, and outdoor restrooms (Diuguid 2017).

Table 5.14-1 and Figure 5.14-1, *Jurupa Valley Park Facilities and Trails*, identify the closest Riverside County Parks and JARPD parks and recreational facilities near the project site.

Table 5.14-1 Parks Serving the Project Site

Park and Location	Acreage	Miles from Middle of Project Site	Amenities
Riverside County Parks			
Rancho Jurupa Park 4800 Crestmore Road Riverside, CA 92509	200	3.7	Lakes (fishing), splash pad for water play, playgrounds, miniature golf course, disc golf course, trails, campgrounds and cabins
Rancho Jurupa Regional Sports Park 5249 Crestmore Road Riverside, CA 92509	32	3.3	Natural and synthetic turf fields, picnic shelters, restrooms, snack bar, and playgrounds
Jurupa Area Recreation and Park District			
Avalon Park 2500 Avalon Street Riverside, CA 92509	10.00	1.0	Playground, grassy area, picnic tables, ballfields, outdoor basketball, sand volleyball, gymnasium, and restrooms
Veterans Memorial Park 4389 Riverview Drive Riverside, CA 92509	10.24	3.3	Playground, grassy area, picnic tables, ballfields, outdoor basketball, community center, picnic shelter, restrooms, and splash ground (opening in 2018)
Glen Avon Heritage Park 7701 Mission Boulevard Riverside, CA 92509	11.63	4.3	Playground, grassy area, picnic tables, outdoor basketball, restrooms, splash ground, and picnic shelter

Source: Diuguid 2017; McDonough 2017.

The City of Jurupa Valley also has a number of trails and bikeways that connect with the greater Riverside County trail system. The closest trails to the project site are a community trail along Andalusia Avenue west of the site and a combination regional trail/Class I bike path along 20th Street/Market Street south of the site

(see Figure 5.14-1, *Jurupa Valley Park Facilities and Trails*). The 20th Street/Market Street trail and bike path connects to the Andalusia Avenue community trail to the west and the combination regional trail/Class I bike path along the Santa Ana River to the east.[1] There are also a number of trails planned for the area referred to as Rattle Snake Mountain (mountain and hills west of the project site across Rubidoux Boulevard), which will become District property as part of future development plans; planned trails would subsequently be maintained by the JARPD (Diuguid 2017).

5.14.2 Notice of Preparation (NOP)/Scoping Comments

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of recreation.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.14.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to recreation are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project:

R-1 Would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

R-2 Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

5.14.4 Applicable Policies and Design Features

5.14.4.1 PLANS, POLICIES, AND PROGRAMS

PPP R-1 Prior to the issuance of a building permit, the project applicant shall pay required park development impact fees to the Jurupa Area Recreation and Park District pursuant to District Ordinance No. 01-2007 and 02-2008.

5.14.4.2 PROJECT DESIGN FEATURES

No existing PDFs are applicable to recreation for the proposed project.

[1] Class I bicycle paths are on exclusive rights-of-way for bicyclists and pedestrians.

5.14.5 Environmental Impacts

The following impact analysis addresses thresholds of significance that are considered potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact R-1: Threshold: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

While future employees of the proposed industrial and business parks may visit nearby parks during lunch breaks or after work hours, impacts to parks and recreational facilities are typically analyzed based on the number of permanent residents generated by a proposed project. Since the proposed project does not include any residential development, no permanent residents would be introduced that may increase the use of existing parks and recreational facilities in the City. Project operational employment is expected to be absorbed from the regional labor force and is not expected to attract substantial numbers of new workers into the region: the unemployment rates for the City of Jurupa Valley and Riverside County in January 2018 were 5.3 percent and 4.7 percent, respectively (EDD 2018). Thus, project-related impacts to parks and recreational facilities would be less than significant.

Level of Significance Without Mitigation: With the implementation of PPP R-1, Impact R-1 is less than significant.

Impact R-2: Threshold: 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?

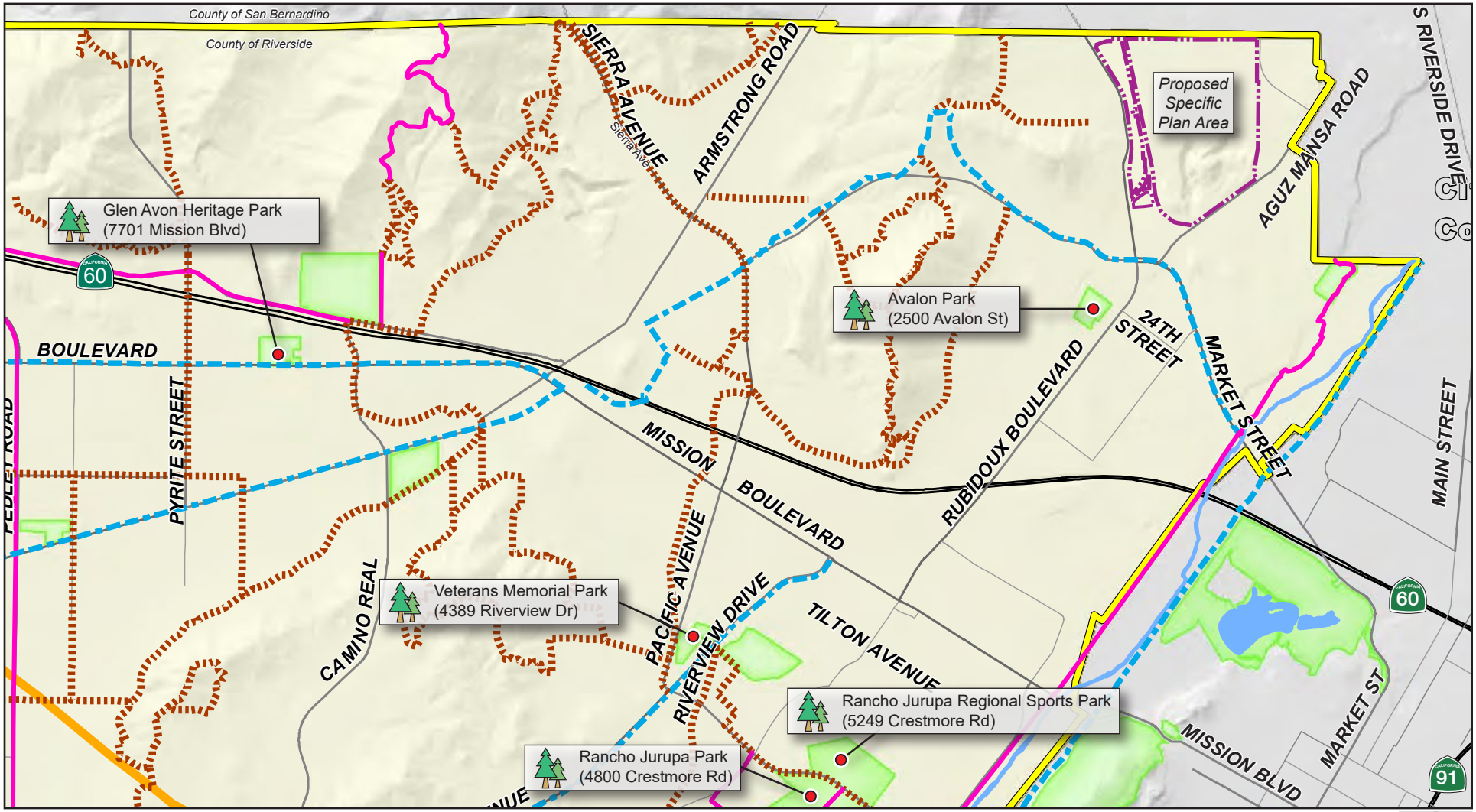
The proposed Specific Plan includes approximately 70.9 acres of open space in the southern portion of the project site. Remediation will occur within the Open Space District in accordance with a DTSC approved Response Plan. After remediation, the area is proposed to remain undeveloped. Within the Open Space District, a recreational park could be developed which allows for a range of passive and active recreation uses. If a recreational use is proposed in the future, a Park Development Plan, Conditional Use Permit, and additional environmental analysis will be required for City review and approval.

Upon the implementation of the Specific Plan's goals, policies, and actions and existing federal, state, and local regulations, the open space area would not have any adverse effects on the environment. Consequently, the proposed Specific Plan would not result in significant impacts relating to new or expanded recreational facilities.

Level of Significance Without Mitigation: Impact R-2 is less than significant.

Figure 5.14-1 - Jurupa Valley Park Facilities and Trails

5. Environmental Analysis



Source: City of Jurupa Valley, 2017

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5.14.6 Cumulative Impacts

The area considered for cumulative impacts is the JARPD. As nearly all the JARPD is in the City of Jurupa Valley, the following analysis of parkland demands is for the City. The population of the City of Jurupa Valley is forecast to increase from 97,000 in 2012 to 114,500 in 2040 (SCAG 2016), an increase of 17,500 or about 18 percent. Based on the City's parkland standards of 5 acres of parkland per 1,000 new residents, the City would need to add an approximate 87.5 acres of additional parkland to accommodate anticipated population growth and would need a total of about 572.5 acres of parkland in 2040. JARPD currently operates 136.5 acres of parkland, 227.72 acres of undeveloped parks and open space, and 26.01 acres of trails in the City of Jurupa Valley, for a total of 390.23 acres. Thus, by 2040 the City is estimated to fall short of its parkland standard by about 182.3 acres. As the City continues to grow, JARPD is constantly looking at new park and recreation facilities, trails, and open space to meet the goals and accommodate future demand.

The implementation of the proposed project would not result in a population increase and therefore would not result in impacts to parks and recreational facilities. Furthermore, the proposed project, along with similar projects within the JARPD service area, would pay required park development impact fees pursuant to District Ordinance No. 01-2007 and 02-2008. These fees will go toward helping the City meet its parkland standards. Therefore, project development would not contribute to a cumulative impact on parks and recreational facilities.

5.14.7 Level of Significance Before Mitigation

Impact R-2 is less than significant.

Upon implementation of PPP R-1, Impact R-1 would be less then significant.

5.14.8 Mitigation Measures

No mitigation measures are required.

5.14.9 Level of Significance After Mitigation

Impacts would be less than significant.

5.14.10 References

Diuguid, Colby (General Manager). 2017, September 15. Service Provider Questionnaire Response. Jurupa Area Recreation and Park District.

Employment Development Department (EDD). 2018, March 22. Monthly Labor Force Data for Cities and Census Designated Places (CDP). http://www.labormarketinfo.edd.ca.gov/file/lfmonth/allsubs.xls.

McDonough, Patrick (Senior Planner). 2017, September 12. Service Provider Questionnaire Response. Riverside County Regional Park and Open-Space District.

5. Environmental Analysis
RECREATION

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5.15 TRANSPORTATION

This section of the draft environmental impact report (DEIR) evaluates the potential for implementation of the Agua Mansa Commerce Park Specific Plan to result in transportation and traffic impacts in the cities of Jurupa Valley, Colton, Riverside, and Rialto and the unincorporated San Bernardino County.

The analysis in this section is based in part on the following technical report(s):

- *K1 -Agua Mansa Commerce Park Traffic Impact Analysis* (TIA), prepared by Ganddini, October 9, 2018
- *K2 -Agua Mansa Commerce Park Supplemental Traffic Analysis,* prepared by Ganddini, August 7, 2019
- *K3 -Agua Mansa Commerce Park (AMCP) Transportation Impact Summary,* prepared by Urban Crossroads, September 29, 2019

A complete copy of these studies are in the technical appendices to this Draft EIR (Appendix K). The traffic studies were developed in conjunction with City of Jurupa Valley Engineering Department staff and is consistent with the Riverside County's Traffic Impact Analysis Preparation Guide (2008). Caltrans and the cities of Jurupa Valley, Colton, Riverside, and Rialto and unincorporated Riverside County require use of the Highway Capacity Manual (HCM 2010) methodology for the analysis of traffic conditions. Table 5.15-1, *Intersection and Ramp Level of Service Descriptions*, provides a description of the level of service (LOS) associated with the delay in seconds per vehicle (sec/veh).

Table 5.15-1 Intersection and Ramp Level of Service Descriptions

LOS	Description	Intersection Control Delay (seconds/vehicle)		Ramp Density (passenger cars/ mile / lane)
		Signalized Intersections	Unsignalized Intersections	
A	**Excellent operation**. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10	≤ 10	≤ 10
B	**Very good operation**. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>10 and < 20	>10 and < 15	>10 and ≤ 20
C	**Good operation**. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20 and < 35	>15 and < 25	>20 and ≤ 28
D	**Fair operation**. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>35 and < 55	>25 and < 35	>28 and ≤ 35
E	**Poor operation.** Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>55 and < 80	>35 and < 50	>35
F	**Forced flow**. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 80	> 50	Demand Exceeds Capacity

Source: Ganddini 2018.

Terminology

The following are definitions for terms used throughout this section:

- **Congestion Management Plan (CMP).** A federally mandated program within metropolitan planning areas to address and manage congestion through the implementation of strategies not calling for major capital investments.
- **Highway Capacity Manual (HCM).** The HCM provides methods for quantifying highway capacity, serving as a fundamental reference on concepts, performance measures, and analysis techniques for evaluating the multimodal operation of streets, highways, freeways, and off-street pathways. The methodology used to assess the operation of intersections is based on the HCM.
- **Institute of Transportation Engineers (ITE).** An international society of professionals in transportation and traffic engineering. The organization publishes the Trip Generation Manual, which provides trip generation data.
- **Levels of Service (LOS).** Roadway capacity is generally limited by the ability to move vehicles through intersections. A level of service (LOS) is a standard performance measurement to describe the operating characteristics of a street system in terms of the level of congestion or delay experienced by motorists. Service levels range from A through F, which relate to traffic conditions from best (uncongested, free-flowing conditions) to worst (total breakdown with stop-and-go operation).
- **Passenger Car Equivalent (PCE).** The impact that a mode of transport has on traffic variables (such as headway, speed, density) compared to a single car. Industrial, warehousing, and other truck-intensive projects convert truck movements into PCE. For light duty trucks (such as service vehicles, buses, RV's and dual rear wheels) use a PCE of 1.5. For medium duty trucks with 3 axles use a PCE of 2.0. For heavy duty trucks with 4 axles, use a PCE of 3.0.
- **Vehicles Miles Traveled (VMT).** The number of vehicle miles of travel is an indicator of the travel levels on the roadway system by motor vehicles. This estimate is based upon traffic volume counts and roadway length.

5.15.1 Environmental Setting

5.15.1.1 REGULATORY BACKGROUND

The regulatory framework is used to inform decision makers about the regulatory agencies/policies that affect transportation in the City of Jurupa Valley. Major policy documents impacting the transportation system in Jurupa Valley include laws at the state level and planning documents at a regional level. State and regional laws, regulations, plans, or guidelines that are applicable to the proposed project are summarized below.

State Regulations

Senate Bill 743

On September 27, 2013, SB 743 was signed into law, starting a process that fundamentally changed transportation impact analysis as part of CEQA compliance. The legislature found that with the adoption of the SB 375, the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of GHG emissions, as required by the California Global Warming Solutions Act of 2006 (Assembly Bill [AB 32]).

SB 743 eliminates auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as the sole basis for determining significant impacts under CEQA. As part of the new CEQA Guidelines, the new criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099(b)(1)).

Pursuant to SB 743, the Natural Resources Agency adopted revisions to the CEQA Guidelines to implement SB 743 on December 28, 2018. The revised CEQA Guidelines establish new criteria for determining the significance of transportation impacts. Under the new Guidelines, VMT-related metric(s) that evaluate the significance of transportation-related impacts under CEQA for development projects, land use plans, and transportation infrastructure projects are required beginning on July 1, 2020. The legislation does not preclude the application of local general plan policies, zoning codes, conditions of approval, or any other planning requirements that require evaluation of LOS, but these metrics may no longer constitute the sole basis for determining transportation impacts under CEQA.

California Department of Transportation

Intersections within incorporated cities associated with freeway on- and off-ramps fall under Caltrans jurisdiction. Caltrans approves the planning, design, and construction of improvements for all state-controlled facilities. Caltrans utilizes the Highway Capacity Manual 6 (HCM 6) methodology to evaluate intersections within its jurisdiction. LOS criteria for unsignalized intersections differ from LOS criteria for signalized intersections as signalized intersections are designed for heavier traffic and therefore a greater delay. Unsignalized intersections are also associated with more uncertainty for users, as delays are less predictable, which can reduce users' delay tolerance. For state-controlled intersections, LOS standards and impact criteria specified by Caltrans will apply (see Table 5.15-1).

As stated in the "Guide for the Preparation of Traffic Impact Studies" (2002), "Caltrans endeavors to maintain a target LOS at the transition between LOS 'C' and LOS 'D' on State highway facilities." Consistent with the City and County requirements, this analysis defines LOS E or F as deficient for state highway facilities.

Regional Regulations

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally

recognized metropolitan planning organization for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

Every four years SCAG updates the Regional Transportation Plan (RTP) for the six-county region that includes Los Angeles, San Bernardino, Riverside, Orange, Ventura, and Imperial counties. On April 7, 2016, the SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan / Sustainable Communities Strategy (2016 RTP/SCS). The SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce greenhouse gas emissions from transportation (excluding goods movement). Current and recent transportation plan goals generally focus on balanced transportation and land use planning that:

- Maximize mobility and accessibility for all people and goods in the region.
- Ensure travel safety and reliability for all people and goods in the region.
- Preserve and ensure a sustainable regional transportation system.
- Maximize the productivity of our transportation system.
- Protect the environment and health of residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).
- Encourage land use and growth patterns that facilitate transit and active transportation.

Through implementation of the strategies in the RTP/SCS, SCAG anticipates lowering greenhouse gas emissions below 2005 levels by 8 percent by 2020, 18 percent by 2035, and 22 percent by 2040. Land use strategies to achieve the region's targets include planning for new growth around high quality transit areas and "livable corridors," and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles (SCAG 2016)

Riverside County Congestion Management Program

In its role as Riverside County's Congestion Management Agency, the Riverside County Transportation Commission (RCTC) prepares and periodically updates the county's Congestion Management Program (CMP) to meet federal Congestion Management Process guidelines. The CMP in effect in Riverside County was approved by the RCTC in 2011. The CMP is currently under review and is planned to be incorporated in the Commission's Long Range Transportation Plan, which is anticipated to be completed by early 2019. All freeways and selected arterial roadways in the county are designated elements of the CMP system of highways and roadways. There are several freeways and arterial roadways in the CMP system in the study area, and these are discussed in detail in the impact analysis. RCTC has adopted a minimum level of service threshold of LOS "E" for CMP facilities.

Local Regulations

County of Riverside Transportation Mitigation Uniform Fee

The County of Riverside has a Transportation Mitigation Uniform Fee (TUMF), which is administered by the Western Regional Council of Governments (WRCOG). Under the TUMF, WRCOG collects fees from new development with the purpose of funding transportation improvements such as roadway widening, new roadways, intersection improvements, traffic signalization, etc., for the purpose of mitigating future growth.

County of San Bernardino

The definition of an intersection deficiency has been obtained from the County of San Bernardino General Plan Circulation Element. The General Plan states that peak hour intersection operations of LOS D or better are generally acceptable. Therefore, any intersection operating at LOS E or F will be considered deficient.

City of Jurupa Valley

General Plan Policies

The specific policies outlined in the City of Jurupa Valley's General Plan Mobility Element that are related to transportation and that apply to the proposed project are listed in a General Plan Consistency Analysis table in EIR Subsection 5.09.

Performance Standard

The City of Jurupa Valley General Plan Mobility Element Policy ME 1.1.2 states:

> Maintain at least a Level of Service (LOS) D or better at all intersections, except where flexibility is warranted based on a multi-modal LOS evaluation, or where LOS E is deemed appropriate to accommodate complete streets/multi-modal facilities.

Development Impact Fee Program

The City of Jurupa Valley has a Development Impact Fee Program that collects fees from new development with the purpose of funding traffic signals and roadway construction in order to mitigate future growth in the City, as specified in the City of Jurupa Valley Mobility Element.

City of Colton

The definition of an intersection deficiency has been obtained from the City of Colton General Plan Mobility Element. The General Plan states that peak hour intersection operations of Tab LOS D or better are generally acceptable. Therefore, any intersection operating at LOS E to F will be considered deficient.

City of Rialto

The City of Rialto 2010 General Plan Update (Circulation Element) contains the following policies applicable to Level of Service standards within the City:

- **Policy 4-1.20:** Design City streets so that signalized intersections operate at Level of Service (LOS) D or better during the morning and evening peak hours, and require new development to mitigate traffic impacts that degrade LOS below that level. The one exception will be Riverside Avenue south of the Metrolink tracks all the way to the City's southern border, which can operate at LOS E.

- **Policy 4-1.21:** Design City streets so that unsignalized intersections operate with no vehicular movement having an average delay greater than 120 seconds during the morning and evening peak hours, and require new development to mitigate traffic impacts that increase delay above that level.

Based on the above thresholds, signalized study intersections and roadway segments operating at LOS E or F are considered deficient. Unsignalized study intersections operating at LOS F with greater than 120 seconds of delay are considered deficient

City of Riverside

The definition of an intersection deficiency has been obtained from the City of Riverside General Plan Circulation and Community Mobility Element, which states that LOS D is the maximum acceptable threshold for study intersections including a roadway of collector or higher classification. LOS C is the maximum threshold in other cases.

5.15.1.2 EXISTING CONDITIONS

Traffic Study Area

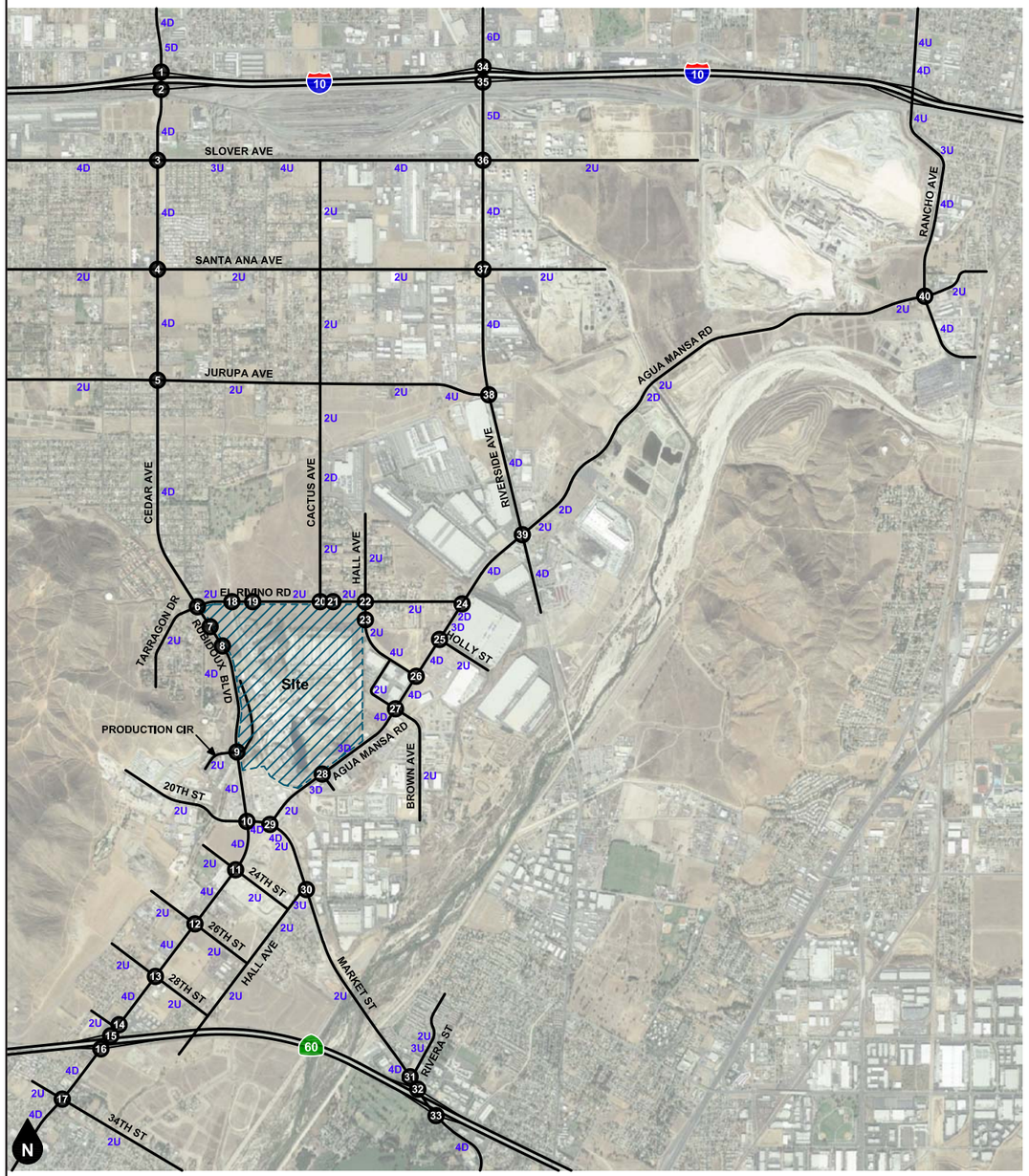
Regional access to the project site is provided by Interstate 10 (I-10) to the north and SR-60 to the south of the project site. Local north-south circulation is provided by Cedar Avenue, Rubidoux Boulevard, Cactus Avenue, Hall Avenue, Market Street, and Riverside Avenue. Local east-west circulation is provided by Slover Avenue, Santa Ana Avenue, Jurupa Avenue, El Rivino Road, and Agua Mansa Road. Figure 5.15-1, *Existing Roadway Conditions*, identifies the existing circulation system in the project study area and study area intersections.

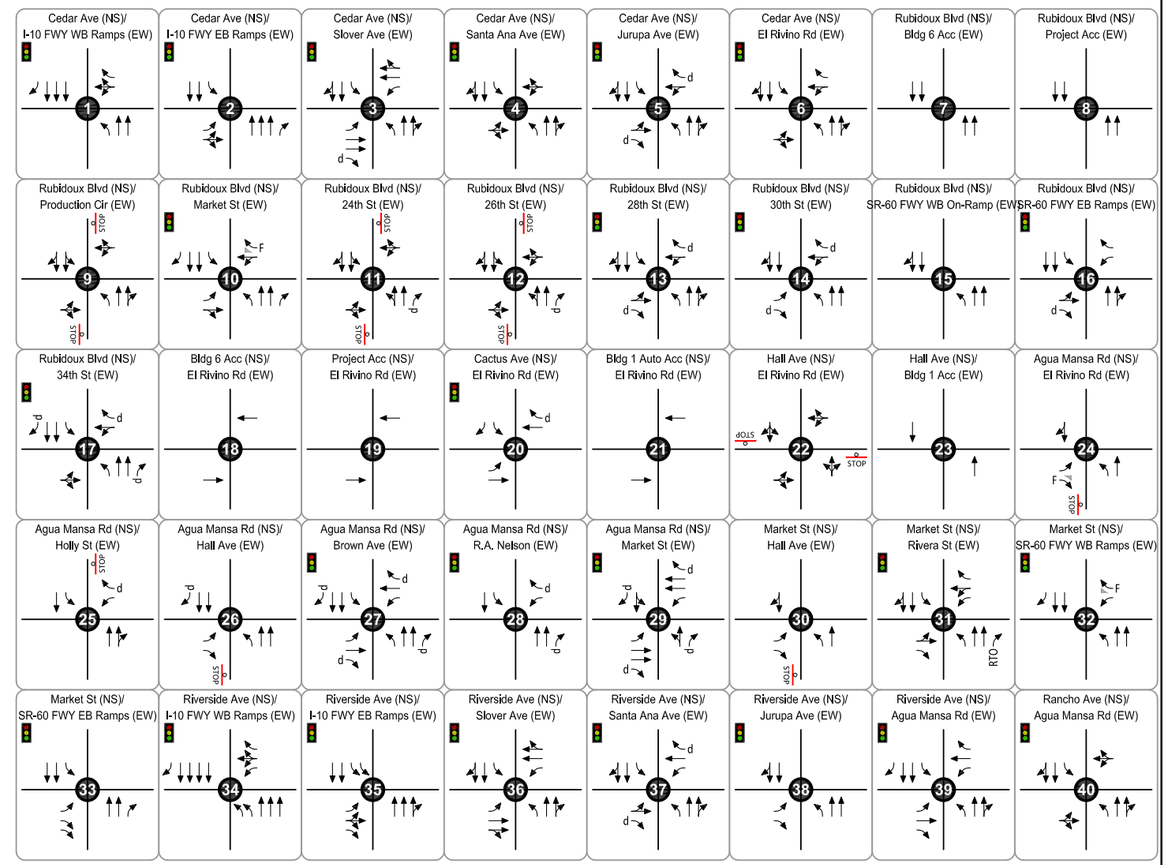
Intersections

Table 5.15-2, *Study Area Intersections*, identifies the intersections in the project's study area. Most of the study intersections are under the jurisdiction of the City of Jurupa Valley; the remaining intersections are under the jurisdiction of Caltrans, the County of San Bernardino, and the cities of Rialto, Riverside, Colton, and Rialto.

Figure 5.15-1 - Existing Roadway Conditions

5. Environmental Analysis





Legend

- Traffic Signal
- STOP Stop Sign
- #D #-Lane Divided Roadway
- #U #-Lane Undivided Roadway
- Existing Lane
- RTO Right Turn Overlap
- F Free Right Turn Lane
- d De Facto Right Turn Lane

NOT TO SCALE

Source: Ganddini Group, Inc, 2018

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Table 5.15-2 Study Area Intersections

No.	Intersection	Jurisdiction
1	Cedar Avenue at I-10 WB Ramps	CAL
2	Cedar Avenue at I-10 EB Ramps	CAL
3	Cedar Avenue at Slover Avenue	SB
4	Cedar Avenue at Santa Ana Avenue	SB
5	Cedar Avenue at Jurupa Avenue	SB
6	Cedar Avenue/ Rubidoux Boulevard at Tarragona Drive/El Rivino Road	JV
7	Rubidoux Boulevard at Building 6 Access	JV
8	Rubidoux Boulevard at Project Access	JV
9	Rubidoux Boulevard at Production Circle	JV
10	Rubidoux Boulevard at 20th Street/Market Street	JV
11	Rubidoux Boulevard at 24th Street	JV
12	Rubidoux Boulevard at 26th Street	JV
13	Rubidoux Boulevard at 28th Street	JV
14	Rubidoux Boulevard at 30th Street/SR-60 WB Off-Ramp	CAL
15	Rubidoux Boulevard at SR 60 WB Ramp	CAL
16	Rubidoux Boulevard at SR-60 EB Ramps	CAL
17	Rubidoux Boulevard at 34th Street	JV
18	El Rivino Road at Building 6 Access	JV/SB
19	El Rivino Road at Project Access	JV/RIA
20	El Rivino Road at Cactus Avenue /Project Access	JV/RIA /SB
21	El Rivino Road at Building 1 Auto Access	JV/SB
22	El Rivino Road at Hall Avenue	JV/SB
23	Hall Avenue at Building 1 Access	JV
24	Agua Mansa Road at El Rivino Road	RIA/SB
25	Agua Mansa Road at Holly Place	SB
26	Agua Mansa Road at Hall Avenue	JV/SB
27	Agua Mansa Road at Brown Avenue	JV/SB
28	Agua Mansa Road at R.A. Nelson	JV
29	Agua Mansa Road at Market Street	JV
30	Market Street at Hall Avenue	JV
31	Market Street at Rivera Street	RIV
32	Market Street at SR-60 WB Ramps	CAL
33	Market Street at SR-60 EB Ramps	CAL
34	Riverside Avenue at I-10 WB Ramps	CAL
35	Riverside Avenue at I-10 Freeway EB Ramps	CAL
36	Riverside Avenue at Slover Avenue	RIA
37	Riverside Avenue at Santa Ana Avenue	RIA
38	Riverside Avenue at Jurupa Avenue	RIA
39	Riverside Avenue at Agua Mansa Road	RIA/COL
40	Rancho Avenue at Agua Mansa Road	COL

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10

Several of the intersections in Table 5.15-2 are on the state highway system and under Caltrans jurisdiction:

- Market Street at SR 60 WB On- and Off-Ramps
- Market Street at SR 60 EB On- and Off-Ramps
- Rubidoux Boulevard at SR 60 WB On- and Off-Ramps
- Rubidoux Boulevard at SR 60 EB On- and Off-Ramps
- Cedar Avenue at I-10 WB On- and Off-Ramps
- Cedar Avenue at I-10 EB On- and Off-Ramps
- Riverside Avenue at I-10 WB On- and Off-Ramps
- Riverside Avenue at I-10 EB On- and Off-Ramps

Roadway Segments

Table 5.15-3, *Study Area Roadway Segments*, identifies the roadway segments in the project's study area.

Table 5.15-3 Study Area Roadway Segments

No.	Roadway Segment	Jurisdiction*
1	Rubidoux Boulevard between El Rivino Road to Production Circle	JV
2	Rubidoux Boulevard between Production Circle to 20th Street	JV
3	Rubidoux Boulevard between 20th Street to 24th Street	JV
4	Rubidoux Boulevard between 24th Street to 26th Street	JV
5	Rubidoux Boulevard between 26th Street to 28th Street	JV
6	Rubidoux Boulevard between 28th Street to 30th Street	JV
7	El Rivino Road between Cedar Avenue to Cactus Avenue	JV/RIA/SB
8	El Rivino Road between Cactus Avenue to Hall Avenue	JV/SB
9	El Rivino Road between Hall Avenue to Agua Mansa Road	JV/SB
10	Hall Avenue between El Rivino Road to Agua Mansa Road	JV
11	Market Street between Rubidoux Boulevard to Agua Mansa Road	JV
12	Market Street between Agua Mansa Road to Hall Avenue	JV
13	Market Street between Hall Avenue to Rivera Street	JV/RIV
14	Agua Mansa Road between Market Street to Brown Avenue	JV
15	Agua Mansa Road between Brown Avenue to Hall Avenue	JV/SB
16	Agua Mansa Road between Hall Avenue to El Rivino Road	JV/SB

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10

In addition, the study area includes the following freeway mainline segments on SR-60, which is in the state highway system under Caltrans jurisdiction:

- SR 60 westbound between Main Street to Market Street
- SR 60 westbound between Market Street to Rubidoux Boulevard
- SR 60 westbound between Rubidoux Boulevard to Valley Way
- SR 60 eastbound between Valley Way to Rubidoux Boulevard
- SR 60 eastbound between Rubidoux Boulevard to Market Street
- SR 60 eastbound between Market Street to Main Street

Existing Traffic Level of Service

Intersections

Existing peak hour intersection turning movement volumes are based upon morning peak period and evening peak period intersection turning movement counts conducted in January/February/May/August 2017 during typical weekday conditions. Study intersections were counted between 6:30 AM and 9:30 AM for the morning peak period and from 3:30 PM and 6:30 PM for the evening peak period. At the request of City of Jurupa Valley staff, the turning movement volumes were increased by an annual ambient growth rate of 1 percent over a one-year period to reflect existing (2018) conditions. Intersection turning movement count worksheets are provided in Appendix C of the TIA (see Appendix K of this DEIR). Figure 5.15-2, *Existing AM Peak Hour Intersection Volumes*, and Figure 5.15-3, *Existing PM Peak Hour Intersection Volumes*, show the existing morning and evening peak hour intersection turning movement volumes, respectively. The morning and evening peak hour LOS for existing traffic conditions are shown in Table 5.15-4, *Existing Intersection Delay and Level of Service*.

Table 5.15-4 Existing Intersection Delay and Level of Service

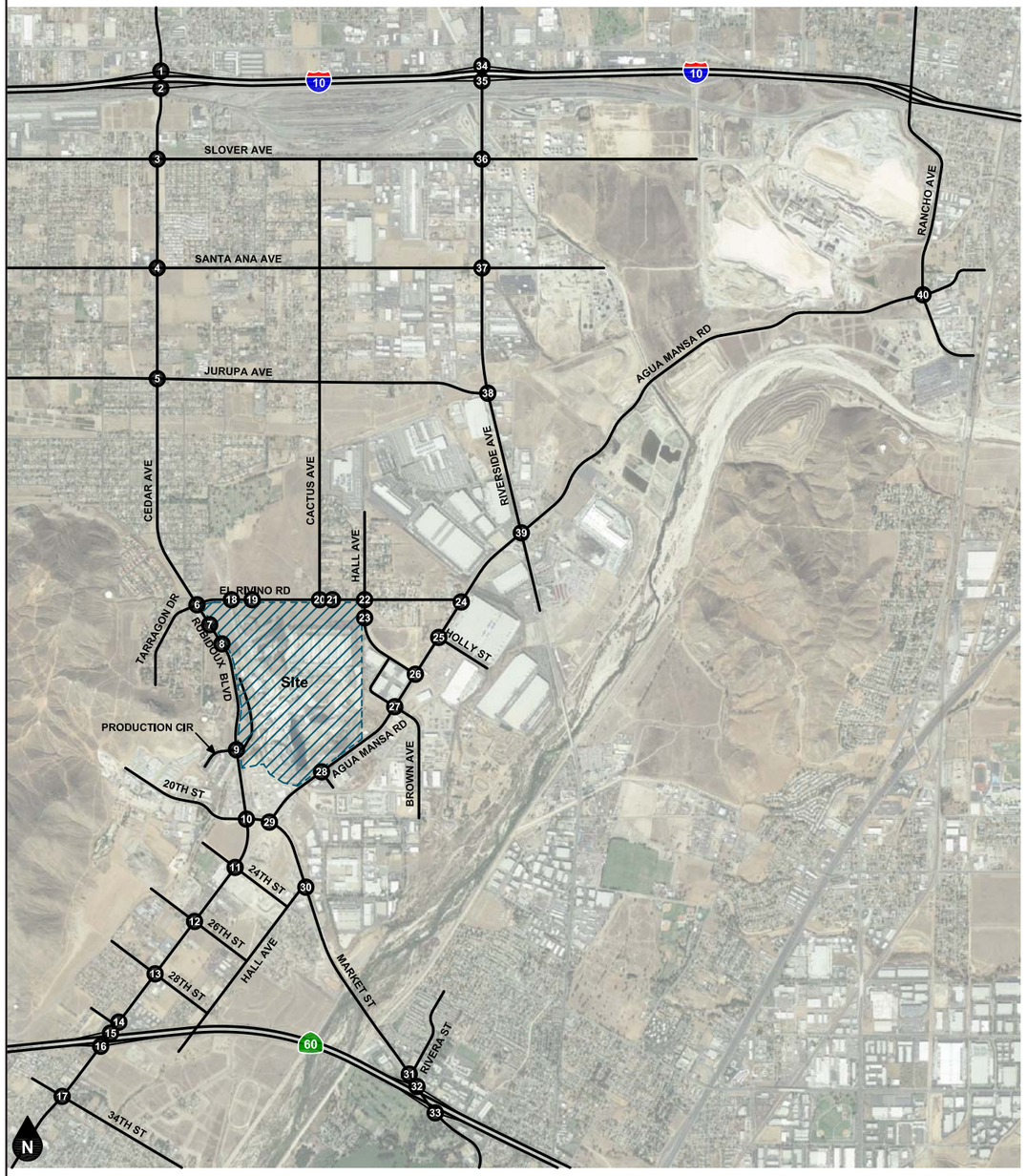
ID	Study Intersection	Jurisdiction	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
1.	Cedar Ave at I-10 Freeway WB Ramps	CAL	TS	54.5	D	35.6	D
2.	Cedar Ave at I-10 Freeway EB Ramps	CAL	TS	43.4	D	36.1	D
3.	Cedar Ave at Slover Ave	SB	TS	17.5	B	17.4	B
4.	Cedar Ave at Santa Ana Ave	SB	TS	10.4	B	11.3	B
5.	Cedar Ave at Jurupa Ave	SB	TS	28.1	C	31.0	C
6.	Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd	JV	TS	11.3	B	19.4	B
9.	Rubidoux Blvd at Production Circle	JV	CSS	**69.3**	**F**	**99.9**	**F**
10.	Rubidoux Blvd at 20th St / Market St	JV	TS	27.7	C	37.8	D
11.	Rubidoux Blvd at 24th St	JV	CSS	**43.5**	**E**	**99.9**	**F**
12.	Rubidoux Blvd at 26th St	JV	CSS	33.6	D	**55.5**	**F**
13.	Rubidoux Blvd at 28th St	JV	TS	47.5	D	40.3	D

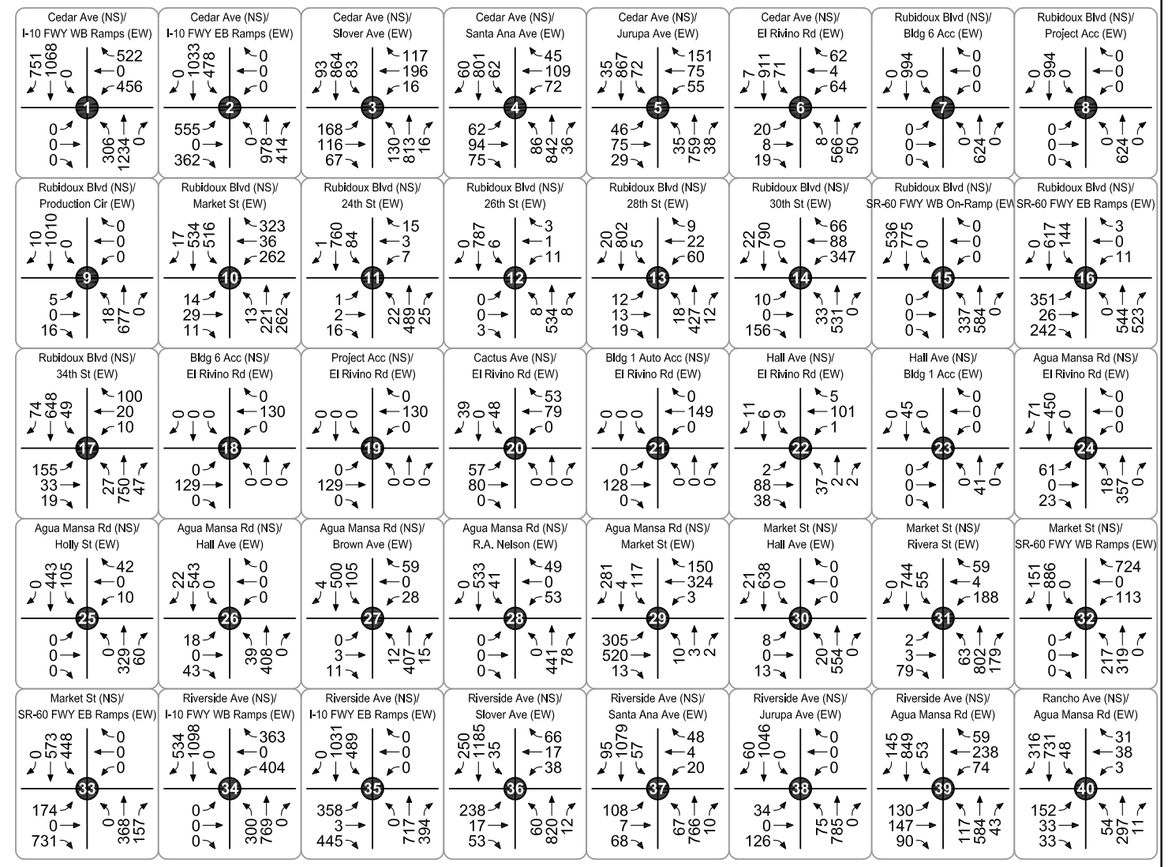
Table 5.15-4 Existing Intersection Delay and Level of Service

ID	Study Intersection	Jurisdiction	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
14.	Rubidoux Blvd at 30th St / SR-60 Freeway WB Off-Ramp	CAL	TS	20.1	C	24.8	C
15.	Rubidoux Blvd at SR-60 Freeway WB On-Ramp	CAL	UN	**44.5**	**E**	20.1	C
16.	Rubidoux Blvd at SR-60 Freeway EB Ramps	CAL	TS	30.5	C	33.7	C
17.	Rubidoux Blvd at 34th St	JV	TS	10.5	B	10.5	B
20.	Cactus Ave / Project Access at El Rivino Rd	JV / RIA / SB	TS	9.5	A	9.4	A
22.	Hall Ave at El Rivino Rd	JV / SB	CSS	11.1	B	17.4	C
24.	Agua Mansa Rd at El Rivino Rd	RIA / SB	CSS	28.9	D	**56.3**	**F**
25.	Agua Mansa Rd at Holly Place	SB	CSS	13.5	B	20.4	C
26.	Agua Mansa Rd at Hall Ave	JV / SB	CSS	12.2	B	13.2	B
27.	Agua Mansa Rd at Brown Ave	JV / SB	TS	10.1	B	14.2	B
28.	Agua Mansa Rd at R.A. Nelson	JV	TS	7.8	A	3.6	A
29.	Agua Mansa Rd at Market St	JV	TS	49.8	D	**99.9**	**F**
30.	Market St at Hall Ave	JV	CSS	28.2	D	**54.2**	**F**
31.	Market St at Rivera St	RIV	TS	19.6	B	22.6	C
32.	Market St at SR-60 Freeway WB Ramps	CAL	TS	10.8	B	16.5	B
33.	Market St at SR-60 Freeway EB Ramps	CAL	TS	19.3	B	31.2	C
34.	Riverside Ave at I-10 Freeway WB Ramps	CAL	TS	21.3	C	12.2	B
35.	Riverside Ave at I-10 Freeway EB Ramps	CAL	TS	18.5	B	19.8	B
36.	Riverside Ave at Slover Ave	RIA	TS	20.9	C	19.7	B
37.	Riverside Ave at Santa Ana Ave	RIA	TS	10.0	B	9.2	A
38.	Riverside Ave at Jurupa Ave	RIA	TS	7.5	A	7.0	A
39.	Riverside Ave at Agua Mansa Rd	RIA / COL	TS	8.7	A	8.4	A
40.	Rancho Ave at Agua Mansa Rd	COL	TS	9.7	A	16.4	B

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10; TS: Traffic Signal; CSS: Cross Street Stop; AWS: All Way Stop; LOS: level of service
Bold: Exceeds LOS D significance criteria.
[1] Delay is shown in seconds/vehicle. Delay is reported for unsignalized study intersections and all study intersections within California Department of Transportation jurisdiction. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).
[2] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Figure 5.15-2 - Existing AM Peak Hour Intersection Volumes





Legend

(#) Study Intersection

NOT TO SCALE

Source: Ganddini Group, Inc, 2018

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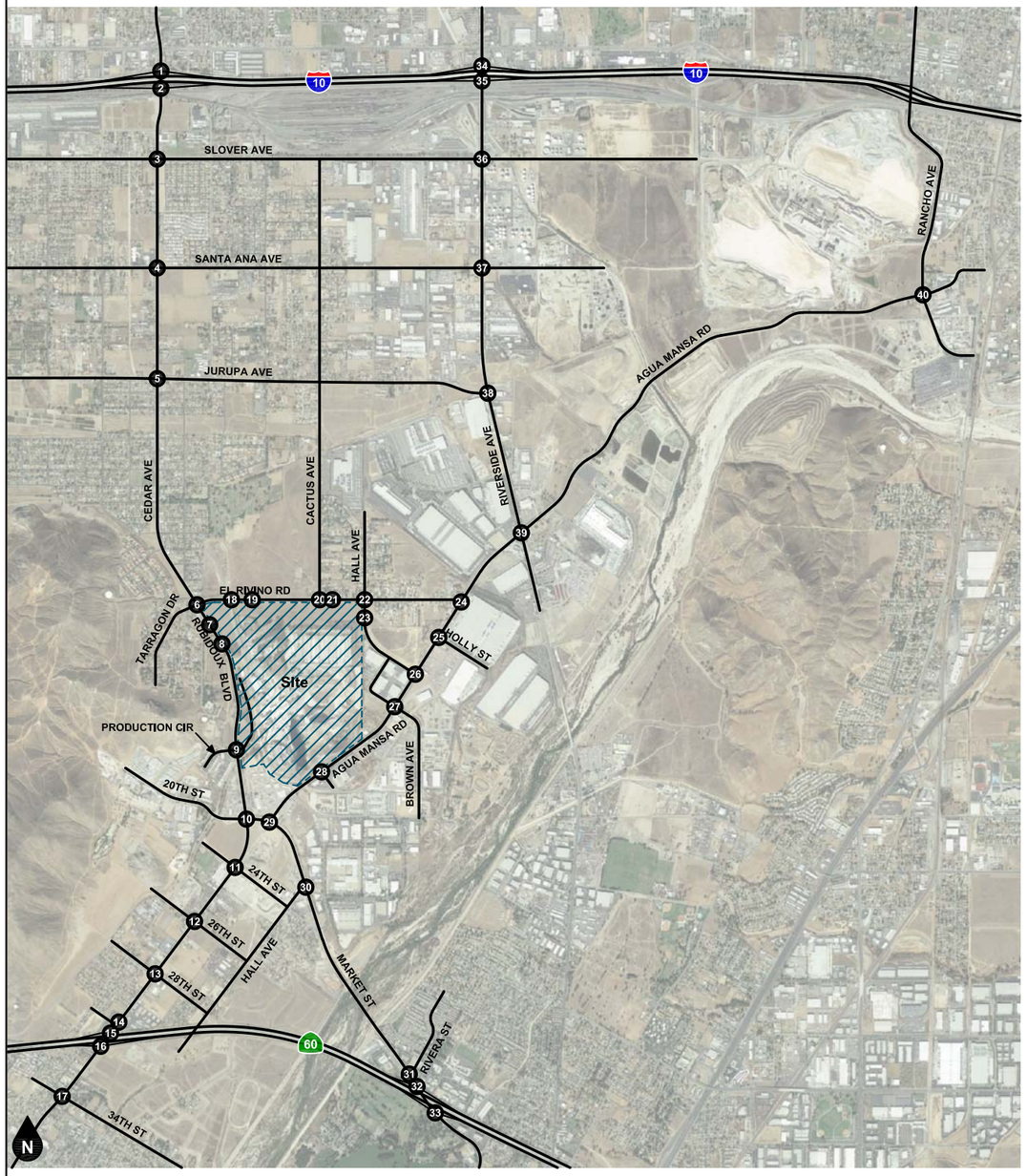
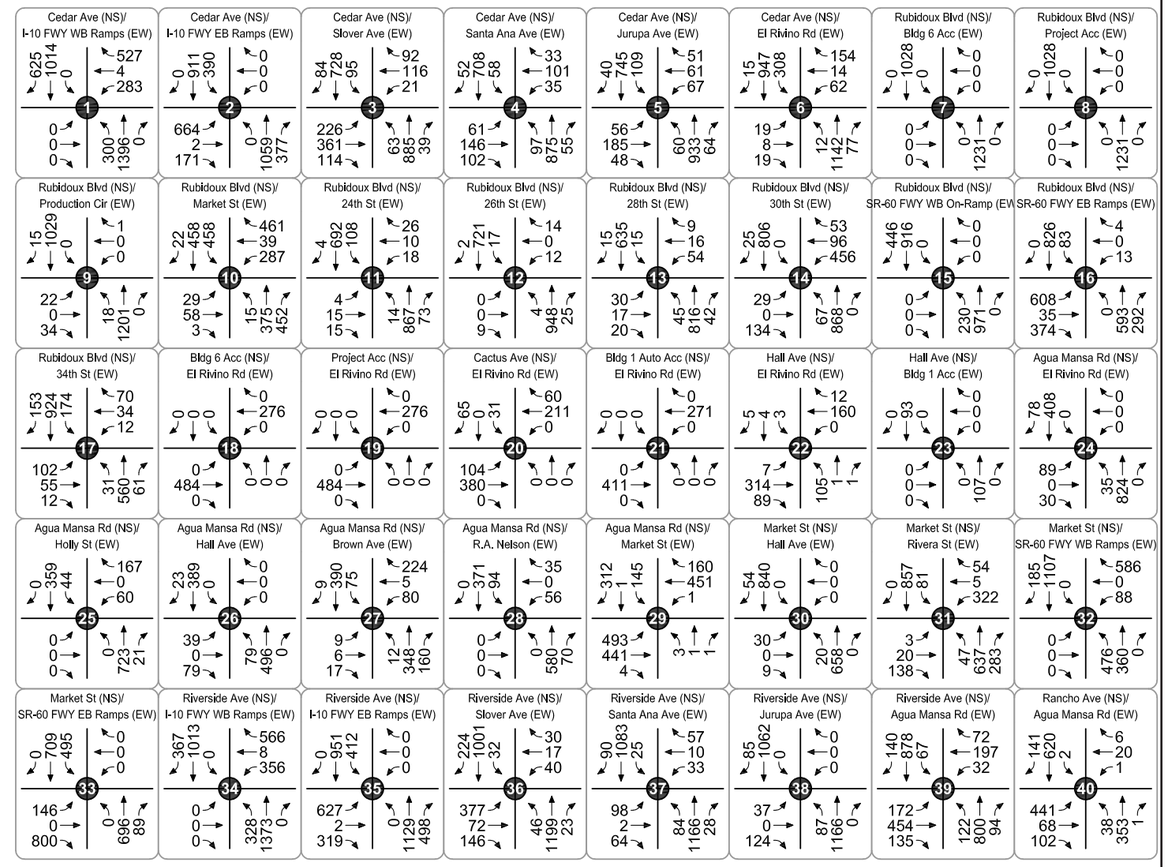
Figure 5.15-3 - Existing PM Peak Hour Intersection Volumes





Legend

(#) Study Intersection

NOT TO SCALE

Source: Ganddini Group, Inc, 2018

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As shown in Table15.5-4, the study intersections currently operate within acceptable levels of service (D or better) during the morning and evening peak hours for existing traffic conditions, except for the following study intersections that currently operate at unacceptable LOS during the peak hours

- #9. Rubidoux Boulevard at Production Circle/Project Access (AM and PM peak hours)
- #11. Rubidoux Boulevard at 24th Street (AM and PM peak hours)
- #12. Rubidoux Boulevard at 26th Street (PM peak hours)
- #15. Rubidoux Boulevard at SR-60 Freeway WB On-Ramp (AM peak hour)
- #24. Agua Mansa Road at El Rivino Road (PM peak hour)
- #29. Agua Mansa Road at Market Street (PM peak hour)
- #30. Market Street at Hall Avenue (PM peak hour)

Roadway Segments

Figure 5.15-4, *Existing Daily Traffic Volumes*, depicts actual and estimated existing average daily traffic volumes. Existing average daily traffic volumes have been based upon Caltrans' 2016 Traffic Counts on California State Highway System and 24-hour roadway segment counts conducted in May/August 2017 (see Appendix C of the TIA) for the freeway segments and roadway segments that have been analyzed in this report as part of the roadway segment analysis.[1] At the request of City of Jurupa Valley staff, the roadway segment counts were increased by an annual ambient growth rate of 1 percent over a one-year period to reflect existing (2018) conditions. The existing daily capacity analyses for roadway segments in the vicinity of the project are shown in Table 5.15-5, *Existing Daily Roadway Capacity Analysis*. For existing traffic conditions, the study roadway segments currently operate at acceptable LOS, except for the following segment, which currently operates at an unacceptable Level of Service:

- Market Street between Hall Avenue to Rivera Street

Table 5.15-5 Existing Daily Roadway Capacity Analysis

Roadway Segment	Jurisdiction	Roadway Standards[1]			Roadway Segment				Capacity Threshold	LOS
		Class	L	Capacity	L	Class[2]	ADT	V/C		
Rubidoux Boulevard										
Btwn El Rivino Rd and Production Circle	JV	MH	4	34,100	4	34,100	22,300	0.65	Acceptable	B
Btwn Production Circle and 20th St	JV	MH	4	34,100	4	34,100	22,000	0.65	Acceptable	B
Btwn 20th St and 24th St	JV	MH	4	34,100	4	34,100	18,800	0.55	Acceptable	A
Btwn 24th St and 26th St	JV	MH	4	34,100	4	34,100	19,600	0.57	Acceptable	A
Btwn 26th St and 28th St	JV	MH	4	34,100	4	34,100	20,200	0.59	Acceptable	A
Btwn 28th St and 30th St	JV	MH	4	34,100	4	34,100	21,800	0.64	Acceptable	B

[1] The 24-hour roadway segment counts are classification counts for a two-day period within the City of Jurupa Valley and one-day outside of the City of Jurupa Valley limits.

5. Environmental Analysis
TRANSPORTATION

Table 5.15-5 Existing Daily Roadway Capacity Analysis

Roadway Segment	Jurisdiction	Roadway Standards[1]			Roadway Segment				Capacity Threshold	LOS
		Class	L	Capacity	L	Class[2]	ADT	V/C		
El Rivino Road										
Btwn Cedar Ave and Cactus Ave	JV / RIA / SB	SH	4	25,900	2	13,000	4,300	0.33	Acceptable	A
Btwn Cactus Ave and Hall Ave	JV /SB	SH	4	25,900	2	13,000	4,000	0.31	Acceptable	A
Btwn Hall Ave and Agua Mansa Rd	JV / SB	SH	4	25,900	2	13,000	3,100	0.24	Acceptable	A
Hall Avenue										
Btwn El Rivino Rd and Agua Mansa Rd	JV	NC[1]	4	25,900	2	13,000	1,100	0.08	Acceptable	A
Market Street										
Btwn Rubidoux Blvd and Agua Mansa Rd	JV	MH	4	34,100	4	34,100	22,200	0.65	Acceptable	B
Btwn Agua Mansa Rd and Hall Ave	JV	MH	4	34,100	2	18,000	17,000	0.94	Approaches Capacity	**E**
Btwn Hall Ave and Rivera St	JV / RIV	MH	4	34,100	2	18,000	23,600	1.31	**Potentially Exceeds Capacity**	**F**
Agua Mansa Road										
Btwn Market St and Brown Ave	JV	SH	4	25,900	2	13,000	11,300	0.87	Approaches Capacity	D
Btwn Brown Ave and Hall Ave	JV / SB	SH	4	25,900	4	25,900	12,300	0.47	Acceptable	A
Btwn Hall Ave and El Rivino Rd	JV / SB	SH	4	25,900	2	18,000	12,800	0.71	Acceptable	C

Source: Ganddini 2018.

Notes: Btwn: between; Class: classification; L: lanes; ADT: average daily trips; V/C: volume-to-capacity ratio; LOS: level of service; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; MH: Major Highway; SH: Secondary Highway; NC: Not Classified

Bold: Exceeds significance criteria.

0.00– 0.80 = Acceptable Capacity. This represents a range of free flow to stable flow, where the unrestricted speed and freedom to maneuver begins to become more limited by the increase in traffic. In general, the driver experiences only minor inconvenience, and traffic flow is quick but light during off-peak hours.

0.81 – 1.00 = Approaches Capacity. This represents high-density but stable flow, where speed and freedom to maneuver are restricted. In general, the driver experiences a degree of inconvenience during peak hours, and traffic flow is slow but steady during peak hours.

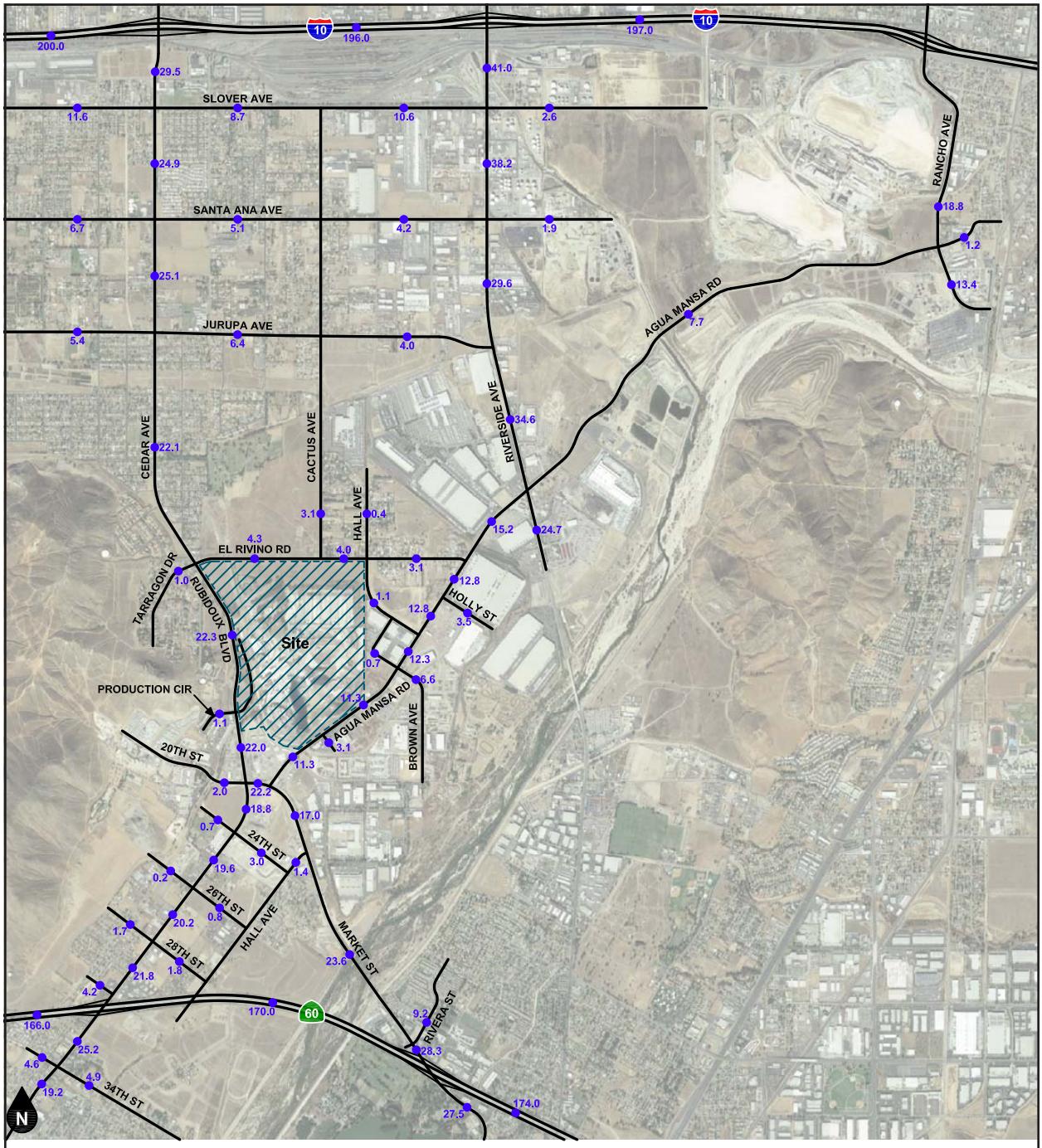
1.00 + = Potentially Exceeds Capacity. This is used to define forced or breakdown flow during peak hours. This condition exists wherever the amount of traffic exceeds the amount which can reasonably be handled by the roadway. In general, the driver experiences a high degree of inconvenience, and traffic flow is extremely slow with stop-and-go flow and traffic queues begin to form. This condition is typical of the breakdown in flow which occurs when an accident is present on the roadway.

[1] Equivalent to a Secondary for County of Riverside Roadway Classifications based on existing curb-to-curb and lane

[2] Roadway maximum capacity at Level of Service "E" for roadway classification. Capacity adjustment to reflect the number of existing number of travel lanes and is based on existing lane geometrics, existing roadway design, points of conflict, and existing curb-to-curb widths to determine the nearest roadway classification and capacity.

Figure 5.15-4 - Existing Daily Traffic Volumes

5. Environmental Analysis



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●## Vehicles Per Day (1,000's)

NOT TO SCALE

Source: Ganddini Group, Inc, 2018

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Alternative Modes of Transportation

Existing Pedestrian and Bicycle Circulation

The Jurupa Area Plan trails and bikeway system is shown on Figure 17 in the TIA (see Appendix K) and includes both multipurpose trails and bicycle routes. Existing pedestrian facilities adjacent to the project site are shown on Figure 18 of the TIA (see Appendix K). On July 5, 2018, the City Council adopted a resolution approving the City's Circulation Master Plan for Bicyclists and Pedestrians that identified a system of 43 recommended bicycle facility segments including a combination of off-street facilities and on-street bike lanes and bike routes. The plan is consistent with AB1348 that requires local jurisdictions to provide for accommodation of all users of the roadway including vehicular traffic, pedestrians, bicyclists and public transportation.

Existing Transit Service

The study area is currently served by Riverside Transit Agency Route 29 along Rubidoux Boulevard, Market Street, Hall Avenue, and 24th Street—also, Riverside Transit Agency Route 49 along Mission Boulevard (south of SR-60). Figure 19 in the TIA (see Appendix K) shows the existing transit routes in the project vicinity.

5.15.2 Thresholds of Significance

5.15.2.1 APPENDIX G THRESHOLDS

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

T-1 Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

T-2 Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).

T-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

T-4 Result in inadequate emergency access.

5.15.2.2 OTHER SIGNIFICANCE CRITERIA

The following significance criteria have been established to evaluate environmental impacts in the project area and are utilized in this DEIR.

Cities of Jurupa Valley, Colton, Rialto, and Riverside and County of San Bernardino

Intersections

The minimum level of service applicable to the study area intersections is LOS D. Therefore, any intersection operating at LOS E or worse will be considered deficient. An impact is considered significant if the project-

related traffic causes an intersection to move from an acceptable level of service to an unacceptable level of service. An impact would also occur where an intersection is already operating at a deficient LOS E or worse, and the proposed project adds additional delay to the intersection. If a significant impact occurs, mitigation is required to bring the intersection back to an acceptable level of service or to the "no-project" condition (condition without implementation of the proposed project). It should be noted that for any roadway segment or intersection located in multiple jurisdictions, the roadway segment or intersection has been analyzed in accordance to City of Jurupa Valley standards since the City of Jurupa Valley is the lead agency.

Segments

Roadway segments are considered to operate at an acceptable level when the average daily traffic volumes do not exceed the roadway capacities as specified by the roadway classification. The City of Jurupa Valley General Plan (2017) roadway capacities as specified by the roadway classifications are shown in Table 1 in the TIA (see Appendix K). The City of Jurupa Valley along with the City of Riverside utilize the County of Riverside roadway capacities. For roadway segments located in multiple jurisdictions, City of Jurupa Valley roadway capacities and classifications have been given preference since the City of Jurupa Valley is the lead agency.

Caltrans

For the purposes of this analysis, the same thresholds (LOS D) have also been applied to all intersections in all jurisdictions, including the Caltrans ramp-to arterial intersections. A level of service analysis for freeway on and off-ramps is included in this analysis. If a state highway facility is operating at less than the target LOS, the existing LOS is to be maintained

Caltrans has determined that all state-owned facilities that operate below LOS D should be identified and improved to an acceptable LOS. The Caltrans Traffic Impact Study Guidelines states that if an existing state-owned facility operates at less than LOS D, the existing service level should be maintained. Based on Caltrans criteria, a project's impact is considered significant if the project causes the LOS to change from an acceptable LOS (i.e., LOS D or better) to a deficient LOS (i.e., LOS E or F).

5.15.3 Applicable Policies and Design Features

Applicable regulatory requirements, plans, policies, and programs (PPPs) and conditions of approval for transportation and traffic impacts are identified below

5.15.3.1 PLANS, POLICIES, OR PROGRAMS (PPP)

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to transportation. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP T-1 Prior to the issuance of any building permits, the project proponent shall make required per-unit fee payments associated with the Western Riverside County Transportation Uniform Mitigation Fees (TUMF), and the City of Jurupa Valley Development Impact Fee (DIF).

PPP T-2 The project shall comply with City's Development Impact Fee program, which requires payment of a development mitigation fee to assist in providing revenue that the City can use to fund transportation improvements such as roads, bridges, major improvements and traffic signals. The Project Applicant shall pay fees in accordance with Municipal Code Chapter 3.75.

PPP T-3 The Proposed Project's construction activities will be conducted in accordance with the provision of traffic-control devices in compliance with the California Manual for Uniform Traffic Control Devices (MUTCD) to ensure traffic safety on public streets, highways, pedestrian walkways, and bikeways.

PPP-T-4 The proposed project's construction contractor will be required to comply with all City of Jurupa Valley standard conditions pertaining to construction including work hours, traffic control plan, haul route, and access. Where possible, construction related trips will be restricted to off-peak hours.

PPP-T-5 The proposed project's construction contractor will be required to obtain an oversized-vehicle transportation permit, if necessary, from Caltrans.

5.15.3.2 PROJECT DESIGN FEATURES

The Project Design Features (PDFs) shall be included as Conditions of Approval for the project. These PDFs have also been incorporated in the Mitigation Measures (as Mitigation Measure T-1 in each respective alternative scenario) and will be included in the Mitigation Monitoring and Reporting Program.

PDF T-1 The proposed project will construct a west bound right-turn lane at Rubidoux Boulevard at the Building 6 Access (Intersection #7).

PDF T-2 The proposed project will provide the following improvement on Rubidoux Boulevard at the project access (Intersection #8):

- Construct a northbound right-turn lane
- Construct a southbound left-turn lane
- Construct a westbound left-turn lane
- Construct a westbound right-turn lane
- Install a traffic signal

PDF T-3 The proposed project will provide the following improvement on El Rivino Road at the Building 6 access (Intersection #18):

- Construct a northbound right-turn lane
- Construct a second eastbound through lane
- Construct an eastbound right-turn lane

- Construct a westbound left-turn lane

PDF T-4 The proposed project will provide the following improvement on El Rivino Road at the project access (Intersection #19):

- Construct a northbound left-turn lane
- Construct a northbound right-turn lane
- Construct a second eastbound through lane
- Construct an eastbound right-turn lane
- Construct a westbound left-turn lane
- Install a traffic signal (Site Access Alternatives 1A and 2A only)

PDF T-5 The proposed project will provide the following improvement on El Rivino Road at the Cactus Avenue/project access (Intersection #20):

- Construct a northbound left-turn lane
- Construct a northbound shared through/right-turn lane
- Construct a second eastbound through lane
- Construct an eastbound right-turn lane
- Construct a westbound left-turn lane

PDF T-6 The proposed project will provide the following improvement on El Rivino Road at the Building 1 auto access (Intersection #21):

- Construct a northbound right-turn lane
- Construct a second eastbound through lane
- Construct an eastbound right-turn lane
- Construct a westbound left-turn lane

PDF T-7 The proposed project will provide the following improvement on Hall Avenue at the Building 1 access (Intersection #23):

- Construct a northbound left-turn lane
- Construct a southbound right-turn lane
- Construct an eastbound left-turn lane
- Construct an eastbound right-turn lane

PDF T-8 The proposed project includes conceptual street improvements that will be installed along Rubidoux Boulevard, El Rivino Road, and Hall Avenue, as shown in Figure 5.15-5, *Circulation Recommendations – Alternatives 1 and 2*, for Alternative 1 and Alternative 2 and Figure 5.15-6, *Circulation Recommendations – Site Access Alternatives 1A and 2A*, for Alternative 1A and Alternative 2A.

5.15.4 Environmental Impacts

5.15.4.1 METHODOLOGY

The TIA prepared for the proposed project provides a detailed analysis of potential traffic and circulation impacts. Each study intersection was analyzed for the following scenarios:

- Existing
- Existing Plus Project Conditions
- Near-Term Year 2020 Without Project Conditions
- Near-Term Year 2020 With Project Conditions
- Future Year 2035 Without Project Conditions
- Future Year 2035 With Project Conditions

The traffic report analyzes existing and future weekday daily, AM peak hour and PM peak hour traffic conditions for a near-term (Year 2020) and long-term (Year 2035) traffic setting upon completion of the proposed project. Study intersections are analyzed using the HCM methodology (see Appendix K for a detailed description of the intersection delay methodology).

Project Trip Generation

Project trip generation based upon rates obtained from the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th edition (2017), and the City of Fontana's Truck Trip Generation Study (2003) (Ganddini 2018). Truck trips are converted to passenger car equivalent (PCE) using factors obtained from the San Bernardino County Transportation Authority (SBCTA; formerly known as the San Bernardino Associated Governments) (see Appendix K).

Alternative 1

Under Alternative 1, the Industrial Park district would allow for 4,216,000 square feet of industrial park uses, 200,000 square feet of business park uses, 64,000 square feet of research and development, and a 70.9-acre recreational park. As shown in Table 5.15-6, *Project Trip Generation in PCE – Alternative 1*, Alternative 1 is forecast to generate a total of approximately 11,376 PCE daily trips, 746 PCE trips of which will occur during the morning peak hour, and 868 PCE trips of which will occur during the evening peak hour.

Table 5.15-6 Project Trip Generation in PCE – Alternative 1

Land Use	Size	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Building 1 - Cars	1,500.000	TSF	1,302	56	19	75	28	65	93
Building 1 – Trucks[1]	1,500.000	TSF	2,021	88	30	118	43	99	142
Building 2 - Cars	1,330.000	TSF	1,154	49	16	65	25	58	83
Building 2 – Trucks[1]	1,330.000	TSF	1,792	76	25	101	36	91	127
Building 3 - Cars	690.000	TSF	599	26	9	35	13	30	43
Building 3 – Trucks[1]	690.000	TSF	929	43	13	56	21	46	67
Building 4 - Cars	465.000	TSF	404	17	6	23	9	20	29
Building 4 – Trucks[1]	465.000	TSF	627	25	10	35	13	33	46
Building 5 - Cars	231.000	TSF	201	9	3	12	4	10	14
Building 5- Trucks[1]	231.000	TSF	311	13	3	16	8	16	24
Building 6 - Cars	200.000	TSF	780	97	13	110	13	86	99
Building 6 – Trucks[1]	200.000	TSF	479	61	10	71	10	52	62
Research and Development	64.000	TSF	721	20	7	27	4	27	31
Regional Park[2]	71.3	AC	56	1	1	2	4	4	8
Total			11,376	581	165	746	231	637	868

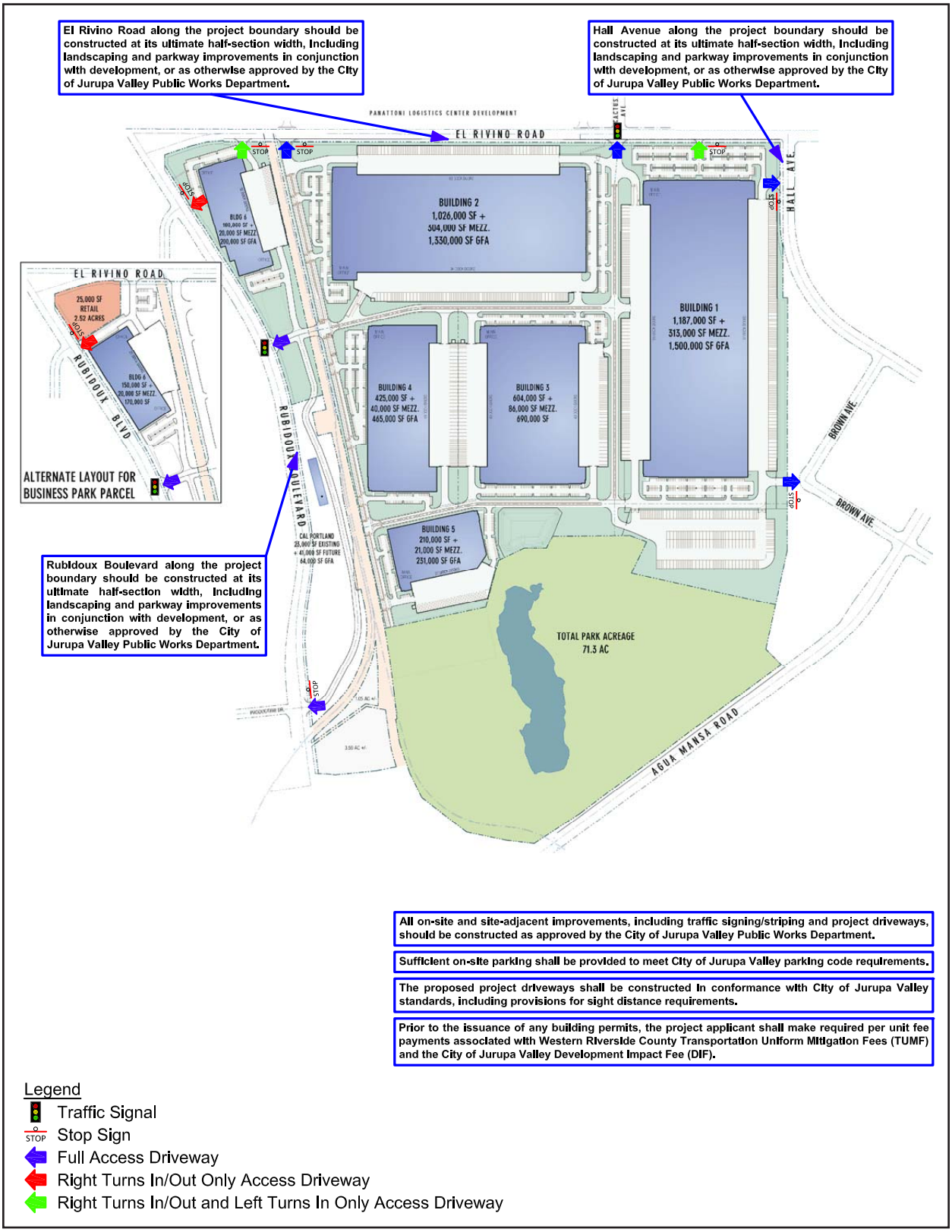
Source: Ganddini 2018.
Notes: AC: acre; TSF: thousand square feet
[1] Truck trips are shown as PCE (see Appendix K).
[2] The recreational component of the project is 70.9-acres. The traffic study evaluates a 71.3-acre park; and therefore, trip generation associated with this project component is conservative

Alternative 2

Under Alternative 2, the Industrial Park district would allow for 4,216,000 square feet of industrial park uses, 150,000 square feet of business park uses, 25,000 square feet of retail, 65,000 square feet of research and development, and a 70.9-acre recreational park. In order to analyze a conservative scenario in terms of the assignment of trips, the traffic volumes from the commercial retail portion of the project site have not been reduced as a result of pass-by trips. As shown in Table 5.15-7, *Project Trip Generation in PCE – Alternative 2*, Alternative 2 is forecast to generate a total of approximately 13,176 PCE daily trips, 657 PCE trips of which will occur during the morning peak hour, and 874 PCE trips of which will occur during the evening peak hour.

Figure 5.15-5 - Circulation Recommendations Alternative 1 and 2

5. Environmental Analysis



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Source: Ganddini Group, Inc, 2018

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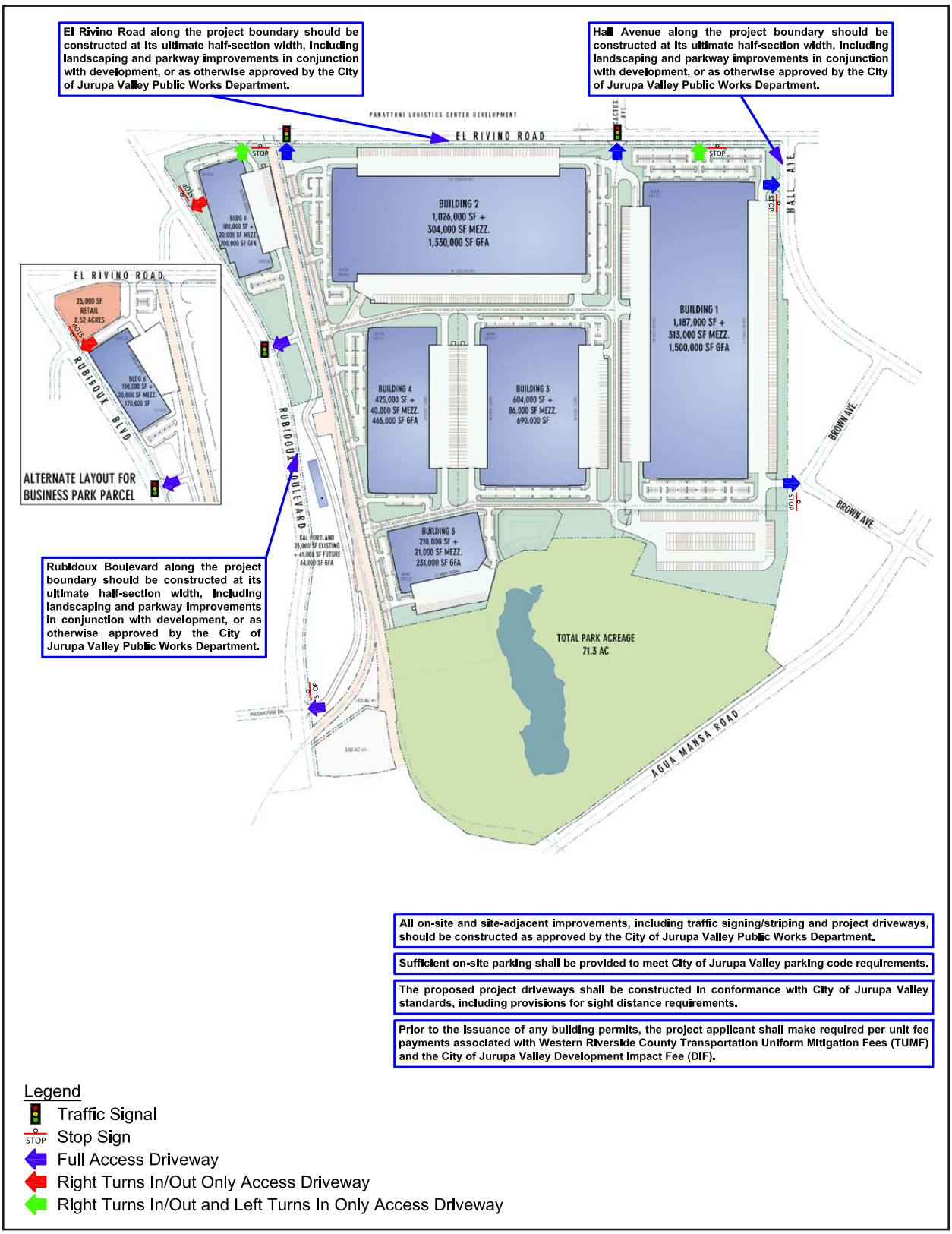
Figure 5.15-6 - Circulation Recommendations Site Access Alternative 1A and 2A



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Source: Ganddini Group, Inc, 2018

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Table 5.15-7 Project Trip Generation in PCE – Alternative 2

Land Use	Size	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Building 1 - Cars	1,500.000	TSF	1,302	56	19	75	28	65	93
Building 1 – Trucks[1]	1,500.000	TSF	2,021	88	30	118	43	99	142
Building 2 - Cars	1,330.000	TSF	1,154	49	16	65	25	58	83
Building 2 – Trucks[1]	1,330.000	TSF	1,792	76	25	101	36	91	127
Building 3 - Cars	690.000	TSF	599	26	9	35	13	30	43
Building 3 – Trucks[1]	690.000	TSF	929	43	13	56	21	46	67
Building 4 - Cars	465.000	TSF	404	17	6	23	9	20	29
Building 4 – Trucks[1]	465.000	TSF	627	25	10	35	13	33	46
Building 5 - Cars	231.000	TSF	201	9	3	12	4	10	14
Building 5- Trucks[1]	231.000	TSF	311	13	3	16	8	16	24
Business Park	170.000	TSF	2,115	41	27	68	32	39	71
Commercial Retail	25.000	TSF	944	15	9	24	46	50	96
Research and Development	64.000	TSF	721	20	7	27	4	27	31
Regional Park[2]	71.3	AC	56	1	1	2	4	4	8
Total			**13,176**	**479**	**178**	**657**	**286**	**588**	**874**

Source: Ganddini 2018.
Notes: AC: acre; TSF: thousand square feet
1 Truck trips are shown as PCE (see Appendix K).
2 The recreational component of the project is 70.9-acres. The traffic study evaluates a 71.3-acre park; and therefore, trip generation associated with this project component is conservative

Trip Distribution and Assignment

Figures 20 to 41 in the TIA (see Appendix K) show the forecast directional distributions of the project generated trips for Alternative 1 and 2 for specific buildings and uses. The project trip distributions are based upon RivTAM select zone traffic model runs and refined by City of Jurupa Valley Engineering Department staff. The trip distributions have been separated for cars and trucks for industrial land uses as these trips have different distributional patterns. Based on the identified trip generation and distributions, project average daily traffic volumes have been calculated and are shown on Figures 5.15-7 and 5.15-8 for Alternative 1 and 2, respectively. Morning and evening peak hour intersection turning movement volumes expected from the project for Alternative 1 are shown on Figures 44 and 45 in the TIA, respectively. Morning and evening peak hour intersection turning movement volumes expected from the project for Alternative 2 are shown on Figures 46 and 47 in the TIA, respectively.

Site Access Alternative 1A and 2A

Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. If access across the rail line is not permitted, then trip distribution for the project would be altered slightly from the analysis for Alternatives 1 and 2. "Site Access Alternative 1A" and "Site Access Alternative 2A" are analyzed for the following intersections:

- #6. Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd

- #7. Rubidoux Blvd at Building 6 Access
- #8. Rubidoux Blvd at Project Access
- #9. Rubidoux Blvd at Production Circle
- #10. Rubidoux Blvd at 20th St / Market St
- #18. Building 6 Access at El Rivino Rd
- #19. Project Access at El Rivino Rd
- #20. Cactus Ave / Project Access at El Rivino Rd
- #21. Building 1 Auto Access at El Rivino Rd
- #22. Hall Ave at El Rivino Rd
- #23. Hall Ave at Building 1 Access
- #26. Agua Mansa Rd at Hall Ave
- #27. Agua Mansa Rd at Brown Ave
- #28. Agua Mansa Rd at R.A. Nelson / Regional Park Access
- #29. Agua Mansa Rd at Market St

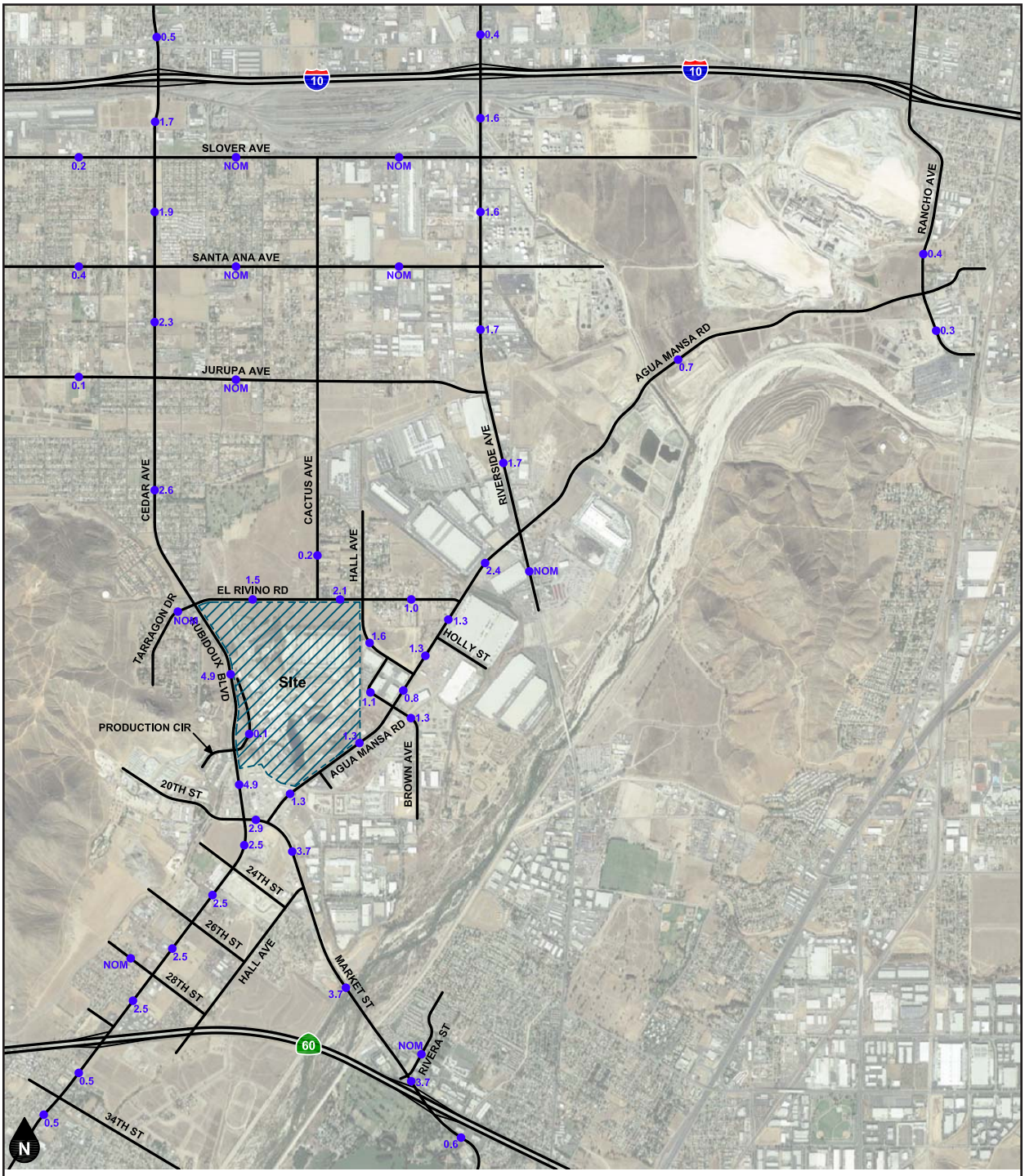
"Site Access Alternative 1A" and "Site Access Alternative 2A" are analyzed for the following roadway segments:

- Rubidoux Boulevard between El Rivino Road to Production Circle
- Rubidoux Boulevard between Production Circle to 20th Street
- El Rivino Road between Cedar Avenue to Cactus Avenue
- El Rivino Road between Cactus Avenue to Hall Avenue
- Hall Avenue between El Rivino Road to Agua Mansa Road
- Market Street between Rubidoux Boulevard to Agua Mansa Road
- Agua Mansa Road between Market Street to Brown Avenue
- Agua Mansa Road between Brown Avenue to Hall Avenue

The remaining study area roadway segments and intersections are not affected by this analysis as the trip distributions do not change apart from the identified project access and project adjacent intersections identified. Figures 77 to 88 in the TIA (see Appendix K) show the forecast directional distributions of the project generated trips for Site Access Alternative 1A and 2A.

Based on the identified trip generation and distributions, project average daily traffic volumes have been calculated and shown on Figure 89 in the TIA for Site Access Alternative 1A and Figure 90 in the TIA for Site Access Alternative 2A. Morning and evening peak hour intersection turning movement volumes expected from the project for the Site Access Alternative 1A are shown on Figures 91 and 92 in the TIA, respectively. Morning and evening peak hour intersection turning movement volumes expected from the project for the Site Access Alternative 2A are shown on Figures 93 and 94 in the TIA, respectively.

Figure 5.15-7 - Project Average Daily Traffic Volumes - Alternative 1



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● ## Vehicles Per Day (1,000's)

NOM Nominal; Less Than 50 Vehicles Per Day

0 3,500
Scale (Feet)

Source: Ganddini Group, Inc., October, 2018

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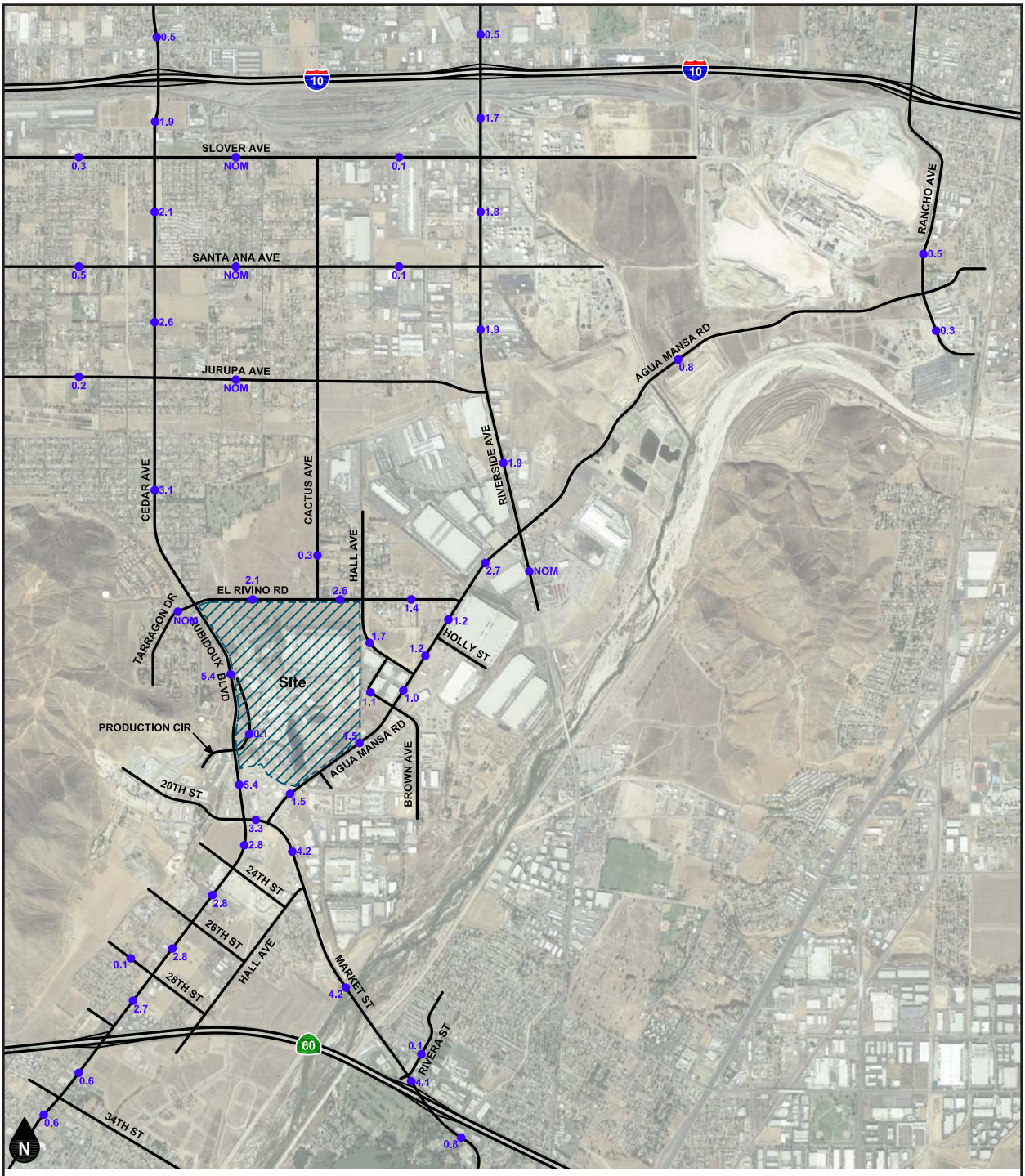
Figure 5.15-8 - Project Average Daily Traffic Volumes - Alternative 2



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● ## Vehicles Per Day (1,000's)

NOM Nominal; Less Than 50 Vehicles Per Day

0 3,500
Scale (Feet)

Source: Ganddini Group, Inc., October, 2018

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Traffic Forecasting

To assess future traffic conditions, existing traffic volumes are combined with project trips, ambient growth, and other development trips.

Future traffic conditions were modeled using the RivTAM Travel Demand Model. RivTAM utilizes socio-economic data based on the proposed land uses for this analysis. Average daily traffic volume forecasts were determined using the growth increment approach on the RivTAM Year 2008 and Year 2035 average daily traffic volume forecasts (see Appendix E of the TIA). Linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between Year 2018 and Year 2035 is 17 years of the 27-year time frame, a factor of 0.63 (i.e. 17/27) was used. For the "with project" scenarios, project trips were manually added to the traffic volumes in the model.

For segments and intersections in the City of Jurupa Valley and the City of Riverside, the forecast methodology is based on the factors and procedures in the Riverside County Transportation Department Traffic Impact Analysis Preparation Guide. For intersections and segments in the City of Rialto, City of Colton, and unincorporated San Bernardino County, the forecast methodology is based on the factors and procedures in the San Bernardino County Congestion Management Program 2016 Update. The Year 2035 peak hour factor has been adjusted upward to 1.00 for intersections in Jurupa Valley. This is to account for the effects of congestion on peak spreading. Peak spreading refers to the tendency of traffic to spread more evenly across time as congestion increases. For study intersections in San Bernardino County, the Year 2035 peak hour factor has been adjusted to 0.95 per County of San Bernardino traffic impact analysis guidelines.

Cumulative Traffic Conditions

A list of other developments in the project vicinity were provided by City of Jurupa Valley, City of Rialto, City of Fontana, City of Colton, City of Riverside, and County of San Bernardino staffs. The other development trips have been aggregated into 31 traffic analysis zones (TAZ). Table 11, Other Trip Generation, in the TIA (see Appendix K) shows the forecast trip generation by traffic analysis zone for other developments forecast to add future traffic volumes to the study area. Figure 4-4, *Areawide Cumulative Projects*, shows the location of related projects analyzed in the traffic analysis. Appendix I in the TIA includes the trip distributions for the other development. Average daily traffic volumes forecast to be generated by other developments are depicted on Figure 49 in the TIA. Figures 50 and 51 in the TIA show the morning and evening peak hour intersection turning movement volumes for other developments, respectively.

Planned Improvements

The Rubidoux Boulevard/SR-60 interchange has two planned alternative improvements included in Appendix H of the TIA (see Appendix K). For the purposes of this traffic impact analysis, Alternative 2 (tight diamond configuration) has been utilized as part of the interchange improvements to mitigate deficient ramp intersections in the 2035 future forecasts.

The following improvement are necessary to mitigate impacts at the cedar Avenue/I-10 Freeway interchange:

- Cedar Avenue/I-10 WB Ramp:
  - Construct second WB right turn lane
  - Construct WB left turn lane
- Cedar Avenue/I-10 EB Ramp
  - Construct EB right turn lane

Although these improvements are generally funded and included in the San Bernardino County Transportation Authority (SBCTA) Measure I Improvement Program, the most recently available materials from the SBCTA website indicate a $7.3M funding shortfall for these improvements and also suggest that the completion of construction is potentially being delayed. A fair share contribution is included as a mitigation measure for the proposed project.

5.15.4.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds for which the project could result in potentially significant impacts.

Impact T-1	Threshold: Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

This analysis describes the proposed project's direct impacts on the circulation network in the project vicinity for the following scenarios:

1. Existing Plus Project.
2. Near-Term 2020
3. Horizon Year 2035

EXISTING PLUS PROJECT ANALYSIS

A direct project impact is defined when an intersection currently operates at acceptable LOS during the peak hours for existing traffic conditions, and the intersection is projected to operate at unacceptable LOS during the peak hours with the addition of project traffic (Existing Plus Project traffic conditions).

Existing Plus Project – Intersections

Alternative 1

"Existing Plus Project – Alternative 1" morning and evening peak hour intersection turning movement volumes are shown in Figures 54 and 55 in the TIA, respectively (see Appendix K). The existing plus project intersection LOS analysis for Alternative 1 is shown in Table 5.15-8, *Existing Plus Project Intersection Delay and Level of Service – Alternative 1*. For "Existing Plus Project – Alternative 1" traffic conditions, the study intersections are

projected to operate within acceptable LOS (D or better) during the morning and evening peak hours, with the exception of the intersections listed below. In cases where the intersection would operate at an acceptable LOS without the proposed project, the intersection is noted with 'direct impact' (the project causes the LOS to degrade to an unacceptable level).

- #1. Cedar Avenue at I-10 Freeway WB Ramps (AM peak hour) – **Direct Impact**
- #9. Rubidoux Boulevard at Production Circle (AM and PM peak hour)
- #10. Rubidoux Boulevard at 20th Street/Market Street (PM peak hour) – **Direct Impact**
- #11. Rubidoux Boulevard at 24th Street (AM and PM peak hour)
- #12. Rubidoux Boulevard at 26th Street (AM and PM peak hour)
- #15. Rubidoux Boulevard at SR-60 Freeway WB On-Ramp (AM peak hour)
- #24. Agua Mansa Road at El Rivino Road (AM and PM peak hour)
- #29. Agua Mansa Road at Market Street (AM and PM peak hour)
- #30. Market Street at Hall Avenue (AM and PM peak hour)

Table 5.15-8 Existing Plus Project Intersection Delay and Level of Service – Alternative 1

			Existing				Existing Plus Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
ID	Study Intersection	Jurisdiction	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
1.	Cedar Ave at I-10 Freeway WB Ramps	CAL	54.5	D	35.6	D	**56.5**	**E**	40.4	D
2.	Cedar Ave at I-10 Freeway EB Ramps	CAL	43.4	D	36.1	D	47.3	D	37.2	D
3.	Cedar Ave at Slover Ave	SB	17.5	B	17.4	B	18.1	B	18.1	B
4.	Cedar Ave at Santa Ana Ave	SB	10.4	B	11.3	B	11.2	B	12.2	B
5.	Cedar Ave at Jurupa Ave	SB	28.1	C	31.0	C	34.2	C	42.0	D
6.	Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd	JV	11.3	B	19.4	B	13.2	B	22.8	C
7.	Rubidoux at Building 6 Access	JV	NA	NA	NA	NA	10.5	B	14.7	B
8.	Rubidoux at Project Access	JV	NA	NA	NA	NA	6.3	A	9.1	A
9.	Rubidoux Blvd at Production Circle	JV	**69.3**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
10.	Rubidoux Blvd at 20th St / Market St	JV	27.7	C	37.8	D	30.5	C	**58.4**	**E**
11.	Rubidoux Blvd at 24th St	JV	**43.5**	**E**	**99.9**	**F**	**54.7**	**F**	**99.9**	**F**
12.	Rubidoux Blvd at 26th St	JV	**33.6**	**D**	**55.5**	**F**	**41.8**	**E**	**73.1**	**F**
13.	Rubidoux Blvd at 28th St	JV	47.5	D	40.3	D	48.3	D	42.5	D
14.	Rubidoux Blvd at 30th St / SR-60 Freeway WB Off-Ramp	CAL	20.1	C	24.8	C	20.7	C	28.4	C
15.	Rubidoux Blvd at SR-60 Freeway WB On-Ramp	CAL	**44.5**	**E**	20.1	C	**50.0**	**E**	24.7	C
16.	Rubidoux Blvd at SR-60 Freeway EB Ramps	CAL	30.5	C	33.7	C	39.3	D	40.4	D

Table 5.15-8 Existing Plus Project Intersection Delay and Level of Service – Alternative 1

ID	Study Intersection	Jurisdiction	Existing				Existing Plus Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
17.	Rubidoux Blvd at 34th St	JV	10.5	B	10.5	B	10.6	B	10.5	B
18.	Building 6 Access at El Rivino Rd	JV	NA	NA	NA	NA	8.8	A	10.2	B
19.	Project Access at El Rivino Rd	JV	NA	NA	NA	NA	10.4	B	16.0	C
20.	Cactus Ave / Project Access at El Rivino Rd	JV / RIA / SB	9.5	A	9.4	A	9.6	A	8.6	A
21.	Building 1 Auto Access at El Rivino Rd	JV	NA	NA	NA	NA	8.8	A	10.0	B
22.	Hall Ave at El Rivino Rd	JV / SB	11.1	B	17.4	C	13.1	B	24.2	C
23.	Hall Ave at Building 1 Access	JV	NA	NA	NA	NA	9.5	A	10.3	B
24.	Agua Mansa Rd at El Rivino Rd	RIA / SB	28.9	D	**56.3**	**F**	**45.5**	**E**	**99.9**	**F**
25.	Agua Mansa Rd at Holly Place	SB	13.5	B	20.4	C	14.2	B	23.6	C
26.	Agua Mansa Rd at Hall Ave	JV / SB	12.2	B	13.2	B	12.7	B	15.3	C
27.	Agua Mansa Rd at Brown Ave	JV / SB	10.1	B	14.2	B	11.2	B	15.3	B
28.	Agua Mansa Rd at R.A. Nelson	JV	7.8	A	3.6	A	7.5	A	3.5	A
29.	Agua Mansa Rd at Market St	JV	49.8	D	**99.9**	**F**	**57.0**	**E**	**99.9**	**F**
30.	Market St at Hall Ave	JV	28.2	D	**54.2**	**F**	**39.5**	**E**	**97.6**	**F**
31.	Market St at Rivera St	RIV	19.6	B	22.6	C	19.0	B	22.3	C
32.	Market St at SR-60 Freeway WB Ramps	CAL	10.8	B	16.5	B	10.9	B	19.1	B
33.	Market St at SR-60 Freeway EB Ramps	CAL	19.3	B	31.2	C	21.6	C	44.3	D
34.	Riverside Ave at I-10 Freeway WB Ramps	CAL	21.3	C	12.2	B	23.7	C	12.6	B
35.	Riverside Ave at I-10 Freeway EB Ramps	CAL	18.5	B	19.8	B	19.1	B	21.6	C
36.	Riverside Ave at Slover Ave	RIA	20.9	C	19.7	B	22.8	C	20.8	C
37.	Riverside Ave at Santa Ana Ave	RIA	10.0	B	9.2	A	10.4	B	9.4	A
38.	Riverside Ave at Jurupa Ave	RIA	7.5	A	7.0	A	7.7	A	7.0	A
39.	Riverside Ave at Agua Mansa Rd	RIA / COL	8.7	A	8.4	A	10.3	B	12.9	B
40.	Rancho Ave at Agua Mansa Rd	COL	9.7	A	16.4	B	10.7	B	19.0	B

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10; TS: Traffic Signal; CSS: Cross Street Stop; AWS: All Way Stop; LOS: level of service
Bold: Exceeds LOS D significance criteria. Bold Underline: Project Direct Impact.
[1] Delay is shown in seconds/vehicle. Delay is reported for un-signalized study intersections and all study intersections within California Department of Transportation jurisdiction. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).
[2] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Level of Significance before Mitigation: Improvements required for Intersections #s 9, 10, 11, 12, 15, 29 and 30 are programmed within existing fee programs (DIF and/or TUMF), and therefore impacts to these intersections would be less than significant under this scenario. The improvements for Intersection #1 have been generally funded but a shortfall for funding has been identified. Impacts to Intersection #1, therefore, and to Intersection # 24which is not included within a fee program, would be Potentially Significant even after implementation of MM Alt1 T-3.

Alternative 2

"Existing Plus Project – Alternative 1" morning and evening peak hour intersection turning movement volumes are shown in Figures 56 and 57 in the TIA, respectively (see Appendix K). The Existing Plus Project Intersection LOS analysis for Alternative 2 is shown in Table 5.15-9, *Existing Plus Project Intersection Delay and Level of Service Analysis – Alternative 2*. For "Existing Plus Project – Alternative 2" traffic conditions, the study intersections are projected to operate within acceptable LOS (D or better) during the morning and evening peak hours, except for the study intersections listed below. In cases where the intersection would operate at an acceptable LOS without the proposed project, the intersection is noted with 'direct impact' (the project causes the LOS to degrade to an unacceptable level):

- #1. Cedar Avenue at I-10 Freeway WB Ramps (AM and PM peak hour) – **Direct Impact**
- #9. Rubidoux Boulevard at Production Circle (AM and PM peak hour)
- #11. Rubidoux Boulevard at 24th Street (AM and PM peak hour)
- #12. Rubidoux Boulevard at 26th Street (AM and PM peak hour)
- #15. Rubidoux Boulevard at SR-60 Freeway WB On-Ramp (AM peak hour)
- #24. Agua Mansa Road at El Rivino Road (AM and PM peak hour)
- #29. Agua Mansa Road at Market Street (AM and PM peak hour)
- #30. Market Street at Hall Avenue (AM and PM peak hour)

Table 5.15-9 Existing Plus Project Intersection Delay and Level of Service – Alternative 2

			Existing				Existing Plus Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
ID	Study Intersection	Jurisdiction	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
1.	Cedar Ave at I-10 Freeway WB Ramps	CAL	54.5	D	35.6	D	**56.4**	**E**	39.2	D
2.	Cedar Ave at I-10 Freeway EB Ramps	CAL	43.4	D	36.1	D	45.8	D	37.1	D
3.	Cedar Ave at Slover Ave	SB	17.5	B	17.4	B	18.0	B	18.0	B
4.	Cedar Ave at Santa Ana Ave	SB	10.4	B	11.3	B	11.1	B	12.3	B
5.	Cedar Ave at Jurupa Ave	SB	28.1	C	31.0	C	26.4	C	30.5	C
6.	Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd	JV	11.3	B	19.4	B	13.1	B	23.4	C
7.	Rubidoux at Building 6 Access	JV	NA	NA	NA	NA	10.6	B	15.2	C
8.	Rubidoux at Project Access	JV	NA	NA	NA	NA	6.0	A	8.1	A

Table 5.15-9 Existing Plus Project Intersection Delay and Level of Service – Alternative 2

ID	Study Intersection	Jurisdiction	Existing				Existing Plus Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
9.	Rubidoux Blvd at Production Circle	JV	**69.3**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
10.	Rubidoux Blvd at 20th St / Market St	JV	27.7	C	37.8	D	30.4	C	54.4	D
11.	Rubidoux Blvd at 24th St	JV	**43.5**	**E**	**99.9**	**F**	**53.1**	**F**	**99.9**	**F**
12.	Rubidoux Blvd at 26th St	JV	**33.6**	**D**	**55.5**	**F**	**40.7**	**E**	**73.2**	**F**
13.	Rubidoux Blvd at 28th St	JV	47.5	D	40.3	D	48.5	D	36.5	D
14.	Rubidoux Blvd at 30th St / SR-60 Freeway WB Off-Ramp	CAL	20.1	C	24.8	C	20.7	C	28.0	C
15.	Rubidoux Blvd at SR-60 Freeway WB On-Ramp	CAL	**44.5**	**E**	20.1	C	**50.3**	**F**	24.1	C
16.	Rubidoux Blvd at SR-60 Freeway EB Ramps	CAL	30.5	C	33.7	C	35.1	D	41.0	D
17.	Rubidoux Blvd at 34th St	JV	10.5	B	10.5	B	10.5	B	10.5	B
18.	Building 6 Access at El Rivino Rd	JV	NA	NA	NA	NA	8.8	A	10.2	B
19.	Project Access at El Rivino Rd	JV	NA	NA	NA	NA	10.4	B	16.2	C
20.	Cactus Ave / Project Access at El Rivino Rd	JV / RIA / SB	9.5	A	9.4	A	9.4	A	8.7	A
21.	Building 1 Auto Access at El Rivino Rd	JV	NA	NA	NA	NA	8.8	A	10.0	B
22.	Hall Ave at El Rivino Rd	JV / SB	11.1	B	17.4	C	12.7	B	24.5	C
23.	Hall Ave at Building 1 Access	JV	NA	NA	NA	NA	9.5	A	10.4	B
24.	Agua Mansa Rd at El Rivino Rd	RIA / SB	28.9	D	**56.3**	**F**	44.3	**E**	**99.9**	**F**
25.	Agua Mansa Rd at Holly Place	SB	13.5	B	20.4	C	14.1	B	23.1	C
26.	Agua Mansa Rd at Hall Ave	JV / SB	12.2	B	13.2	B	12.7	B	15.0	B
27.	Agua Mansa Rd at Brown Ave	JV / SB	10.1	B	14.2	B	11.2	B	15.3	B
28.	Agua Mansa Rd at R.A. Nelson	JV	7.8	A	3.6	A	7.5	A	3.4	A
29.	Agua Mansa Rd at Market St	JV	49.8	D	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
30.	Market St at Hall Ave	JV	28.2	D	**54.2**	**F**	**37.6**	**E**	**96.8**	**F**
31.	Market St at Rivera St	RIV	19.6	B	22.6	C	19.1	B	22.4	C
32.	Market St at SR-60 Freeway WB Ramps	CAL	10.8	B	16.5	B	10.9	B	18.6	B
33.	Market St at SR-60 Freeway EB Ramps	CAL	19.3	B	31.2	C	21.3	C	42.5	D
34.	Riverside Ave at I-10 Freeway WB Ramps	CAL	21.3	C	12.2	B	23.2	C	12.6	B
35.	Riverside Ave at I-10 Freeway EB Ramps	CAL	18.5	B	19.8	B	19.2	B	21.3	C
36.	Riverside Ave at Slover Ave	RIA	20.9	C	19.7	B	22.4	C	20.7	C

Table 5.15-9 Existing Plus Project Intersection Delay and Level of Service – Alternative 2

ID	Study Intersection	Jurisdiction	Existing				Existing Plus Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
37.	Riverside Ave at Santa Ana Ave	RIA	10.0	B	9.2	A	10.3	B	9.4	A
38.	Riverside Ave at Jurupa Ave	RIA	7.5	A	7.0	A	7.7	A	7.0	A
39.	Riverside Ave at Agua Mansa Rd	RIA / COL	8.7	A	8.4	A	10.3	B	12.3	B
40.	Rancho Ave at Agua Mansa Rd	COL	9.7	A	16.4	B	10.6	B	19.0	B

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10; TS: Traffic Signal; CSS: Cross Street Stop; AWS: All Way Stop; LOS: level of service
Bold: Exceeds LOS D significance criteria. Bold Underline: Project Direct Impact.
1 Delay is shown in seconds/vehicle. Delay is reported for un-signalized study intersections and all study intersections within California Department of Transportation jurisdiction. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).
2 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Level of Significance before Mitigation: Improvements required for Intersections #s 9, 11, 12, 15, 29 and 30 are programmed within existing fee programs (DIF and/or TUMF); therefore, impacts to these intersections would be less than significant under this scenario. The improvements for Intersection #1 have been generally funded in San Bernardino County, but a funding shortfall has been identified. The impacts to this intersection, therefore, and impacts to Intersection # 24, which is not included within a fee program would be Potentially Significant even after implementation of MM Alt 2 T-3.

Site Access Alternative 1A

Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. "Existing Plus Project – Site Access Alternative 1A" morning and evening peak hour intersection turning movement volumes are shown for Site Access Alternative 1A on Figures 97 and 98 in the TIA, respectively (see Appendix K). The existing plus project intersection LOS analysis for the Site Access Alternative 1A is shown in Table 5.15-10, *Existing Plus Project Intersection Delay and Level of Service – Site Access Alternative 1*. Note that only the intersections potentially affected by this site access alternative were evaluated (intersections not listed would have the same impact as included for Alternative 1). For "Existing Plus Project – Site Access Alternative 1" traffic conditions, the study intersections are projected to operate within acceptable LOS (D or better) during the morning and evening peak hours, except for the following study intersections:

- #9. Rubidoux Boulevard at Production Circle (AM and PM peak hour)
- #10. Rubidoux Boulevard at 20th Street/Market Street (PM peak hour) – **Direct Impact**
- #29. Agua Mansa Road at Market Street (AM and PM peak hour)

Table 5.15-10 Existing Plus Project Intersection Delay and Level of Service – Site Access Alternative 1A

ID	Study Intersection	Jurisdiction	Existing				Existing Plus Project Site Access Alternative 1A			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
6.	Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd	JV	11.3	B	19.4	B	17.1	B	34.8	C
7.	Rubidoux at Building 6 Access	JV	NA	NA	NA	NA	11.2	B	14.9	B
8.	Rubidoux at Project Access	JV	NA	NA	NA	NA	4.4	A	5.8	A
9.	Rubidoux Blvd at Production Circle	JV	**69.3**	**F**	**99.9**	**F**	99.9	F	99.9	F
10.	Rubidoux Blvd at 20th St / Market St	JV	27.7	C	37.8	D	31.4	C	**64.6**	**E**
18.	Building 6 Access at El Rivino Rd	JV	NA	NA	NA	NA	9.4	A	10.6	B
19.	Project Access at El Rivino Rd	JV	NA	NA	NA	NA	5.1	A	6.7	A
20.	Cactus Ave / Project Access at El Rivino Rd	JV / RIA / SB	9.5	A	9.4	A	9.7	A	9.8	A
21.	Building 1 Auto Access at El Rivino Rd	JV	NA	NA	NA	NA	8.8	A	10.0	A
22.	Hall Ave at El Rivino Rd	JV / SB	11.1	B	17.4	C	13.2	B	25.5	D
23.	Hall Ave at Building 1 Access	JV	NA	NA	NA	NA	9.6	A	10.5	B
25.	Agua Mansa Rd at Holly Place	SB	13.5	B	20.4	C	14.2	B	23.6	C
26.	Agua Mansa Rd at Hall Ave	JV / SB	12.2	B	13.2	B	12.7	B	15.3	C
27.	Agua Mansa Rd at Brown Ave	JV / SB	10.1	B	14.2	B	11.6	B	15.7	B
28.	Agua Mansa Rd at R.A. Nelson	JV	7.8	A	3.6	A	7.4	A	3.4	A
29.	Agua Mansa Rd at Market St	JV	49.8	D	**99.9**	**F**	99.9	F	99.9	F

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10; TS: Traffic Signal; CSS: Cross Street Stop; AWS: All Way Stop; LOS: level of service
Bold: Exceeds LOS D significance criteria. Bold Underline: Project Direct Impact.
1 Delay is shown in seconds/vehicle. Delay is reported for un-signalized study intersections and all study intersections within California Department of Transportation jurisdiction. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).
2 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Level of Significance before Mitigation: Intersections #s 7, 8 ,9, 18, 19, 20, 21, and 23 are all locations where the project developer will be constructing necessary improvements. Intersections #s 9, 10, 11, 12, 15, 29, and 30 are programmed within existing fee programs (DIF and/or TUMF), and therefore impacts to these intersections would be less than significant under this scenario. The improvements for Intersection #1 have been generally funded in San Bernardino County, but a funding shortfall has been identified. Impacts to Intersection # 1, and t Intersection # 24, which is not included within a fee program would be Potentially Significant even after implementation of MM Alt1A T-3.

Site Access Alternative 2A

Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. "Existing Plus Project – Alternative 2A" morning and evening peak hour intersection turning movement volumes are shown for Site Access Alternative 2A on Figures 99 and 100 in the TIA, respectively (see Appendix K). The Existing Plus Project Intersection LOS analysis for Site Access Alternative 2A is shown in Table 5.15-11, *Existing Plus Project Intersection Delay and Level of Service Analysis – Site Access Alternative 2A*. Note that only the intersections potentially affected by this site access alternative were evaluated (intersections not listed would have the same impact as included for Alternative 2). For "Existing Plus Project – Site Access Alternative 2A" traffic conditions, the study intersections are projected to operate within acceptable LOS (D or better) during the morning and evening peak hours, except for the following study intersections:

- #9. Rubidoux Boulevard at Production Circle (AM and PM peak hour)
- #10. Rubidoux Boulevard at 20th Street/Market Street (PM peak hour) – **Direct Impact**
- #29. Agua Mansa Road at Market Street (AM and PM peak hour)

Table 5.15-11 Existing Plus Project Intersection Delay and Level of Service – Site Access Alternative 2A

			Existing				Existing Plus Project Site Access Alternative 2A			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
ID	Study Intersection	Jurisdiction	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
6.	Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd	JV	11.3	B	19.4	B	17.0	B	36.5	D
7.	Rubidoux at Building 6 Access	JV	NA	NA	NA	NA	11.2	B	15.4	C
8.	Rubidoux at Project Access	JV	NA	NA	NA	NA	4.2	A	4.5	A
9.	Rubidoux Blvd at Production Circle	JV	**69.3**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
10.	Rubidoux Blvd at 20th St / Market St	JV	27.7	C	37.8	D	31.3	C	**58.9**	**E**
18.	Building 6 Access at El Rivino Rd	JV	NA	NA	NA	NA	9.4	A	10.6	B
19.	Project Access at El Rivino Rd	JV	NA	NA	NA	NA	5.2	A	6.7	A
20.	Cactus Ave / Project Access at El Rivino Rd	JV / RIA / SB	9.5	A	9.4	A	9.5	A	9.9	A
21.	Building 1 Auto Access at El Rivino Rd	JV	NA	NA	NA	NA	8.8	A	10.0	B
22.	Hall Ave at El Rivino Rd	JV / SB	11.1	B	17.4	C	12.8	B	25.9	D
23.	Hall Ave at Building 1 Access	JV	NA	NA	NA	NA	9.6	A	10.6	B
25.	Agua Mansa Rd at Holly Place	SB	13.5	B	20.4	C	14.1	B	23.1	C
26.	Agua Mansa Rd at Hall Ave	JV / SB	12.2	B	13.2	B	12.7	B	14.9	B
27.	Agua Mansa Rd at Brown Ave	JV / SB	10.1	B	14.2	B	11.6	B	15.7	B

Table 5.15-11 Existing Plus Project Intersection Delay and Level of Service – Site Access Alternative 2A

ID	Study Intersection	Jurisdiction	Existing				Existing Plus Project Site Access Alternative 2A			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]
28.	Agua Mansa Rd at R.A. Nelson	JV	7.8	A	3.6	A	7.4	A	3.4	A
29.	Agua Mansa Rd at Market St	JV	49.8	D	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10; TS: Traffic Signal; CSS: Cross Street Stop; AWS: All Way Stop; LOS: level of service
Bold: Exceeds LOS D significance criteria. Bold Underline: Project Direct Impact.
1 Delay is shown in seconds/vehicle. Delay is reported for un-signalized study intersections and all study intersections within California Department of Transportation jurisdiction. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).
2 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Level of Significance before Mitigation: Intersections #s 7, 8 ,9, 18, 19, 20, 21, and 23 are all locations where the project developer will be constructing necessary improvements. The improvements for Intersection #1 have been fully funded and improvements required for Intersections #s 9, 10, 11, 12, 15, 29, and 30 are programmed within existing fee programs (DIF and/or TUMF); therefore, impacts to these intersections would be less than significant under this scenario. Impacts to Intersection # 24, however, are not included within a fee program and impacts would be Potentially Significant even after implementation of MM Alt2A T-3.

Existing Plus Project – Roadway Segments

Alternative 1

"Existing Plus Project – Alternative 1" average daily traffic volumes are shown on Figure 52 in the TIA (see Appendix K). The existing plus project roadway segment analysis for Alternative 1 is shown in Table 5.15-12, *Existing Plus Project Daily Roadway Capacity Analysis – Alternative 1*. For "Existing Plus Project – Alternative 1" traffic conditions, the study roadway segments are projected to operate at acceptable LOS, except for the following roadway segments:

- Market Street, Agua Mansa Road to Hall Avenue
- Market Street, Hall Avenue to Rivera Street

Table 5.15-12 Existing Plus Project Daily Roadway Capacity Analysis – Alternative 1

Roadway Segment	Jurisdiction	Existing Roadway Segment				Existing Plus Project Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Rubidoux Boulevard									
Btwn El Rivino Rd and Production Circle	JV	22,300	0.65	Acceptable	B	27,200	0.80	Acceptable	C
Btwn Production Circle and 20th St	JV	22,000	0.65	Acceptable	B	26,900	0.79	Acceptable	C
Btwn 20th St and 24th St	JV	18,800	0.55	Acceptable	A	21,300	0.62	Acceptable	B
Btwn 24th St and 26th St	JV	19,600	0.57	Acceptable	A	22,100	0.65	Acceptable	B
Btwn 26th St and 28th St	JV	20,200	0.59	Acceptable	A	22,700	0.67	Acceptable	B
Btwn 28th St and 30th St	JV	21,800	0.64	Acceptable	B	24,300	0.71	Acceptable	C
El Rivino Road									
Btwn Cedar Ave and Cactus Ave	JV / RIA / SB	4,300	0.33	Acceptable	A	5,800	0.45	Acceptable	A
Btwn Cactus Ave and Hall Ave	JV /SB	4,000	0.31	Acceptable	A	6,100	0.47	Acceptable	A
Btwn Hall Ave and Agua Mansa Rd	JV / SB	3,100	0.24	Acceptable	A	4,100	0.32	Acceptable	A
Hall Avenue									
Btwn El Rivino Rd and Agua Mansa Rd	JV	1,100	0.08	Acceptable	A	2,700	0.21	Acceptable	A
Market Street									
Btwn Rubidoux Blvd and Agua Mansa Rd	JV	22,200	0.65	Acceptable	B	25,100	0.74	Acceptable	C
Btwn Agua Mansa Rd and Hall Ave	JV	17,000	0.94	Approaches Capacity	**E**	20,700	1.15	**Potentially Exceeds Capacity**	**F**
Btwn Hall Ave and Rivera St	JV / RIV	23,600	1.31	**Potentially Exceeds Capacity**	**F**	27,300	1.52	**Potentially Exceeds Capacity**	**F**
Agua Mansa Road									
Btwn Market St and Brown Ave	JV	11,300	0.87	Approaches Capacity	D	12,600	0.97	Approaches Capacity	E
Btwn Brown Ave and Hall Ave	JV / SB	12,300	0.47	Acceptable	A	13,100	0.51	Acceptable	A
Btwn Hall Ave and El Rivino Rd	JV / SB	12,800	0.71	Acceptable	C	14,100	0.78	Acceptable	C

Source: Ganddini 2018.
Notes: Btwn: between; Class: classification; L: lanes; ADT: average daily trips; V/C: volume-to-capacity ratio; LOS: level of service; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; MH: Major Highway; SH: Secondary Highway; NC: Not Classified
Bold: Exceeds LOS E significance criteria.
[1] Equivalent to a Secondary for County of Riverside Roadway Classifications based on existing curb-to-curb and lane
[2] Roadway maximum capacity at Level of Service "E" for roadway classification. Capacity adjustment to reflect the number of existing number of travel lanes and is based on existing lane geometrics, existing roadway design, points of conflict, and existing curb-to-curb widths to determine the nearest roadway classification and capacity.

Level of Significance before Mitigation: With implementation of MM Alt1 T-4, Impact T-1 for Roadway Segments is Less than Significant.

Alternative 2

"Existing Plus Project – Alternative 2" daily traffic volumes are shown on Figure 53 in the TIA (see Appendix K). The existing plus project roadway segment analysis for Alternative 2 is shown in Table 5.15-13, *Existing Plus Project Daily Roadway Capacity Analysis – Alternative 2*. For "Existing Plus Project – Alternative 2" traffic conditions, the study roadway segments are projected to operate at acceptable LOS, except for the following roadway segments:

- Market Street, Agua Mansa Road to Hall Avenue
- Market Street, Hall Avenue to Rivera Street

Table 5.15-13 Existing Plus Project Daily Roadway Capacity Analysis – Alternative 2

Roadway Segment	Jurisdiction	Existing Roadway Segment				Existing Plus Project Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Rubidoux Boulevard									
Btwn El Rivino Rd and Production Circle	JV	22,300	0.65	Acceptable	B	27,700	0.81	Approaches Capacity	D
Btwn Production Circle and 20th St	JV	22,000	0.65	Acceptable	B	27,400	0.80	Approaches Capacity	D
Btwn 20th St and 24th St	JV	18,800	0.55	Acceptable	A	21,600	0.63	Acceptable	B
Btwn 24th St and 26th St	JV	19,600	0.57	Acceptable	A	22,400	0.66	Acceptable	B
Btwn 26th St and 28th St	JV	20,200	0.59	Acceptable	A	23,000	0.67	Acceptable	B
Btwn 28th St and 30th St	JV	21,800	0.64	Acceptable	B	24,500	0.72	Acceptable	C
El Rivino Road									
Btwn Cedar Ave and Cactus Ave	JV / RIA / SB	4,300	0.33	Acceptable	A	6,400	0.49	Acceptable	A
Btwn Cactus Ave and Hall Ave	JV /SB	4,000	0.31	Acceptable	A	6,600	0.51	Acceptable	A
Btwn Hall Ave and Agua Mansa Rd	JV / SB	3,100	0.24	Acceptable	A	4,500	0.35	Acceptable	A
Hall Avenue									
Btwn El Rivino Rd and Agua Mansa Rd	JV	1,100	0.08	Acceptable	A	2,800	0.22	Acceptable	A
Market Street									
Btwn Rubidoux Blvd and Agua Mansa Rd	JV	22,200	0.65	Acceptable	B	25,500	0.75	Acceptable	C
Btwn Agua Mansa Rd and Hall Ave	JV	17,000	0.94	Approaches Capacity	**E**	21,200	1.18	**Potentially Exceeds Capacity**	**F**

Table 5.15-13 Existing Plus Project Daily Roadway Capacity Analysis – Alternative 2

Roadway Segment	Jurisdiction	Existing Roadway Segment				Existing Plus Project Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Btwn Hall Ave and Rivera St	JV / RIV	23,600	1.31	**Potentially Exceeds Capacity**	**F**	27,800	1.54	**Potentially Exceeds Capacity**	**F**
Agua Mansa Road									
Btwn Market St and Brown Ave	JV	11,300	0.87	Approaches Capacity	D	12,800	0.98	Approaches Capacity	E
Btwn Brown Ave and Hall Ave	JV / SB	12,300	0.47	Acceptable	A	13,300	0.51	Acceptable	A
Btwn Hall Ave and El Rivino Rd	JV / SB	12,800	0.71	Acceptable	C	14,000	0.78	Acceptable	C

Source: Ganddini 2018.
Notes: Btwn: between; Class: classification; L: lanes; ADT: average daily trips; V/C: volume-to-capacity ratio; LOS: level of service; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; MH: Major Highway; SH: Secondary Highway; NC: Not Classified
Bold: Exceeds LOS E significance criteria.
[1] Equivalent to a Secondary for County of Riverside Roadway Classifications based on existing curb-to-curb and lane
[2] Roadway maximum capacity at Level of Service "E" for roadway classification. Capacity adjustment to reflect the number of existing number of travel lanes and is based on existing lane geometrics, existing roadway design, points of conflict, and existing curb-to-curb widths to determine the nearest roadway classification and capacity.

Level of Significance before Mitigation: With implementation of MM Alt2 T-4 would be Less than Significant.

Site Access Alternative 1A

Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. "Existing Plus Project – Site Access Alternative 1A" average daily traffic volumes are depicted on Figure 95 in the TIA for Site Access Alternative 1A (see Appendix K). The existing plus project roadway segment analysis for Site Access Alternative 1A is shown in Table 5.15-14, *Existing Plus Project Daily Roadway Capacity Analysis – Site Access Alternative 1A*. For "Existing Plus Project – Site Access Alternative 1A" traffic conditions, the study roadway segments are projected to operate at acceptable LOS.

Table 5.15-14 Existing Plus Project Daily Roadway Capacity Analysis – Site Access Alternative 1A

Roadway Segment	Jurisdiction	Existing Roadway Segment				Existing Plus Project Site Access Alternative 1A Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Rubidoux Boulevard									
Btwn El Rivino Rd and Production Circle	JV	22,300	0.65	Acceptable	B	26,900	0.79	Acceptable	C
Btwn Production Circle and 20th St	JV	22,000	0.65	Acceptable	B	26,500	0.78	Acceptable	C
El Rivino Road									
Btwn Cedar Ave and Cactus Ave	JV / RIA / SB	4,300	0.33	Acceptable	A	10,200	0.78	Acceptable	C
Btwn Cactus Ave and Hall Ave	JV /SB	4,000	0.31	Acceptable	A	6,400	0.49	Acceptable	A
Hall Avenue									
Btwn El Rivino Rd and Agua Mansa Rd	JV	1,100	0.08	Acceptable	A	2,600	0.20	Acceptable	A
Market Street									
Btwn Rubidoux Blvd and Agua Mansa Rd	JV	22,200	0.65	Acceptable	B	25,300	0.74	Acceptable	C
Agua Mansa Road									
Btwn Market St and Brown Ave	JV	11,300	0.87	Approaches Capacity	D	13,000	1.00	Potentially Exceeds Capacity	E
Btwn Brown Ave and Hall Ave	JV / SB	12,300	0.47	Acceptable	A	13,000	0.50	Acceptable	A

Source: Ganddini 2018.
Notes: Btwn: between; Class: classification; L: lanes; ADT: average daily trips; V/C: volume-to-capacity ratio; LOS: level of service; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; MH: Major Highway; SH: Secondary Highway; NC: Not Classified
Bold: Exceeds LOS E significance criteria.
[1] Equivalent to a Secondary for County of Riverside Roadway Classifications based on existing curb-to-curb and lane
[2] Roadway maximum capacity at Level of Service "E" for roadway classification. Capacity adjustment to reflect the number of existing number of travel lanes and is based on existing lane geometrics, existing roadway design, points of conflict, and existing curb-to-curb widths to determine the nearest roadway classification and capacity.

Level of Significance before Mitigation: Less than Significant (for the segments identified in Table 5.15-14).

Site Access Alternative 2A

Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. "Existing Plus Project – Site Access Alternative 2A" average daily traffic volumes are depicted on Figure 96 in the TIA for Site Access Alternative 2A (see Appendix K). The existing plus project roadway segment analysis for Site Access Alternative 2A is shown in Table 5.15-15, *Existing Plus Project Daily Roadway Capacity Analysis – Site Access Alternative 2A*. For "Existing Plus Project – Site Access Alternative 2A" traffic conditions, the study roadway segments are projected to operate at acceptable LOS, except for the following roadway segments:

- Agua Mansa Road, Market Street to Brown Avenue

Table 5.15-15 Existing Plus Project Daily Roadway Capacity Analysis – Site Access Alternative 2A

Roadway Segment	Jurisdiction	Existing Roadway Segment				Existing Plus Project Site Access Alternative 2A Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Rubidoux Boulevard									
Btwn El Rivino Rd and Production Circle	JV	22,300	0.65	Acceptable	B	27,400	0.80	Approaches Capacity	D
Btwn Production Circle and 20th St	JV	22,000	0.65	Acceptable	B	27,100	0.79	Acceptable	C
El Rivino Road									
Btwn Cedar Ave and Cactus Ave	JV / RIA / SB	4,300	0.33	Acceptable	A	10,900	0.84	Approaches Capacity	D
Btwn Cactus Ave and Hall Ave	JV /SB	4,000	0.31	Acceptable	A	7,000	0.54	Acceptable	A
Hall Avenue									
Btwn El Rivino Rd and Agua Mansa Rd	JV	1,100	0.08	Acceptable	A	2,700	0.21	Acceptable	A
Market Street									
Btwn Rubidoux Blvd and Agua Mansa Rd	JV	22,200	0.65	Acceptable	B	25,700	0.75	Acceptable	C
Agua Mansa Road									
Btwn Market St and Brown Ave	JV	11,300	0.87	Approaches Capacity	D	13,200	1.02	**Potentially Exceeds Capacity**	**F**
Btwn Brown Ave and Hall Ave	JV / SB	12,300	0.47	Acceptable	A	13,200	0.51	Acceptable	A

Source: Ganddini 2018.
Notes: Btwn: between; Class: classification; L: lanes; ADT: average daily trips; V/C: volume-to-capacity ratio; LOS: level of service; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; MH: Major Highway; SH: Secondary Highway; NC: Not Classified
Bold: Exceeds LOS E significance criteria.
[1] Equivalent to a Secondary for County of Riverside Roadway Classifications based on existing curb-to-curb and lane
[2] Roadway maximum capacity at Level of Service "E" for roadway classification. Capacity adjustment to reflect the number of existing number of travel lanes and is based on existing lane geometrics, existing roadway design, points of conflict, and existing curb-to-curb widths to determine the nearest roadway classification and capacity.

Level of Significance before Mitigation: With implementation of MM Alt2A T-2, Impact T-1 is Less than Significant.

NEAR-TERM 2020 ANALYSIS

This analysis describes the proposed project's cumulative impacts on the circulation network in the project vicinity for the "Near-Term 2020" scenario. "Near-Term 2020 – Without Project" morning and evening peak hour intersection turning movement volumes are shown on Figures 59 and 60 in the TIA, respectively (see Appendix K), and average daily traffic volumes are shown in Figure 58 in the TIA (see Appendix K).

Near-Term 2020 – Intersections

Alternative 1

"Near-Term 2020 – Alternative 1" morning and evening peak hour intersection turning movement volumes are shown on Figures 63 and 64 in the TIA, respectively (see Appendix K). The year 2020 intersection LOS analysis for Alternative 1 is shown in Table 5.15-16, *Near-Term 2020 Intersection Delay and Level of Service – Alternative 1*. For "Near-Term Year 2020 – Alternative 1" traffic conditions, the study intersections are projected to operate within acceptable LOS (D or better) during the morning and evening peak hours, except for the following study intersections:

- #1. Cedar Avenue at I-10 Freeway WB Ramps (AM and PM peak hour)
- #2. Cedar Avenue at I-10 Freeway EB Ramps (AM peak hour)
- #5. Cedar Avenue at Jurupa Avenue (PM peak hour)
- #9. Rubidoux Boulevard at Production Circle (AM and PM peak hour)
- #10. Rubidoux Boulevard at 20th Street/Market Street (AM and PM peak hour)
- #11. Rubidoux Boulevard at 24th Street (AM and PM peak hour)
- #12. Rubidoux Boulevard at 26th Street (AM and PM peak hour)
- #14. Rubidoux Boulevard at 30th Street/SR-60 Freeway WB Off-Ramp (PM peak hour)
- #15. Rubidoux Boulevard at SR-60 Freeway WB On-Ramp (AM and PM peak hour)
- #16. Rubidoux Boulevard at SR-60 Freeway EB Ramps (AM peak hour)
- #22. Hall Avenue at El Rivino Road (PM peak hour)
- #24. Agua Mansa Road at El Rivino Road (AM and PM peak hour)
- #29. Agua Mansa Road at Market Street (AM and PM peak hour)
- #30. Market Street at Hall Avenue (AM and PM peak hour)
- #33. Market Street at SR-60 Freeway EB Ramps (PM peak hour)

Table 5.15-16 Near-Term Year 2020 Intersection Delay and Level of Service – Alternative 1

			Year 2020 No Project				Year 2020 With Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
ID	Study Intersection	Jurisdiction	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
1.	Cedar Ave at I-10 Freeway WB Ramps	CAL	**83.1**	**F**	**64.2**	**E**	**85.3**	**F**	**72.0**	**E**
2.	Cedar Ave at I-10 Freeway EB Ramps	CAL	**62.5**	**E**	49.5	D	**67.4**	**E**	50.9	D
3.	Cedar Ave at Slover Ave	SB	25.2	C	29.1	C	27.1	C	32.1	C
4.	Cedar Ave at Santa Ana Ave	SB	14.1	B	16.4	B	15.8	B	18.6	B
5.	Cedar Ave at Jurupa Ave	SB	**61.1**	**E**	**92.7**	**F**	54.9	D	**99.9**	**F**
6.	Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd	JV	14.0	B	28.8	C	16.0	B	39.2	D
7.	Rubidoux at Building 6 Access	JV	NA	NA	NA	NA	11.7	B	16.3	C

Table 5.15-16 Near-Term Year 2020 Intersection Delay and Level of Service – Alternative 1

			Year 2020 No Project				Year 2020 With Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
ID	Study Intersection	Jurisdiction	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
8.	Rubidoux at Project Access	JV	NA	NA	NA	NA	6.4	A	9.8	A
9.	Rubidoux Blvd at Production Circle	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
10.	Rubidoux Blvd at 20th St / Market St	JV	**70.8**	**E**	**99.9**	**F**	**92.5**	**F**	**99.9**	**F**
11.	Rubidoux Blvd at 24th St	JV	**85.4**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
12.	Rubidoux Blvd at 26th St	JV	**59.7**	**F**	**99.9**	**F**	**79.0**	**F**	**99.9**	**F**
13.	Rubidoux Blvd at 28th St	JV	25.1	C	34.3	C	24.2	C	38.1	D
14.	Rubidoux Blvd at 30th St / SR-60 Freeway WB Off-Ramp	CAL	30.1	C	**73.6**	**E**	31.8	C	**76.9**	**E**
15.	Rubidoux Blvd at SR-60 Freeway WB On-Ramp	CAL	**99.9**	**F**	**43.7**	**E**	**99.9**	**F**	**64.3**	**F**
16.	Rubidoux Blvd at SR-60 Freeway EB Ramps	CAL	48.0	D	48.8	D	**99.9**	**F**	54.4	D
17.	Rubidoux Blvd at 34th St	JV	11.5	B	11.5	B	11.6	B	11.6	B
18.	Building 6 Access at El Rivino Rd	JV	NA	NA	NA	NA	9.4	A	10.6	B
19.	Project Access at El Rivino Rd	JV	NA	NA	NA	NA	12.6	B	21.6	C
20.	Cactus Ave / Project Access at El Rivino Rd	JV / RIA / SB	11.7	B	12.2	B	12.7	B	13.0	B
21.	Building 1 Auto Access at El Rivino Rd	JV	NA	NA	NA	NA	9.0	A	10.7	B
22.	Hall Ave at El Rivino Rd	JV / SB	13.0	B	25.8	D	16.8	C	**46.7**	**E**
23.	Hall Ave at Building 1 Access	JV	NA	NA	NA	NA	10.1	B	11.1	B
24.	Agua Mansa Rd at El Rivino Rd	RIA / SB	**53.6**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
25.	Agua Mansa Rd at Holly Place	SB	14.5	B	24.3	C	15.3	C	28.8	D
26.	Agua Mansa Rd at Hall Ave	JV / SB	13.5	B	15.9	C	14.2	B	20.1	C
27.	Agua Mansa Rd at Brown Ave	JV / SB	10.5	B	14.7	B	11.6	B	16.2	B
28.	Agua Mansa Rd at R.A. Nelson	JV	4.3	A	3.4	A	4.2	A	3.3	A
29.	Agua Mansa Rd at Market St	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
30.	Market St at Hall Ave	JV	**51.2**	**F**	**99.9**	**F**	**76.7**	**F**	**99.9**	**F**
31.	Market St at Rivera St	RIV	17.1	B	25.3	C	20.0	B	26.0	C
32.	Market St at SR-60 Freeway WB Ramps	CAL	12.3	B	24.2	C	12.5	B	34.1	C
33.	Market St at SR-60 Freeway EB Ramps	CAL	28.6	C	**58.8**	**E**	33.8	C	**89.2**	**F**
34.	Riverside Ave at I-10 Freeway WB Ramps	CAL	29.3	C	14.6	B	33.1	C	15.0	B

Table 5.15-16 Near-Term Year 2020 Intersection Delay and Level of Service – Alternative 1

ID	Study Intersection	Jurisdiction	Year 2020 No Project				Year 2020 With Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]
35.	Riverside Ave at I-10 Freeway EB Ramps	CAL	24.2	C	31.1	C	25.6	C	38.7	D
36.	Riverside Ave at Slover Ave	RIA	47.2	D	33.5	C	54.2	D	38.2	D
37.	Riverside Ave at Santa Ana Ave	RIA	12.1	B	11.7	B	12.6	B	12.1	B
38.	Riverside Ave at Jurupa Ave	RIA	8.8	A	8.1	A	9.2	A	8.2	A
39.	Riverside Ave at Agua Mansa Rd	RIA / COL	16.6	B	17.8	B	21.0	C	32.7	C
40.	Rancho Ave at Agua Mansa Rd	COL	12.7	B	26.4	C	13.9	B	32.0	C

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10; TS: Traffic Signal; CSS: Cross Street Stop; AWS: All Way Stop; LOS: level of service
Bold: Exceeds LOS D significance criteria.
1 Delay is shown in seconds/vehicle. Delay is reported for un-signalized study intersections and all study intersections within California Department of Transportation jurisdiction. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).
2 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Level of Significance before Mitigation: Improvements required for Intersections #s 9, 10, 11, 12, 14, 15, 16 29, and 30 are programmed within existing fee programs (DIF and/or TUMF); therefore, impacts to these intersections would be less than significant under this scenario. The improvements for Intersections #s 1 and 2 have been generally funded in San Bernardino County, but a funding shortfall has been identified. Impacts to Intersections #'s 1 and 2, therefore, and Intersection #'s 5, 24, 22, and 33, which are not included within a fee program and would be Potentially Significant even after implementation of MM Alt1 T-3 (which includes fair share payments for these intersection improvements).

Alternative 2

"Near-Term 2020 – Alternative 2" morning and evening peak hour intersection turning movement volumes are shown on Figures 65 and 66 in the TIA, respectively (see Appendix K). The year 2020 intersection LOS analysis for Alternative 2 is shown in Table 5.15-17, *Near-Term 2020 Intersection Delay and Level of Service – Alternative 2*. For "Near-Term Year 2020 – Alternative 2" traffic conditions, the study intersections are projected to operate within acceptable LOS (D or better) during the morning and evening peak hours, except for the following study intersections:

- #1. Cedar Avenue at I-10 Freeway WB Ramps (AM and PM peak hour)
- #2. Cedar Avenue at I-10 Freeway EB Ramps (AM peak hour)
- #5. Cedar Avenue at Jurupa Avenue (PM peak hour)
- #9. Rubidoux Boulevard at Production Circle (AM and PM peak hour)
- #10. Rubidoux Boulevard at 20th Street/Market Street (AM and PM peak hour)

- #11. Rubidoux Boulevard at 24th Street (AM and PM peak hour)
- #12. Rubidoux Boulevard at 26th Street (AM and PM peak hour)
- #14. Rubidoux Boulevard at 30th Street/SR-60 Freeway WB Off-Ramp (PM peak hour)
- #15. Rubidoux Boulevard at SR-60 Freeway WB On-Ramp (AM and PM peak hour)
- #16. Rubidoux Boulevard at SR-60 Freeway EB Ramps (AM peak hour)
- #22. Hall Avenue at El Rivino Road (PM peak hour)
- #24. Agua Mansa Road at El Rivino Road (AM and PM peak hour)
- #29. Agua Mansa Road at Market Street (AM and PM peak hour)
- #30. Market Street at Hall Avenue (AM and PM peak hour)
- #33. Market Street at SR-60 Freeway EB Ramps (PM peak hour)

Table 5.15-17 Near-Term Year 2020 Intersection Delay and Level of Service – Alternative 2

			Year 2020 No Project				Year 2020 With Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
ID	Study Intersection	Jurisdiction	Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]
1.	Cedar Ave at I-10 Freeway WB Ramps	CAL	**83.1**	**F**	**64.2**	**E**	**85.2**	**F**	**70.9**	**E**
2.	Cedar Ave at I-10 Freeway EB Ramps	CAL	**62.5**	**E**	49.5	D	**66.2**	**E**	50.6	D
3.	Cedar Ave at Slover Ave	SB	25.2	C	29.1	C	26.8	C	31.7	C
4.	Cedar Ave at Santa Ana Ave	SB	14.1	B	16.4	B	15.5	B	18.7	B
5.	Cedar Ave at Jurupa Ave	SB	**61.1**	**E**	**92.7**	**F**	53.3	D	**99.9**	**F**
6.	Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd	JV	14.0	B	28.8	C	15.9	B	39.9	D
7.	Rubidoux at Building 6 Access	JV	NA	NA	NA	NA	11.8	B	17.0	C
8.	Rubidoux at Project Access	JV	NA	NA	NA	NA	6.1	A	8.6	A
9.	Rubidoux Blvd at Production Circle	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
10.	Rubidoux Blvd at 20th St / Market St	JV	**70.8**	**E**	**99.9**	**F**	**92.9**	**F**	**99.9**	**F**
11.	Rubidoux Blvd at 24th St	JV	**85.4**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
12.	Rubidoux Blvd at 26th St	JV	**59.7**	**F**	**99.9**	**F**	**76.0**	**F**	**99.9**	**F**
13.	Rubidoux Blvd at 28th St	JV	25.1	C	34.3	C	24.3	C	44.6	D
14.	Rubidoux Blvd at 30th St / SR-60 Freeway WB Off-Ramp	CAL	30.1	C	**73.6**	**E**	31.8	C	**76.4**	**E**
15.	Rubidoux Blvd at SR-60 Freeway WB On-Ramp	CAL	**99.9**	**F**	**43.7**	**E**	**99.9**	**F**	**61.7**	**F**
16.	Rubidoux Blvd at SR-60 Freeway EB Ramps	CAL	48.0	D	48.8	D	**99.9**	**F**	55.0	D
17.	Rubidoux Blvd at 34th St	JV	11.5	B	11.5	B	11.6	B	11.6	B
18.	Building 6 Access at El Rivino Rd	JV	NA	NA	NA	NA	9.4	A	10.6	B

Table 5.15-17 Near-Term Year 2020 Intersection Delay and Level of Service – Alternative 2

			Year 2020 No Project				Year 2020 With Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
ID	Study Intersection	Jurisdiction	Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]
19.	Project Access at El Rivino Rd	JV	NA	NA	NA	NA	12.5	B	21.9	C
20.	Cactus Ave / Project Access at El Rivino Rd	JV / RIA / SB	11.7	B	12.2	B	12.5	B	13.1	B
21.	Building 1 Auto Access at El Rivino Rd	JV	NA	NA	NA	NA	9.0	A	10.8	B
22.	Hall Ave at El Rivino Rd	JV / SB	13.0	B	25.8	D	15.9	C	**47.6**	**E**
23.	Hall Ave at Building 1 Access	JV	NA	NA	NA	NA	10.0	A	11.2	B
24.	Agua Mansa Rd at El Rivino Rd	RIA / SB	**53.6**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
25.	Agua Mansa Rd at Holly Place	SB	14.5	B	24.3	C	15.2	C	28.1	D
26.	Agua Mansa Rd at Hall Ave	JV / SB	13.5	B	15.9	C	14.2	B	19.3	C
27.	Agua Mansa Rd at Brown Ave	JV / SB	10.5	B	14.7	B	11.6	B	16.3	B
28.	Agua Mansa Rd at R.A. Nelson	JV	4.3	A	3.4	A	4.2	A	3.2	A
29.	Agua Mansa Rd at Market St	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
30.	Market St at Hall Ave	JV	**51.2**	**F**	**99.9**	**F**	**72.3**	**F**	**99.9**	**F**
31.	Market St at Rivera St	RIV	17.1	B	25.3	C	17.6	B	26.1	C
32.	Market St at SR-60 Freeway WB Ramps	CAL	12.3	B	24.2	C	12.5	B	32.2	C
33.	Market St at SR-60 Freeway EB Ramps	CAL	28.6	C	**58.8**	**E**	33.3	C	**85.5**	**F**
34.	Riverside Ave at I-10 Freeway WB Ramps	CAL	29.3	C	14.6	B	32.2	C	15.0	B
35.	Riverside Ave at I-10 Freeway EB Ramps	CAL	24.2	C	31.1	C	25.7	C	37.2	D
36.	Riverside Ave at Slover Ave	RIA	47.2	D	33.5	C	53.0	D	37.4	D
37.	Riverside Ave at Santa Ana Ave	RIA	12.1	B	11.7	B	12.4	B	12.0	B
38.	Riverside Ave at Jurupa Ave	RIA	8.8	A	8.1	A	9.1	A	8.2	A
39.	Riverside Ave at Agua Mansa Rd	RIA / COL	16.6	B	17.8	B	20.7	C	30.5	C
40.	Rancho Ave at Agua Mansa Rd	COL	12.7	B	26.4	C	13.8	B	31.8	C

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10; TS: Traffic Signal; CSS: Cross Street Stop; AWS: All Way Stop; LOS: level of service
Bold: Exceeds LOS D significance criteria.
[1] Delay is shown in seconds/vehicle. Delay is reported for un-signalized study intersections and all study intersections within California Department of Transportation jurisdiction. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).
[2] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Level of Significance before Mitigation: Improvements required for Intersections #s 9, 10, 11, 12, 14, 15, 16, 29, and 30 are programmed within existing fee programs (DIF and/or TUMF); therefore, impacts to these intersections would be less than significant under this scenario. Impacts to Intersection #10 are within DIF/TUMF programs and also require a fair share payment from the Caterpillar project. Impacts to this intersection are less than significant. The improvements for Intersections #s 1 and 2 have been generally funded in San Bernardino County, but a funding shortfall has been identified. Impacts to Intersections #'s 1 and 2, therefore, along with impacts to Intersection #s 5, 24, 22, and 33, that are not included within a fee program would be Potentially Significant even after implementation of MM Alt2 T-3 (which includes fair share payments for these intersection improvements).

Site Access Alternative 1A

Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. "Near-Term Year 2020 – Site Access Alternative 1A" morning and evening peak hour intersection turning movement volumes are shown for Site Access Alternative 1A on Figures 103 and 104 in the TIA, respectively (see Appendix K).

The year 2020 intersection LOS analysis for Site Access Alternative 1A is shown in Table 5.15-18, *Near-Term 2020 Intersection Delay and Level of Service – Site Access Alternative 1A*. Note that only the intersections potentially affected by this site access alternative were evaluated (intersections not listed would have the same impact as Alternative 1). For "Near-Term Year 2020 – Site Access Alternative 1A" traffic conditions, the study intersections are projected to operate within acceptable LOS (D or better) during the morning and evening peak hours, except for the following study intersections:

- #6. Cedar Avenue at Tarragona Drive/El Rivino Road (PM peak hour)
- #9. Rubidoux Boulevard at Production Circle (AM and PM peak hour)
- #10. Rubidoux Boulevard at 20th Street/Market Street (AM and PM peak hour)
- #22. Hall Avenue at El Rivino Road (PM peak hour)
- #29. Agua Mansa Road at Market Street (AM and PM peak hour)

Table 5.15-18 Near-Term Year 2020 Intersection Delay and Level of Service – Site Access Alternative 1A

ID	Study Intersection	Jurisdiction	Year 2020 No Project				Year 2020 With Project Site Access Alternative 1A			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]
6.	Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd	JV	14.0	B	28.8	C	22.5	C	**77.6**	**E**
7.	Rubidoux at Building 6 Access	JV	NA	NA	NA	NA	12.5	B	16.6	C
8.	Rubidoux at Project Access	JV	NA	NA	NA	NA	4.4	A	5.6	A
9.	Rubidoux Blvd at Production Circle	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
10.	Rubidoux Blvd at 20th St / Market St	JV	**70.8**	**E**	**99.9**	**F**	**99.8**	**F**	**99.9**	**F**
18.	Building 6 Access at El Rivino Rd	JV	NA	NA	NA	NA	10.1	B	11.0	B
19.	Project Access at El Rivino Rd	JV	NA	NA	NA	NA	5.2	A	6.5	A
20.	Cactus Ave / Project Access at El Rivino Rd	JV / RIA / SB	11.7	B	12.2	B	12.9	B	14.2	B
21.	Building 1 Auto Access at El Rivino Rd	JV	NA	NA	NA	NA	9.0	A	10.7	B
22.	Hall Ave at El Rivino Rd	JV / SB	13.0	B	25.8	D	17.0	C	**50.2**	**F**
23.	Hall Ave at Building 1 Access	JV	NA	NA	NA	NA	10.2	B	11.4	B
25.	Agua Mansa Rd at Holly Place	SB	14.5	B	24.3	C	15.3	C	28.8	D
26.	Agua Mansa Rd at Hall Ave	JV / SB	13.5	B	15.9	C	14.3	B	20.1	C
27.	Agua Mansa Rd at Brown Ave	JV / SB	10.5	B	14.7	B	11.9	B	16.6	B
28.	Agua Mansa Rd at R.A. Nelson	JV	4.3	A	3.4	A	4.2	A	3.3	A
29.	Agua Mansa Rd at Market St	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10; TS: Traffic Signal; CSS: Cross Street Stop; AWS: All Way Stop; LOS: level of service
Bold: Exceeds LOS D significance criteria.
1 Delay is shown in seconds/vehicle. Delay is reported for un-signalized study intersections and all study intersections within California Department of Transportation jurisdiction. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).
2 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Level of Significance before Mitigation: Improvements required for Intersections #s 6, 9, 10, 11, 12, 14, 15, 16, 29, and 30 are programmed within existing fee programs (DIF and/or TUMF); therefore, impacts to these intersections would be less than significant under this scenario. The improvements for Intersections #s 1 and 2 have been generally funded in San Bernardino County, but a funding shortfall has been identified. Impacts to these intersection, therefore, in addition to Intersections #s 5, 24, 22, and 33, that are not included within a fee program would be Potentially Significant even after implementation of MM Alt1A T-3 (which includes fair share payments for these intersection improvements).

Site Access Alternative 2A

Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. "Near-Term Year 2020 – Alternative 2A" morning and evening peak hour intersection turning movement volumes are shown for Site Access Alternative 2A on Figures 105 and 106 in the TIA, respectively (see Appendix K).

The year 2020 intersection LOS analysis for Site Access Alternative 2A is shown in Table 5.15-19, *Near-Term 2020 Intersection Delay and Level of Service – Site Access Alternative 2A*. Note that only the intersections potentially affected by this site access alternative were evaluated (intersections not listed would have the same impact as Alternative 2).For "Near-Term Year 2020 – Site Access Alternative 2A" traffic conditions, the study intersections are projected to operate within acceptable LOS (D or better) during the morning and evening peak hours, except for the following study intersections:

- #6. Cedar Avenue at Tarragona Drive/El Rivino Road (PM peak hour)
- #9. Rubidoux Boulevard at Production Circle (AM and PM peak hour)
- #10. Rubidoux Boulevard at 20th Street/Market Street (AM and PM peak hour)
- #22. Hall Avenue at El Rivino Road (PM peak hour)
- #29. Agua Mansa Road at Market Street (AM and PM peak hour)

Table 5.15-19 Near-Term Year 2020 Intersection Delay and Level of Service – Site Access Alternative 2A

			Year 2020 No Project				Year 2020 With Project Site Access Alternative 2A			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
ID	Study Intersection	Jurisdiction	Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]
6.	Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd	JV	14.0	B	28.8	C	26.5	C	84.8	F
7.	Rubidoux at Building 6 Access	JV	NA	NA	NA	NA	12.6	B	17.3	C
8.	Rubidoux at Project Access	JV	NA	NA	NA	NA	4.2	A	4.3	A
9.	Rubidoux Blvd at Production Circle	JV	**99.9**	**F**	**99.9**	**F**	99.9	F	99.9	F
10.	Rubidoux Blvd at 20th St / Market St	JV	**70.8**	**E**	**99.9**	**F**	99.9	F	99.9	F
18.	Building 6 Access at El Rivino Rd	JV	NA	NA	NA	NA	10.2	B	11.1	B
19.	Project Access at El Rivino Rd	JV	NA	NA	NA	NA	5.2	A	6.5	A
20.	Cactus Ave / Project Access at El Rivino Rd	JV / RIA / SB	11.7	B	12.2	B	12.7	B	14.3	B
21.	Building 1 Auto Access at El Rivino Rd	JV	NA	NA	NA	NA	9.0	A	10.7	B
22.	Hall Ave at El Rivino Rd	JV / SB	13.0	B	25.8	D	16.2	C	53.1	F
23.	Hall Ave at Building 1 Access	JV	NA	NA	NA	NA	10.1	B	11.4	B
25.	Agua Mansa Rd at Holly Place	SB	14.5	B	24.3	C	15.2	C	28.1	D
26.	Agua Mansa Rd at Hall Ave	JV / SB	13.5	B	15.9	C	14.2	B	19.3	C

Table 5.15-19 Near-Term Year 2020 Intersection Delay and Level of Service – Site Access Alternative 2A

ID	Study Intersection	Jurisdiction	Year 2020 No Project				Year 2020 With Project Site Access Alternative 2A			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
27.	Agua Mansa Rd at Brown Ave	JV / SB	10.5	B	14.7	B	11.9	B	16.7	B
28.	Agua Mansa Rd at R.A. Nelson	JV	4.3	A	3.4	A	4.2	A	3.2	A
29.	Agua Mansa Rd at Market St	JV	**99.9**	**F**	**99.9**	**F**	99.9	F	99.9	F

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10; TS: Traffic Signal; CSS: Cross Street Stop; AWS: All Way Stop; LOS: level of service
Bold: Exceeds LOS D significance criteria.
1 Delay is shown in seconds/vehicle. Delay is reported for un-signalized study intersections and all study intersections within California Department of Transportation jurisdiction. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).
2 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Level of Significance before Mitigation: The improvements for Intersections #s 1 and 2 have been fully funded and improvements required for Intersections #s 6, 9, 10, 11, 12, 14, 15, 16, 29, and 30 are programmed within existing fee programs (DIF and/or TUMF), and therefore impacts to these intersections would be less than significant under this scenario. Impacts to Intersections # 5, 24, 22, and 33, , however, are not included within a fee program and would be Potentially Significant even after implementation of MM Alt2A T-3 (which includes fair share payments for these intersection improvements).

Near Term 2020 – Roadway Segments

Alternative 1

"Near-Term 2020 – Alternative 1" average daily traffic volumes are shown on Figure 61 in the TIA (see Appendix K). The near-term year 2020 roadway segment analysis for Alternative 1 is shown in Table 5.15-20, *Near-Term 2020 Daily Roadway Capacity Analysis – Alternative 1*. For "Near-Term Year 2020 – Alternative 1" traffic conditions, the study roadway segments are projected to operate at acceptable LOS, except for the following roadway segments:

- Rubidoux Boulevard, El Rivino Road to Production Circle
- Rubidoux Boulevard, Production Circle to 20th Street
- Market Street, Agua Mansa Road to Hall Avenue
- Market Street, Hall Avenue to Rivera Street
- Agua Mansa Road, Market Street to Brown Avenue

Table 5.15-20 Near-Term 2020 Daily Roadway Capacity Analysis – Alternative 1

Roadway Segment	Jurisdiction	Year 2020 No Project Roadway Segment				Year 2020 With Project Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Rubidoux Boulevard									
Btwn El Rivino Rd and Production Circle	JV	30,100	0.88	Approaches Capacity	D	35,000	1.03	**Potentially Exceeds Capacity**	**F**
Btwn Production Circle and 20th St	JV	29,800	0.87	Approaches Capacity	D	34,700	1.02	**Potentially Exceeds Capacity**	**F**
Btwn 20th St and 24th St	JV	25,000	0.73	Acceptable	C	27,500	0.81	Approaches Capacity	D
Btwn 24th St and 26th St	JV	25,800	0.76	Acceptable	C	28,300	0.83	Approaches Capacity	D
Btwn 26th St and 28th St	JV	26,700	0.78	Acceptable	C	29,200	0.86	Approaches Capacity	D
Btwn 28th St and 30th St	JV	28,100	0.82	Approaches Capacity	D	30,600	0.90	Approaches Capacity	D
El Rivino Road									
Btwn Cedar Ave and Cactus Ave	JV / RIA / SB	10,100	0.78	Acceptable	C	11,600	0.89	Approaches Capacity	D
Btwn Cactus Ave and Hall Ave	JV /SB	6,000	0.46	Acceptable	A	8,100	0.62	Acceptable	B
Btwn Hall Ave and Agua Mansa Rd	JV / SB	4,100	0.32	Acceptable	A	5,100	0.39	Acceptable	A
Hall Avenue									
Btwn El Rivino Rd and Agua Mansa Rd	JV	2,500	0.19	Acceptable	A	4,100	0.32	Acceptable	A
Market Street									
Btwn Rubidoux Blvd and Agua Mansa Rd	JV	29,700	0.87	Approaches Capacity	D	32,600	0.96	Approaches Capacity	E
Btwn Agua Mansa Rd and Hall Ave	JV	25,700	1.43	**Potentially Exceeds Capacity**	**F**	29,400	1.63	**Potentially Exceeds Capacity**	**F**
Btwn Hall Ave and Rivera St	JV / RIV	35,000	1.94	**Potentially Exceeds Capacity**	**F**	38,700	2.15	**Potentially Exceeds Capacity**	**F**
Agua Mansa Road									
Btwn Market St and Brown Ave	JV	15,600	1.20	**Potentially Exceeds Capacity**	**F**	16,900	1.30	**Potentially Exceeds Capacity**	**F**

Table 5.15-20 Near-Term 2020 Daily Roadway Capacity Analysis – Alternative 1

Roadway Segment	Jurisdiction	Year 2020 No Project Roadway Segment				Year 2020 With Project Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Btwn Brown Ave and Hall Ave	JV / SB	16,600	0.64	Acceptable	B	17,400	0.67	Acceptable	B
Btwn Hall Ave and El Rivino Rd	JV / SB	15,900	0.88	Approaches Capacity	D	17,200	0.96	Approaches Capacity	E

Source: Ganddini 2018.
Notes: Btwn: between; Class: classification; L: lanes; ADT: average daily trips; V/C: volume-to-capacity ratio; LOS: level of service; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; MH: Major Highway; SH: Secondary Highway; NC: Not Classified
Bold: Exceeds LOS E significance criteria.
[1] Equivalent to a Secondary for County of Riverside Roadway Classifications based on existing curb-to-curb and lane
[2] Roadway maximum capacity at Level of Service "E" for roadway classification. Capacity adjustment to reflect the number of existing number of travel lanes and is based on existing lane geometrics, existing roadway design, points of conflict, and existing curb-to-curb widths to determine the nearest roadway classification and capacity.

Level of Significance before Mitigation: Even with implementation of MM Alt1 T-4, this impact would be potentially significant because the required Market Street improvements are not fully covered by TUMF and DIF fees. Additionally, under cumulative conditions, Rubidoux Boulevard, between El Rivino Road and Production Circle and also between Production Circle and 20th Street segments are shown to exceed capacity at the City's General Plan ultimate width for this roadway.. This impact would be significant.

Alternative 2

"Near-Term 2020 – Alternative 2" average daily traffic volumes are shown on Figure 62 in the TIA (see Appendix K). The near-term year 2020 roadway segment analysis for Alternative 2 is shown in Table 5.15-21, *Near-Term 2020 Daily Roadway Capacity Analysis – Alternative 2*. For "Near-Term Year 2020 – Alternative 2" traffic conditions, the study roadway segments are projected to operate at acceptable LOS, except for the following roadway segments:

- Rubidoux Boulevard, El Rivino Road to Production Circle
- Rubidoux Boulevard, Production Circle to 20th Street
- Market Street, Agua Mansa Road to Hall Avenue
- Market Street, Hall Avenue to Rivera Street
- Agua Mansa Road, Market Street to Brown Avenue

Table 5.15-21 Near-Term 2020 Daily Roadway Capacity Analysis – Alternative 2

Roadway Segment	Jurisdiction	Year 2020 No Project Roadway Segment				Year 2020 With Project Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Rubidoux Boulevard									
Btwn El Rivino Rd and Production Circle	JV	30,100	0.88	Approaches Capacity	D	35,500	1.04	**Potentially Exceeds Capacity**	**F**
Btwn Production Circle and 20th St	JV	29,800	0.87	Approaches Capacity	D	35,200	1.03	**Potentially Exceeds Capacity**	**F**
Btwn 20th St and 24th St	JV	25,000	0.73	Acceptable	C	27,800	0.82	Approaches Capacity	D
Btwn 24th St and 26th St	JV	25,800	0.76	Acceptable	C	28,600	0.84	Approaches Capacity	D
Btwn 26th St and 28th St	JV	26,700	0.78	Acceptable	C	29,500	0.87	Approaches Capacity	D
Btwn 28th St and 30th St	JV	28,100	0.82	Approaches Capacity	D	30,800	0.90	Approaches Capacity	E
El Rivino Road									
Btwn Cedar Ave and Cactus Ave	JV / RIA / SB	10,100	0.78	Acceptable	C	12,200	0.94	Approaches Capacity	E
Btwn Cactus Ave and Hall Ave	JV /SB	6,000	0.46	Acceptable	A	8,600	0.66	Acceptable	B
Btwn Hall Ave and Agua Mansa Rd	JV / SB	4,100	0.32	Acceptable	A	5,500	0.42	Acceptable	A
Hall Avenue									
Btwn El Rivino Rd and Agua Mansa Rd	JV	2,500	0.19	Acceptable	A	4,200	0.32	Acceptable	A
Market Street									
Btwn Rubidoux Blvd and Agua Mansa Rd	JV	29,700	0.87	Approaches Capacity	D	33,000	0.97	Approaches Capacity	E
Btwn Agua Mansa Rd and Hall Ave	JV	25,700	1.43	**Potentially Exceeds Capacity**	**F**	29,900	1.66	**Potentially Exceeds Capacity**	**F**
Btwn Hall Ave and Rivera St	JV / RIV	35,000	1.94	**Potentially Exceeds Capacity**	**F**	39,200	2.18	**Potentially Exceeds Capacity**	**F**
Agua Mansa Road									
Btwn Market St and Brown Ave	JV	15,600	1.20	**Potentially Exceeds Capacity**	**F**	17,100	1.32	**Potentially Exceeds Capacity**	**F**

Table 5.15-21 Near-Term 2020 Daily Roadway Capacity Analysis – Alternative 2

Roadway Segment	Jurisdiction	Year 2020 No Project Roadway Segment				Year 2020 With Project Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Btwn Brown Ave and Hall Ave	JV / SB	16,600	0.64	Acceptable	B	17,600	0.68	Acceptable	B
Btwn Hall Ave and El Rivino Rd	JV / SB	15,900	0.88	Approaches Capacity	D	17,100	0.95	Approaches Capacity	E

Source: Ganddini 2018.
Notes: Btwn: between; Class: classification; L: lanes; ADT: average daily trips; V/C: volume-to-capacity ratio; LOS: level of service; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; MH: Major Highway; SH: Secondary Highway; NC: Not Classified
Bold: Exceeds LOS E significance criteria.
[1] Equivalent to a Secondary for County of Riverside Roadway Classifications based on existing curb-to-curb and lane
[2] Roadway maximum capacity at Level of Service "E" for roadway classification. Capacity adjustment to reflect the number of existing number of travel lanes and is based on existing lane geometrics, existing roadway design, points of conflict, and existing curb-to-curb widths to determine the nearest roadway classification and capacity.

Level of Significance before Mitigation: Even with implementation of MM Alt2 T-4 this impact would be potentially significant because the required Market Street improvements are not fully covered by TUMF and DIF fees. Additionally, under cumulative conditions, Rubidoux Boulevard, between El Rivino Road and Production Circle and also between Production Circle and 20th Street segments are shown to exceed capacity at the City's General Plan ultimate width for this roadway..

Site Access Alternative 1A

Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. "Near-Term Year 2020 – Site Access Alternative 1A" average daily traffic volumes are depicted on Figure 101 in the TIA for Site Access Alternative 1A (see Appendix K).

The near-term year 2020 roadway segment analysis for Site Access Alternative 1A is shown in Table 5.15-22, *Near-Term 2020 Daily Roadway Capacity Analysis – Site Access Alternative 1A*. For "Near-Term Year 2020 – Site Access Alternative 1A" traffic conditions, the study roadway segments are projected to operate at acceptable LOS, except for the following roadway segments:

- Rubidoux Boulevard, El Rivino Road to Production Circle
- Rubidoux Boulevard, Production Circle to 20th Street
- El Rivino Road, Cedar Avenue to Cactus Avenue
- Agua Mansa Road, Market Street to Brown Avenue

Table 5.15-22 Near-Term 2020 Daily Roadway Capacity Analysis – Site Access Alternative 1A

Roadway Segment	Jurisdiction	Year 2020 No Project Roadway Segment				Year 2020 With Project Site Access Alternative 1A Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Rubidoux Boulevard									
Btwn El Rivino Rd and Production Circle	JV	30,100	0.88	Approaches Capacity	D	34,600	1.01	**Potentially Exceeds Capacity**	**F**
Btwn Production Circle and 20th St	JV	29,800	0.87	Approaches Capacity	D	34,300	1.01	**Potentially Exceeds Capacity**	**F**
El Rivino Road									
Btwn Cedar Ave and Cactus Ave	JV / RIA / SB	10,100	0.78	Acceptable	C	16,000	1.23	**Potentially Exceeds Capacity**	**F**
Btwn Cactus Ave and Hall Ave	JV /SB	6,000	0.46	Acceptable	A	8,400	0.65	Acceptable	B
Hall Avenue									
Btwn El Rivino Rd and Agua Mansa Rd	JV	2,500	0.19	Acceptable	A	4,000	0.31	Acceptable	A
Market Street									
Btwn Rubidoux Blvd and Agua Mansa Rd	JV	29,700	0.87	Approaches Capacity	D	32,800	0.96	Approaches Capacity	E
Agua Mansa Road									
Btwn Market St and Brown Ave	JV	15,600	1.20	**Potentially Exceeds Capacity**	**F**	17,300	1.33	**Potentially Exceeds Capacity**	**F**
Btwn Brown Ave and Hall Ave	JV / SB	16,600	0.64	Acceptable	B	17,300	0.67	Acceptable	B

Source: Ganddini 2018.
Notes: Btwn: between; Class: classification; L: lanes; ADT: average daily trips; V/C: volume-to-capacity ratio; LOS: level of service; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; MH: Major Highway; SH: Secondary Highway; NC: Not Classified
Bold: Exceeds LOS E significance criteria.
[1] Equivalent to a Secondary for County of Riverside Roadway Classifications based on existing curb-to-curb and lane
[2] Roadway maximum capacity at Level of Service "E" for roadway classification. Capacity adjustment to reflect the number of existing number of travel lanes and is based on existing lane geometrics, existing roadway design, points of conflict, and existing curb-to-curb widths to determine the nearest roadway classification and capacity.

Level of Significance before Mitigation: Even with implementation of MM Alt1A T-4, impacts to roadway segments for this alternative would be potentially significant. Fair share improvements for Agua Mansa at El Rivino Road and associated with Intersection #24 are not within the City's jurisdiction and are not programmed improvements. Additionally, under cumulative conditions, Rubidoux Boulevard, between El Rivino Road and Production Circle and also between Production Circle and 20th Street segments are shown to exceed capacity at the City's General Plan ultimate width for this roadway..

Site Access Alternative 2A

Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. "Near-Term Year 2020 – Site Access Alternative

2A" average daily traffic volumes are depicted on Figure 102 in the TIA for Site Access Alternative 2A (see Appendix K).

The near-term year 2020 roadway segment analysis for Site Access Alternative 2A is shown in Table 5.15-23, *Near-Term 2020 Daily Roadway Capacity Analysis – Site Access Alternative 2A*. For "Near-Term Year 2020 – Site Access Alternative 2A" traffic conditions, the study roadway segments are projected to operate at acceptable LOS, except for the following roadway segments:

- Rubidoux Boulevard, El Rivino Road to Production Circle
- Rubidoux Boulevard, Production Circle to 20th Street
- El Rivino Road, Cedar Avenue to Cactus Avenue
- Agua Mansa Road, Market Street to Brown Avenue

Table 5.15-23 Near-Term 2020 Daily Roadway Capacity Analysis – Site Access Alternative 2A

		Year 2020 No Project Roadway Segment				Year 2020 With Project Site Access Alternative 2A Roadway Segment			
Roadway Segment	Jurisdiction	ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Rubidoux Boulevard									
Btwn El Rivino Rd and Production Circle	JV	30,100	0.88	Approaches Capacity	D	35,200	1.03	**Potentially Exceeds Capacity**	**F**
Btwn Production Circle and 20th St	JV	29,800	0.87	Approaches Capacity	D	34,900	1.02	**Potentially Exceeds Capacity**	**F**
El Rivino Road									
Btwn Cedar Ave and Cactus Ave	JV / RIA / SB	10,100	0.78	Acceptable	C	16,700	1.28	**Potentially Exceeds Capacity**	**F**
Btwn Cactus Ave and Hall Ave	JV /SB	6,000	0.46	Acceptable	A	9,000	0.69	Acceptable	B
Hall Avenue									
Btwn El Rivino Rd and Agua Mansa Rd	JV	2,500	0.19	Acceptable	A	4,100	0.32	Acceptable	A
Market Street									
Btwn Rubidoux Blvd and Agua Mansa Rd	JV	29,700	0.87	Approaches Capacity	D	33,200	0.97	Approaches Capacity	E
Agua Mansa Road									
Btwn Market St and Brown Ave	JV	15,600	1.20	**Potentially Exceeds Capacity**	**F**	17,500	1.35	**Potentially Exceeds Capacity**	**F**
Btwn Brown Ave and Hall Ave	JV / SB	16,600	0.64	Acceptable	B	17,500	0.68	Acceptable	B

Source: Ganddini 2018.
Notes: Btwn: between; Class: classification; L: lanes; ADT: average daily trips; V/C: volume-to-capacity ratio; LOS: level of service; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; MH: Major Highway; SH: Secondary Highway; NC: Not Classified
Bold: Exceeds LOS E significance criteria.
[1] Equivalent to a Secondary for County of Riverside Roadway Classifications based on existing curb-to-curb and lane
[2] Roadway maximum capacity at Level of Service "E" for roadway classification. Capacity adjustment to reflect the number of existing number of travel lanes and is based on existing lane geometrics, existing roadway design, points of conflict, and existing curb-to-curb widths to determine the nearest roadway classification and capacity.

Level of Significance before Mitigation: Even with implementation of MM Alt2A T-4, impacts to roadway segments for this alternative would be potentially significant. Fair share improvements for Agua Mansa at El Rivino Road and associated with intersection #24 are not within the City's jurisdiction and are not programmed improvements. Additionally, under cumulative conditions, Rubidoux Boulevard, between El Rivino Road and Production Circle and also between Production Circle and 20th Street segments are shown to exceed capacity at the City's General Plan ultimate width for this roadway..

HORIZON YEAR 2035 ANALYSIS

This analysis describes the proposed project's cumulative impacts on the circulation network in the project vicinity for the "Horizon Year 2035" scenario. "Horizon Year 2035 – Without Project" morning and evening peak hour intersection turning movement volumes are shown on Figures 68 and 69 in the TIA, respectively (see Appendix K), and average daily segment volumes are shown in Figure 67 in the TIA (see Appendix K).

Horizon Year 2035 – Intersections

Alternative 1

"Horizon Year 2035 – Alternative 1" morning and evening peak hour intersection turning movement volumes are shown on Figures 72 and 73 in the TIA, respectively. The horizon year 2035 intersection LOS analysis for Alternative 1 is shown in Table 5.15-24, *Horizon Year 2035 Intersection Delay and Level of Service – Alternative 1*. For "Horizon Year 2035 – Alternative 1" traffic conditions, the study intersections are projected to operate within acceptable LOS (D or better) during the morning and evening peak hours, except for the following study intersections:

- #1. Cedar Avenue at I-10 Freeway WB Ramps (AM and PM peak hour)
- #2. Cedar Avenue at I-10 Freeway EB Ramps (AM peak hour)
- #5. Cedar Avenue at Jurupa Avenue (AM peak hour)
- #9. Rubidoux Boulevard at Production Circle (AM and PM peak hour)
- #10. Rubidoux Boulevard at 20th Street/Market Street (AM and PM peak hour)
- #11. Rubidoux Boulevard at 24th Street (AM and PM peak hour)
- #12. Rubidoux Boulevard at 26th Street (AM and PM peak hour)
- #13. Rubidoux Boulevard at 28th Street (PM peak hour)
- #22. Hall Avenue at El Rivino Road (PM peak hour)
- #24. Agua Mansa Road at El Rivino Road (AM and PM peak hour)
- #25. Agua Mansa Road at Holly Place (PM peak hour)
- #29. Agua Mansa Road at Market Street (AM and PM peak hour)
- #30. Market Street at Hall Avenue (AM and PM peak hour)
- #32. Market Street at SR-60 Freeway WB Ramps (PM peak hour)
- #33. Market Street at SR-60 Freeway EB Ramps (PM peak hour)
- #36. Riverside Avenue at Slover Avenue (PM peak hour)

Table 5.15-24 Horizon Year 2035 Intersection Delay and Level of Service – Alternative 1

ID	Study Intersection	Jurisdiction	Year 2035 No Project				Year 2035 With Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
1.	Cedar Ave at I-10 Freeway WB Ramps	CAL	**79.6**	**E**	**61.5**	**E**	**81.6**	**F**	**69.5**	**E**
2.	Cedar Ave at I-10 Freeway EB Ramps	CAL	**61.8**	**E**	49.0	D	**66.2**	**E**	51.8	D
3.	Cedar Ave at Slover Ave	SB	40.8	D	48.2	D	41.5	D	50.1	D
4.	Cedar Ave at Santa Ana Ave	SB	29.8	C	31.2	C	30.6	C	34.2	C
5.	Cedar Ave at Jurupa Ave	SB	**73.4**	**E**	**99.9**	**F**	**91.2**	**F**	27.3	C
6.	Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd	JV	12.6	B	27.5	C	13.4	B	37.1	D
7.	Rubidoux at Building 6 Access	JV	0.0	A	0.0	A	11.4	B	16.1	C
8.	Rubidoux at Project Access	JV	0.0	A	0.0	A	6.2	A	9.4	A
9.	Rubidoux Blvd at Production Circle	JV	**93.5**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
10.	Rubidoux Blvd at 20th St / Market St	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
11.	Rubidoux Blvd at 24th St	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
12.	Rubidoux Blvd at 26th St	JV	**81.5**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
13.	Rubidoux Blvd at 28th St	JV	32.5	C	**78.4**	**E**	34.7	C	**85.1**	**F**
14.	Rubidoux Blvd at 30th St / SR-60 Freeway WB Off-Ramp	CAL	17.0	C	16.5	C	17.5	C	18.5	C
15.	Rubidoux Blvd at SR-60 Freeway WB On-Ramp	CAL	21.9	C	14.7	B	23.1	C	17.2	B
16.	Rubidoux Blvd at SR-60 Freeway EB Ramps	CAL	33.7	C	43.6	D	34.1	C	48.6	D
17.	Rubidoux Blvd at 34th St	JV	12.5	B	12.1	B	12.6	B	12.1	B
18.	Building 6 Access at El Rivino Rd	JV	0.0	A	0.0	A	9.3	A	10.5	B
19.	Project Access at El Rivino Rd	JV	0.0	A	0.0	A	12.3	B	20.7	C
20.	Cactus Ave / Project Access at El Rivino Rd	JV / RIA / SB	13.0	B	16.6	B	14.0	B	18.8	B
21.	Building 1 Auto Access at El Rivino Rd	JV	0.0	A	0.0	A	9.3	A	12.2	B
22.	Hall Ave at El Rivino Rd	JV / SB	12.6	B	**58.6**	**F**	15.2	C	**99.9**	**F**
23.	Hall Ave at Building 1 Access	JV	0.0	A	0.0	A	10.6	B	12.8	B
24.	Agua Mansa Rd at El Rivino Rd	RIA / SB	**46.2**	**E**	**99.9**	**F**	**75.7**	**F**	**99.9**	**F**
25.	Agua Mansa Rd at Holly Place	SB	16.2	C	**36.8**	**E**	17.1	C	**45.8**	**E**
26.	Agua Mansa Rd at Hall Ave	JV / SB	15.5	C	22.6	C	16.4	C	32.1	D
27.	Agua Mansa Rd at Brown Ave	JV / SB	10.6	B	14.1	B	11.8	B	15.3	B

Table 5.15-24 Horizon Year 2035 Intersection Delay and Level of Service – Alternative 1

ID	Study Intersection	Jurisdiction	Year 2035 No Project				Year 2035 With Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
28.	Agua Mansa Rd at R.A. Nelson	JV	3.8	A	3.4	A	3.8	A	3.4	A
29.	Agua Mansa Rd at Market St	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
30.	Market St at Hall Ave	JV	**53.8**	**F**	**99.9**	**F**	**82.3**	**F**	**99.9**	**F**
31.	Market St at Rivera St	RIV	17.0	B	26.3	C	17.4	B	26.3	C
32.	Market St at SR-60 Freeway WB Ramps	CAL	12.4	B	50.5	D	12.6	B	**66.6**	**E**
33.	Market St at SR-60 Freeway EB Ramps	CAL	30.6	C	**91.0**	**F**	36.1	D	**99.9**	**F**
34.	Riverside Ave at I-10 Freeway WB Ramps	CAL	21.9	C	22.2	C	22.7	C	22.6	C
35.	Riverside Ave at I-10 Freeway EB Ramps	CAL	26.9	C	40.2	D	26.7	C	43.5	D
36.	Riverside Ave at Slover Ave	RIA	31.6	C	**57.3**	**E**	34.8	C	**62.6**	**E**
37.	Riverside Ave at Santa Ana Ave	RIA	11.9	B	12.5	B	12.1	B	13.0	B
38.	Riverside Ave at Jurupa Ave	RIA	9.7	A	9.9	A	10.0	A	10.1	B
39.	Riverside Ave at Agua Mansa Rd	RIA / COL	22.4	C	32.7	C	21.6	C	50.7	D
40.	Rancho Ave at Agua Mansa Rd	COL	21.7	C	43.1	D	21.7	C	49.3	D

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10; TS: Traffic Signal; CSS: Cross Street Stop; AWS: All Way Stop; LOS: level of service
Bold: Exceeds LOS D significance criteria.
1 Delay is shown in seconds/vehicle. Delay is reported for un-signalized study intersections and all study intersections within California Department of Transportation jurisdiction. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).
2 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Level of Significance before Mitigation: Improvements required for Intersections #s 9, 10, 11, 12, 13, 25, 29, 30 and 31 are programmed within existing fee programs (DIF and/or TUMF). Therefore, impacts to these intersections would be less than significant under this scenario. The improvements for Intersections #s 1 and 2 have been generally funded in San Bernardino County, but funding shortfalls have been identified. The impacts to these intersections, therefore, and impacts to Intersections #s 5, 24, 22, , 33 and 36, that are not included within a fee program would be Potentially Significant even after implementation of MM Alt1 T-1 (which includes fair share payments for these intersection improvements).

Alternative 2

"Near-Term 2020 – Alternative 2" morning and evening peak hour intersection turning movement volumes are shown on Figures 74 and 75 in the TIA, respectively (see Appendix K). The horizon year 2035 intersection LOS analysis for Alternative 2 is shown in Table 5.15-25, *Horizon Year 2035 Intersection Delay and Level of Service*

– *Alternative 2*. For "Horizon Year 2035 – Alternative 2" traffic conditions, the study intersections are projected to operate within acceptable LOS (D or better) during the morning and evening peak hours, except for the following study intersections:

- #1. Cedar Avenue at I-10 Freeway WB Ramps (AM and PM peak hour)
- #2. Cedar Avenue at I-10 Freeway EB Ramps (AM peak hour)
- #5. Cedar Avenue at Jurupa Avenue (AM peak hour)
- #9. Rubidoux Boulevard at Production Circle (AM and PM peak hour)
- #10. Rubidoux Boulevard at 20th Street/Market Street (AM and PM peak hour)
- #11. Rubidoux Boulevard at 24th Street (AM and PM peak hour)
- #12. Rubidoux Boulevard at 26th Street (AM and PM peak hour)
- #13. Rubidoux Boulevard at 28th Street (PM peak hour)
- #22. Hall Avenue at El Rivino Road (PM peak hour)
- #24. Agua Mansa Road at El Rivino Road (AM and PM peak hour)
- #25. Agua Mansa Road at Holly Place (PM peak hour)
- #29. Agua Mansa Road at Market Street (AM and PM peak hour)
- #30. Market Street at Hall Avenue (AM and PM peak hour)
- #32. Market Street at SR-60 Freeway WB Ramps (PM peak hour)
- #33. Market Street at SR-60 Freeway EB Ramps (PM peak hour)
- #36. Riverside Avenue at Slover Avenue (PM peak hour)

Table 5.15-25 Horizon Year 2035 Intersection Delay and Level of Service – Alternative 2

ID	Study Intersection	Jurisdiction	Year 2035 No Project				Year 2035 With Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
1.	Cedar Ave at I-10 Freeway WB Ramps	CAL	**79.6**	**E**	**61.5**	**E**	**81.4**	**F**	**68.5**	**E**
2.	Cedar Ave at I-10 Freeway EB Ramps	CAL	**61.8**	**E**	49.0	D	**65.1**	**E**	51.6	D
3.	Cedar Ave at Slover Ave	SB	40.8	D	48.2	D	41.3	D	49.7	D
4.	Cedar Ave at Santa Ana Ave	SB	29.8	C	31.2	C	31.2	C	37.4	D
5.	Cedar Ave at Jurupa Ave	SB	**73.4**	**E**	**99.9**	**F**	**88.0**	**F**	26.8	C
6.	Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd	JV	12.6	B	27.5	C	13.3	B	38.8	D
7.	Rubidoux at Building 6 Access	JV	0.0	A	0.0	A	11.5	B	16.6	C
8.	Rubidoux at Project Access	JV	0.0	A	0.0	A	5.9	A	8.3	A
9.	Rubidoux Blvd at Production Circle	JV	**93.5**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
10.	Rubidoux Blvd at 20th St / Market St	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
11.	Rubidoux Blvd at 24th St	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**

Table 5.15-25 Horizon Year 2035 Intersection Delay and Level of Service – Alternative 2

ID	Study Intersection	Jurisdiction	Year 2035 No Project				Year 2035 With Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
12.	Rubidoux Blvd at 26th St	JV	**81.5**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
13.	Rubidoux Blvd at 28th St	JV	32.5	C	**78.4**	**E**	34.9	C	**85.4**	**F**
14.	Rubidoux Blvd at 30th St / SR-60 Freeway WB Off-Ramp	CAL	17.0	C	16.5	C	17.6	C	18.3	C
15.	Rubidoux Blvd at SR-60 Freeway WB On-Ramp	CAL	21.9	C	14.7	B	23.1	C	16.9	B
16.	Rubidoux Blvd at SR-60 Freeway EB Ramps	CAL	33.7	C	43.6	D	34.0	C	48.3	D
17.	Rubidoux Blvd at 34th St	JV	12.5	B	12.1	B	12.6	B	12.1	B
18.	Building 6 Access at El Rivino Rd	JV	0.0	A	0.0	A	9.4	A	10.6	B
19.	Project Access at El Rivino Rd	JV	0.0	A	0.0	A	12.2	B	21.0	C
20.	Cactus Ave / Project Access at El Rivino Rd	JV / RIA / SB	13.0	B	16.6	B	13.8	B	19.0	B
21.	Building 1 Auto Access at El Rivino Rd	JV	0.0	A	0.0	A	9.3	A	12.2	B
22.	Hall Ave at El Rivino Rd	JV / SB	12.6	B	**58.6**	**F**	14.7	B	**99.9**	**F**
23.	Hall Ave at Building 1 Access	JV	0.0	A	0.0	A	10.5	B	12.9	B
24.	Agua Mansa Rd at El Rivino Rd	RIA / SB	**46.2**	**E**	**99.9**	**F**	**74.3**	**F**	**99.9**	**F**
25.	Agua Mansa Rd at Holly Place	SB	16.2	C	**36.8**	**E**	17.0	C	**44.5**	**E**
26.	Agua Mansa Rd at Hall Ave	JV / SB	15.5	C	22.6	C	16.4	C	30.3	D
27.	Agua Mansa Rd at Brown Ave	JV / SB	10.6	B	14.1	B	11.8	B	15.3	B
28.	Agua Mansa Rd at R.A. Nelson	JV	3.8	A	3.4	A	3.8	A	3.3	A
29.	Agua Mansa Rd at Market St	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
30.	Market St at Hall Ave	JV	**53.8**	**F**	**99.9**	**F**	**77.3**	**F**	**99.9**	**F**
31.	Market St at Rivera St	RIV	17.0	B	26.3	C	17.3	B	26.3	C
32.	Market St at SR-60 Freeway WB Ramps	CAL	12.4	B	50.5	D	12.6	B	**65.0**	**E**
33.	Market St at SR-60 Freeway EB Ramps	CAL	30.6	C	**91.0**	**F**	35.6	D	**99.9**	**F**
34.	Riverside Ave at I-10 Freeway WB Ramps	CAL	21.9	C	22.2	C	22.5	C	22.7	C
35.	Riverside Ave at I-10 Freeway EB Ramps	CAL	26.9	C	40.2	D	26.8	C	43.1	D
36.	Riverside Ave at Slover Ave	RIA	31.6	C	**57.3**	**E**	34.8	C	**61.9**	**E**
37.	Riverside Ave at Santa Ana Ave	RIA	11.9	B	12.5	B	12.0	B	12.9	B
38.	Riverside Ave at Jurupa Ave	RIA	9.7	A	9.9	A	10.0	A	10.1	B

Table 5.15-25 Horizon Year 2035 Intersection Delay and Level of Service – Alternative 2

ID	Study Intersection	Jurisdiction	Year 2035 No Project				Year 2035 With Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
39.	Riverside Ave at Agua Mansa Rd	RIA / COL	22.4	C	32.7	C	21.4	C	52.7	D
40.	Rancho Ave at Agua Mansa Rd	COL	21.7	C	43.1	D	23.5	C	49.4	D

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10; TS: Traffic Signal; CSS: Cross Street Stop; AWS: All Way Stop; LOS: level of service
Bold: Exceeds LOS D significance criteria.
1 Delay is shown in seconds/vehicle. Delay is reported for un-signalized study intersections and all study intersections within California Department of Transportation jurisdiction. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).
2 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Level of Significance before Mitigation: Improvements required for Intersections #s 9, 11, 12, 13, 15, 25, 29, 30 and 31 are programmed within existing fee programs (DIF and/or TUMF). Therefore, impacts to these intersections would be less than significant under this scenario. Impacts to Intersection #10 are under the DIF/TUMF programs and also require a fair share payment from the Caterpillar project, and are less than significant. The improvements for Intersections #s 1 and 2 have been generally funded in San Bernardino County, but a funding shortfall has been identified. The impacts to these intersections, therefore, and impacts to Intersections # 5, 24, 22, 33 and 36, that are not included within a fee program would be Potentially Significant even after implementation of MM Alt1 T-3 (which includes fair share payments for these intersection improvements).

Site Access Alternative 1A

Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. "Horizon Year 2035 – Site Access Alternative 1A" morning and evening peak hour intersection turning movement volumes are shown for Site Access Alternative 1A on Figures 109 and 110 in the TIA, respectively.

The horizon year 2035 intersection LOS analysis for Site Access Alternative 1A is shown in Table 5.15-26, *Horizon Year 2035 Intersection Delay and Level of Service – Site Access Alternative 1A*. Note that only the intersections potentially affected by this site access alternative were evaluated (intersections not listed would have the same impact as Alternative 1). For "Horizon Year 2035 – Site Access Alternative 1A" traffic conditions, the study intersections are projected to operate within acceptable LOS (D or better) during the morning and evening peak hours, except for the following study intersections:

- #6. Cedar Avenue at Tarragona Drive/El Rivino Road (PM peak hour)
- #9. Rubidoux Boulevard at Production Circle (AM and PM peak hour)
- #10. Rubidoux Boulevard at 20th Street/Market Street (AM and PM peak hour)
- #22. Hall Avenue at El Rivino Road (PM peak hour)
- #29. Agua Mansa Road at Market Street (AM and PM peak hour)

Table 5.15-26 Horizon Year 2035 Intersection Delay and Level of Service – Site Access Alternative 1A

ID	Study Intersection	Jurisdiction	Year 2035 No Project				Year 2035 With Project Site Access Alternative 1A			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]
6.	Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd	JV	12.6	B	27.5	C	18.0	B	**77.9**	**E**
7.	Rubidoux at Building 6 Access	JV	0.0	A	0.0	A	12.1	B	16.4	C
8.	Rubidoux at Project Access	JV	0.0	A	0.0	A	4.4	A	5.5	A
9.	Rubidoux Blvd at Production Circle	JV	**93.5**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
10.	Rubidoux Blvd at 20th St / Market St	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
18.	Building 6 Access at El Rivino Rd	JV	0.0	A	0.0	A	10.0	A	10.9	B
19.	Project Access at El Rivino Rd	JV	0.0	A	0.0	A	5.1	A	6.4	A
20.	Cactus Ave / Project Access at El Rivino Rd	JV / RIA / SB	13.0	B	16.6	B	14.3	B	19.3	B
21.	Building 1 Auto Access at El Rivino Rd	JV	0.0	A	0.0	A	9.3	A	12.1	B
22.	Hall Ave at El Rivino Rd	JV / SB	12.6	B	**58.6**	**F**	15.4	C	**99.9**	**F**
23.	Hall Ave at Building 1 Access	JV	0.0	A	0.0	A	10.7	B	13.1	B
26.	Agua Mansa Rd at Hall Ave	JV / SB	15.5	C	22.6	C	16.5	C	31.8	D
27.	Agua Mansa Rd at Brown Ave	JV / SB	10.6	B	14.1	B	12.1	B	15.7	B
28.	Agua Mansa Rd at R.A. Nelson	JV	3.8	A	3.4	A	3.8	A	3.3	A
29.	Agua Mansa Rd at Market St	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10; TS: Traffic Signal; CSS: Cross Street Stop; AWS: All Way Stop; LOS: level of service
Bold: Exceeds LOS D significance criteria.
[1] Delay is shown in seconds/vehicle. Delay is reported for un-signalized study intersections and all study intersections within California Department of Transportation jurisdiction. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).
[2] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Level of Significance before Mitigation: Improvements required for Intersections #s 6, 9, 10, 11,, 12,13, 14, 16, 25, 29, and 30 are programmed within existing fee programs (DIF and/or TUMF); therefore, impacts to these intersections would be less than significant under this scenario. The improvements for Intersections #s 1 and 2 have been generally funded, but a funding shortfall has been identified. Impacts to these intersections, therefore, and to Intersections #s 5, 24, 22 and 36, that are not included within a fee program would be Potentially Significant even after implementation of MM Alt1A T-3 (which includes fair share payments for these intersection improvements).

Site Access Alternative 2A

Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. "Horizon Year 2035 – Site Access Alternative 2A" morning and evening peak hour intersection turning movement volumes are shown for Site Access Alternative 2A on Figures 111 and 112 in the TIA, respectively (see Appendix K).

The horizon year 2035 intersection LOS analysis for Site Access Alternative 2A is shown in Table 5.15-27, *Horizon Year 2035 Intersection Delay and Level of Service – Site Access Alternative 2A*. Note that only the intersections potentially affected by this site access alternative were evaluated (intersections not listed would have the same impact as Alternative 2).For "Horizon Year 2035 – Site Access Alternative 2A" traffic conditions, the study intersections are projected to operate within acceptable LOS (D or better) during the morning and evening peak hours, except for the following study intersections:

- #6. Cedar Avenue at Tarragona Drive/El Rivino Road (PM peak hour)
- #9. Rubidoux Boulevard at Production Circle (AM and PM peak hour)
- #10. Rubidoux Boulevard at 20th Street/Market Street (AM and PM peak hour)
- #22. Hall Avenue at El Rivino Road (PM peak hour)
- #29. Agua Mansa Road at Market Street (AM and PM peak hour)

Table 5.15-27 Horizon Year 2035 Intersection Delay and Level of Service – Site Access Alternative 2A

			Year 2035 No Project				Year 2035 With Project Site Access Alternative 2A			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
ID	Study Intersection	Jurisdiction	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[31,2]	LOS[5]	Delay[1,2]	LOS[5]
6.	Cedar Ave / Rubidoux Blvd at Tarragona Dr / El Rivino Rd	JV	12.6	B	27.5	C	17.9	B	**82.0**	**F**
7.	Rubidoux at Building 6 Access	JV	0.0	A	0.0	A	12.2	B	16.9	C
8.	Rubidoux at Project Access	JV	0.0	A	0.0	A	4.2	A	4.2	A
9.	Rubidoux Blvd at Production Circle	JV	**93.5**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
10.	Rubidoux Blvd at 20th St / Market St	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**
18.	Building 6 Access at El Rivino Rd	JV	0.0	A	0.0	A	10.0	B	11.0	B
19.	Project Access at El Rivino Rd	JV	0.0	A	0.0	A	5.1	A	8.8	A
20.	Cactus Ave / Project Access at El Rivino Rd	JV / RIA / SB	13.0	B	16.6	B	14.1	B	19.5	B
21.	Building 1 Auto Access at El Rivino Rd	JV	0.0	A	0.0	A	9.3	A	12.2	B
22.	Hall Ave at El Rivino Rd	JV / SB	12.6	B	**58.6**	**F**	14.8	B	**99.9**	**F**
23.	Hall Ave at Building 1 Access	JV	0.0	A	0.0	A	10.6	B	13.2	B
26.	Agua Mansa Rd at Hall Ave	JV / SB	15.5	C	22.6	C	16.4	C	30.0	D

Table 5.15-27 Horizon Year 2035 Intersection Delay and Level of Service – Site Access Alternative 2A

ID	Study Intersection	Jurisdiction	Year 2035 No Project				Year 2035 With Project Site Access Alternative 2A			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]	Delay[3,1,2]	LOS[5]	Delay[1,2]	LOS[5]
27.	Agua Mansa Rd at Brown Ave	JV / SB	10.6	B	14.1	B	12.1	B	15.7	B
28.	Agua Mansa Rd at R.A. Nelson	JV	3.8	A	3.4	A	3.8	A	3.3	A
29.	Agua Mansa Rd at Market St	JV	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**	**99.9**	**F**

Source: Ganddini 2018.
Notes: CAL: Caltrans; COL: Colton, JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; WB: westbound; EB: eastbound; SR-60: State Route 60; I-10: Interstate 10; TS: Traffic Signal; CSS: Cross Street Stop; AWS: All Way Stop; LOS: level of service
Bold: Exceeds LOS D significance criteria.
[1] Delay is shown in seconds/vehicle. Delay is reported for un-signalized study intersections and all study intersections within California Department of Transportation jurisdiction. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).
[2] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Level of Significance before Mitigation: Improvements required for Intersections #s 6, 9, 11, 12, 13,15, 25, 29, and 30 are programmed within existing fee programs (DIF and/or TUMF); therefore, impacts to these intersections would be less than significant under this scenario. Impacts to Intersection #10 are under the DIF/TUMF programs and also require fair share to Caterpillar project, and are less than significant. The improvements for Intersections #s 1 and 2 have been fully funded in San Bernardino County, but a funding shortfall has been identified. Impacts to these intersections, therefore, and to Intersections #s 5, 24, 22, 33, and 36, that are not included within a fee program would be Potentially Significant even after implementation of MM Alt2A T-1 (which includes fair share payments for these intersection improvements).

Horizon Year 2035 – Roadway Segments

Alternative 1

"Near-Term 2020 – Alternative 1" average daily traffic volumes are shown on Figure 70 in the TIA (see Appendix K). The horizon year 2035 roadway segment analysis for Alternative 1 is shown in Table 5.15-28, *Horizon Year 2035 Daily Roadway Capacity Analysis – Alternative 1*. For "Horizon Year 2035 – Alternative 1" traffic conditions, the study roadway segments are projected to operate at acceptable LOS, except for the following roadway segments:

- Rubidoux Boulevard, El Rivino Road to Production Circle
- Rubidoux Boulevard, Production Circle to 20th Street
- Market Street, Agua Mansa Road to Hall Avenue
- Market Street, Hall Avenue to Rivera Street
- Agua Mansa Road, Market Street to Brown Avenue
- Agua Mansa Road, Hall Avenue to El Rivino Road

Table 5.15-28 Horizon Year 2035 Daily Roadway Capacity Analysis – Alternative 1

Roadway Segment	Jurisdiction	Year 2035 No Project Roadway Segment				Year 2035 With Project Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Rubidoux Boulevard									
Btwn El Rivino Rd and Production Circle	JV	30,100	0.88	Approaches Capacity	D	35,000	1.03	**Potentially Exceeds Capacity**	**F**
Btwn Production Circle and 20th St	JV	29,800	0.87	Approaches Capacity	D	34,700	1.02	**Potentially Exceeds Capacity**	**F**
Btwn 20th St and 24th St	JV	25,000	0.73	Acceptable	C	27,500	0.81	Approaches Capacity	D
Btwn 24th St and 26th St	JV	25,800	0.76	Acceptable	C	28,300	0.83	Approaches Capacity	D
Btwn 26th St and 28th St	JV	26,700	0.78	Acceptable	C	29,200	0.86	Approaches Capacity	D
Btwn 28th St and 30th St	JV	29,000	0.85	Approaches Capacity	D	31,500	0.92	Approaches Capacity	E
El Rivino Road									
Btwn Cedar Ave and Cactus Ave	JV / RIA / SB	11,400	0.88	Approaches Capacity	D	12,900	0.99	Approaches Capacity	E
Btwn Cactus Ave and Hall Ave	JV /SB	6,600	0.51	Acceptable	A	8,700	0.67	Acceptable	B
Btwn Hall Ave and Agua Mansa Rd	JV / SB	4,100	0.32	Acceptable	A	5,100	0.39	Acceptable	A
Hall Avenue									
Btwn El Rivino Rd and Agua Mansa Rd	JV	2,800	0.22	Acceptable	A	4,400	0.34	Acceptable	A
Market Street									
Btwn Rubidoux Blvd and Agua Mansa Rd	JV	29,800	0.87	Approaches Capacity	D	32,700	0.96	Approaches Capacity	E
Btwn Agua Mansa Rd and Hall Ave	JV	25,700	1.43	**Potentially Exceeds Capacity**	**F**	29,400	1.63	**Potentially Exceeds Capacity**	**F**
Btwn Hall Ave and Rivera St	JV / RIV	35,000	1.94	**Potentially Exceeds Capacity**	**F**	38,700	2.15	**Potentially Exceeds Capacity**	**F**
Agua Mansa Road									
Btwn Market St and Brown Ave	JV	19,900	1.53	**Potentially Exceeds Capacity**	**F**	21,200	1.63	**Potentially Exceeds Capacity**	**F**

Table 5.15-28 Horizon Year 2035 Daily Roadway Capacity Analysis – Alternative 1

Roadway Segment	Jurisdiction	Year 2035 No Project Roadway Segment				Year 2035 With Project Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Btwn Brown Ave and Hall Ave	JV / SB	20,900	0.81	Approaches Capacity	D	21,700	0.84	Approaches Capacity	D
Btwn Hall Ave and El Rivino Rd	JV / SB	19,600	1.09	**Potentially Exceeds Capacity**	**F**	20,900	1.16	**Potentially Exceeds Capacity**	**F**

Source: Ganddini 2018.
Notes: Btwn: between; Class: classification; L: lanes; ADT: average daily trips; V/C: volume-to-capacity ratio; LOS: level of service; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; MH: Major Highway; SH: Secondary Highway; NC: Not Classified
Bold: Exceeds LOS E significance criteria.
[1] Equivalent to a Secondary for County of Riverside Roadway Classifications based on existing curb-to-curb and lane
[2] Roadway maximum capacity at Level of Service "E" for roadway classification. Capacity adjustment to reflect the number of existing number of travel lanes and is based on existing lane geometrics, existing roadway design, points of conflict, and existing curb-to-curb widths to determine the nearest roadway classification and capacity.

Level of Significance before Mitigation: Even with implementation of MM Alt1 T-4, this impact would be potentially significant because the required Market Street improvements are not fully covered by TUMF and DIF fees. Also, Agua Mansa road widening is a fair share improvement that is currently not a programmed improvement and partially within the County of San Bernardino's jurisdiction. Additionally, under cumulative conditions, Rubidoux Boulevard, between El Rivino Road and Production Circle and also between Production Circle and 20th Street segments are shown to exceed capacity at the City's General Plan ultimate width for this roadway.

Alternative 2

"Near-Term 2020 – Alternative 2" average daily traffic volumes are shown on Figure 71 in the TIA (see Appendix K). The horizon year 2035 roadway segment analysis for Alternative 2 is shown in Table 5.15-29, *Horizon Year 2035 Daily Roadway Capacity Analysis – Alternative 2*. For "Horizon Year 2035 – Alternative 2" traffic conditions, the study roadway segments are projected to operate at acceptable LOS, except for the following roadway segments:

- Rubidoux Boulevard, El Rivino Road to Production Circle
- Rubidoux Boulevard, Production Circle to 20th Street
- El Rivino Road, Cedar Avenue to Cactus Avenue
- Market Street, Agua Mansa Road to Hall Avenue
- Market Street, Hall Avenue to Rivera Street
- Agua Mansa Road, Market Street to Brown Avenue
- Agua Mansa Road, Hall Avenue to El Rivino Road

Table 5.15-29 Horizon Year 2035 Daily Roadway Capacity Analysis – Alternative 2

Roadway Segment	Jurisdiction	Year 2035 No Project Roadway Segment				Year 2035 With Project Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Rubidoux Boulevard									
Btwn El Rivino Rd and Production Circle	JV	30,100	0.88	Approaches Capacity	D	35,500	1.04	**Potentially Exceeds Capacity**	**F**
Btwn Production Circle and 20th St	JV	29,800	0.87	Approaches Capacity	D	35,200	1.03	**Potentially Exceeds Capacity**	**F**
Btwn 20th St and 24th St	JV	25,000	0.73	Acceptable	C	27,800	0.82	Approaches Capacity	D
Btwn 24th St and 26th St	JV	25,800	0.76	Acceptable	C	28,600	0.84	Approaches Capacity	D
Btwn 26th St and 28th St	JV	26,700	0.78	Acceptable	C	29,500	0.87	Approaches Capacity	D
Btwn 28th St and 30th St	JV	29,000	0.85	Approaches Capacity	D	31,700	0.93	Approaches Capacity	E
El Rivino Road									
Btwn Cedar Ave and Cactus Ave	JV / RIA / SB	11,400	0.88	Approaches Capacity	D	13,500	1.04	**Potentially Exceeds Capacity**	**F**
Btwn Cactus Ave and Hall Ave	JV /SB	6,600	0.51	Acceptable	A	9,200	0.71	Acceptable	C
Btwn Hall Ave and Agua Mansa Rd	JV / SB	4,100	0.32	Acceptable	A	5,500	0.42	Acceptable	A
Hall Avenue									
Btwn El Rivino Rd and Agua Mansa Rd	JV	2,800	0.22	Acceptable	A	4,500	0.35	Acceptable	A
Market Street									
Btwn Rubidoux Blvd and Agua Mansa Rd	JV	29,800	0.87	Approaches Capacity	D	33,100	0.97	Approaches Capacity	E
Btwn Agua Mansa Rd and Hall Ave	JV	25,700	1.43	**Potentially Exceeds Capacity**	**F**	29,900	1.66	**Potentially Exceeds Capacity**	**F**
Btwn Hall Ave and Rivera St	JV / RIV	35,000	1.94	**Potentially Exceeds Capacity**	**F**	39,200	2.18	**Potentially Exceeds Capacity**	**F**
Agua Mansa Road									
Btwn Market St and Brown Ave	JV	19,900	1.53	**Potentially Exceeds Capacity**	**F**	21,400	1.65	**Potentially Exceeds Capacity**	**F**

Table 5.15-29 Horizon Year 2035 Daily Roadway Capacity Analysis – Alternative 2

Roadway Segment	Jurisdiction	Year 2035 No Project Roadway Segment				Year 2035 With Project Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Btwn Brown Ave and Hall Ave	JV / SB	20,900	0.81	Approaches Capacity	D	21,900	0.85	Approaches Capacity	D
Btwn Hall Ave and El Rivino Rd	JV / SB	19,600	1.09	**Potentially Exceeds Capacity**	**F**	20,800	1.16	**Potentially Exceeds Capacity**	**F**

Source: Ganddini 2018.
Notes: Btwn: between; Class: classification; L: lanes; ADT: average daily trips; V/C: volume-to-capacity ratio; LOS: level of service; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; MH: Major Highway; SH: Secondary Highway; NC: Not Classified
Bold: Exceeds LOS E significance criteria.
[1] Equivalent to a Secondary for County of Riverside Roadway Classifications based on existing curb-to-curb and lane
[2] Roadway maximum capacity at Level of Service "E" for roadway classification. Capacity adjustment to reflect the number of existing number of travel lanes and is based on existing lane geometrics, existing roadway design, points of conflict, and existing curb-to-curb widths to determine the nearest roadway classification and capacity.

Level of Significance before Mitigation: Even with implementation of MM Alt2 T-4, this impact would be potentially significant because the required Market Street improvements are not fully covered by TUMF and DIF fees. Also, Agua Mansa road widening is a fair share improvement that is currently not a programmed improvement and partially within the County of San Bernardino's jurisdiction. Additionally, under cumulative conditions, Rubidoux Boulevard, between El Rivino Road and Production Circle and also between Production Circle and 20th Street segments are shown to exceed capacity at the City's General Plan ultimate width for this roadway.

Site Access Alternative 1A

Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. "Horizon Term Year 2035 – Site Access Alternative 1A" average daily traffic volumes are depicted on Figure 107 in the TIA for Site Access Alternative 1A (see Appendix K).

The horizon year 2035 roadway segment analysis for Site Access Alternative 1A is shown in Table 5.15-30, *Horizon Year 2035 Daily Roadway Capacity Analysis – Site Access Alternative 1A*. For "Horizon Year 2035 – Site Access Alternative 1A" traffic conditions, the study roadway segments are projected to operate at acceptable LOS, except for the following roadway segments:

- Rubidoux Boulevard, El Rivino Road to Production Circle
- Rubidoux Boulevard, Production Circle to 20th Street
- El Rivino Road, Cedar Avenue to Cactus Avenue
- Agua Mansa Road, Market Street to Brown Avenue

Table 5.15-30 Horizon Year 2035 Daily Roadway Capacity Analysis – Site Access Alternative 1A

Roadway Segment	Jurisdiction	Year 2035 No Project Roadway Segment				Year 2035 With Project Site Access Alternative 1A Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Rubidoux Boulevard									
Btwn El Rivino Rd and Production Circle	JV	30,100	0.88	Approaches Capacity	D	34,600	1.01	**Potentially Exceeds Capacity**	**F**
Btwn Production Circle and 20th St	JV	29,800	0.87	Approaches Capacity	D	34,300	1.01	**Potentially Exceeds Capacity**	**F**
El Rivino Road									
Btwn Cedar Ave and Cactus Ave	JV / RIA / SB	11,400	0.88	Approaches Capacity	D	17,300	1.33	**Potentially Exceeds Capacity**	**F**
Btwn Cactus Ave and Hall Ave	JV /SB	6,600	0.51	Acceptable	A	9,000	0.69	Acceptable	B
Hall Avenue									
Btwn El Rivino Rd and Agua Mansa Rd	JV	2,800	0.22	Acceptable	A	4,300	0.33	Acceptable	A
Market Street									
Btwn Rubidoux Blvd and Agua Mansa Rd	JV	29,800	0.87	Approaches Capacity	D	32,900	0.96	Approaches Capacity	E
Agua Mansa Road									
Btwn Market St and Brown Ave	JV	19,900	1.53	**Potentially Exceeds Capacity**	**F**	21,600	1.66	**Potentially Exceeds Capacity**	**F**
Btwn Brown Ave and Hall Ave	JV / SB	20,900	0.81	Approaches Capacity	D	21,600	0.83	Approaches Capacity	D

Source: Ganddini 2018.
Notes: Btwn: between; Class: classification; L: lanes; ADT: average daily trips; V/C: volume-to-capacity ratio; LOS: level of service; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; MH: Major Highway; SH: Secondary Highway; NC: Not Classified
Bold: Exceeds LOS E significance criteria.
[1] Equivalent to a Secondary for County of Riverside Roadway Classifications based on existing curb-to-curb and lane
[2] Roadway maximum capacity at Level of Service "E" for roadway classification. Capacity adjustment to reflect the number of existing number of travel lanes and is based on existing lane geometrics, existing roadway design, points of conflict, and existing curb-to-curb widths to determine the nearest roadway classification and capacity.

Level of Significance before Mitigation: Even with implementation of MM Alt1A T-4, this impact would be potentially significant because the required Market Street improvements are not fully covered by TUMF and DIF fees. Also, Agua Mansa road widening is a fair share improvement that is currently not a programmed improvement and partially within the County of San Bernardino's jurisdiction. Additionally, under cumulative conditions, Rubidoux Boulevard, between El Rivino Road and Production Circle and also between Production Circle and 20th Street segments are shown to exceed capacity at the City's General Plan ultimate width for this roadway.

Site Access Alternative 2A

Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line may not be granted. "Horizon Year 2020 – Site Access Alternative 2A" average daily traffic volumes are depicted on Figure 108 in the TIA for Site Access Alternative 2A (see Appendix K).

The horizon year 2035 roadway segment analysis for Site Access Alternative 2A is shown in Table 5.15-31, *Horizon Year 2035 Daily Roadway Capacity Analysis – Site Access Alternative 2A*. For "Horizon Year 2035 – Site Access Alternative 2A" traffic conditions, the study roadway segments are projected to operate at acceptable LOS, except for the following roadway segments:

- Rubidoux Boulevard, El Rivino Road to Production Circle
- Rubidoux Boulevard, Production Circle to 20th Street
- El Rivino Road, Cedar Avenue to Cactus Avenue
- Agua Mansa Road, Market Street to Brown Avenue

Table 5.15-31 Horizon Year 2035 Daily Roadway Capacity Analysis – Site Access Alternative 2A

		Year 2035 No Project Roadway Segment				Year 2035 With Project Site Access Alternative 2A Roadway Segment			
Roadway Segment	Jurisdiction	ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Rubidoux Boulevard									
Btwn El Rivino Rd and Production Circle	JV	30,100	0.88	Approaches Capacity	D	35,200	1.03	**Potentially Exceeds Capacity**	**F**
Btwn Production Circle and 20th St	JV	29,800	0.87	Approaches Capacity	D	34,900	1.02	**Potentially Exceeds Capacity**	**F**
El Rivino Road									
Btwn Cedar Ave and Cactus Ave	JV / RIA / SB	11,400	0.88	Approaches Capacity	D	18,000	1.38	**Potentially Exceeds Capacity**	**F**
Btwn Cactus Ave and Hall Ave	JV /SB	6,600	0.51	Acceptable	A	9,600	0.74	Acceptable	C
Hall Avenue									
Btwn El Rivino Rd and Agua Mansa Rd	JV	2,800	0.22	Acceptable	A	4,400	0.34	Acceptable	A
Market Street									
Btwn Rubidoux Blvd and Agua Mansa Rd	JV	29,800	0.87	Approaches Capacity	D	33,300	0.98	Approaches Capacity	E
Agua Mansa Road									
Btwn Market St and Brown Ave	JV	19,900	1.53	**Potentially Exceeds Capacity**	**F**	21,800	1.68	**Potentially Exceeds Capacity**	**F**

Table 5.15-31 Horizon Year 2035 Daily Roadway Capacity Analysis – Site Access Alternative 2A

Roadway Segment	Jurisdiction	Year 2035 No Project Roadway Segment				Year 2035 With Project Site Access Alternative 2A Roadway Segment			
		ADT	V/C	Threshold Capacity	LOS	ADT	V/C	Capacity Threshold	LOS
Btwn Brown Ave and Hall Ave	JV / SB	20,900	0.81	Approaches Capacity	D	21,800	0.84	Approaches Capacity	D

Source: Ganddini 2018.
Notes: Btwn: between; Class: classification; L: lanes; ADT: average daily trips; V/C: volume-to-capacity ratio; LOS: level of service; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; MH: Major Highway; SH: Secondary Highway; NC: Not Classified
Bold: Exceeds LOS E significance criteria.
[1] Equivalent to a Secondary for County of Riverside Roadway Classifications based on existing curb-to-curb and lane
[2] Roadway maximum capacity at Level of Service "E" for roadway classification. Capacity adjustment to reflect the number of existing number of travel lanes and is based on existing lane geometrics, existing roadway design, points of conflict, and existing curb-to-curb widths to determine the nearest roadway classification and capacity.

Level of Significance before Mitigation: Even with implementation of MM Alt2A T-4 , this impact would be potentially significant because the required Market Street improvements are not fully covered by TUMF and DIF fees. Also, Agua Mansa road widening is a fair share improvement that is currently not a programmed improvement and partially within the County of San Bernardino's jurisdiction. Additionally, under cumulative conditions, Rubidoux Boulevard, between El Rivino Road and Production Circle and also between Production Circle and 20th Street segments are shown to exceed capacity at the City's General Plan ultimate width for this roadway.

TEMPORARY CONSTRUCTION TRAFFIC

This analysis describes the proposed project's temporary impacts on the circulation network in the project vicinity during construction activities.

Site development would require the use of haul trucks during site clearing, demolition, remediation, and excavation and the use of a variety of other construction vehicles throughout the construction work at the site. Transportation of heavy construction equipment and or materials, which requires the use of oversized vehicles, will require the appropriate transportation permit (see PPP T-5). It is anticipated that during construction approximately 12,660 tons of demolition materials will be exported—3,000 tons of concrete and masonry material, 6,660 tons of scrap metal, and 3,000 tons of mixed demolition debris (wood, drywall, roofing, insulation, and glass). Up to 20,000 cubic yards of contaminated soil is also expected to be exported.

Compared to the project trip generation, construction of the proposed project is expected to generate significantly less trips. The traffic impacts of construction activity will be minor and temporary. To further lessen the impact of construction traffic, the project will be required to comply with all standard conditions for the City of Jurupa Valley pertaining to construction activities; where possible, construction-related vehicle trips would be made in the off-peak hours (see PPP T-4). Additionally, a construction work site traffic control plan is required to be submitted to the City for review and approval prior to the start of any construction work (see PPP T-3). The plans are required to show the location of roadway, sidewalk, bike route, bus stop or driveway closures, traffic detours, haul routes, hours of operation, protective devices, warning signs, and access to abutting properties. Temporary traffic controls used around the construction area would adhere to the standards set forth in the California Manual of Uniform Traffic Control Devices (2014), and construction

activities should adhere to applicable local ordinances (see PPP T-4). Temporary construction impacts of the proposed project are less than significant.

Level of Significance before Mitigation: Less Than Significant.

Alternative Modes of Transportation Analysis

Existing Pedestrian and Bicycle Circulation

The Jurupa Area Plan trails and bikeway system is shown on Figure 17 in the TIA (see Appendix K) and includes both multipurpose trails and bicycle routes. Existing pedestrian facilities adjacent to the project site are shown on Figure 18 of the TIA (see Appendix K).

Existing Transit Service

The study area is currently served by Riverside Transit Agency Route 29 along Rubidoux Boulevard, Market Street, Hall Avenue, and 24th Street—also, Riverside Transit Agency Route 49 along Mission Boulevard (south of SR-60). Figure 19 in the TIA (see Appendix K) shows the existing transit routes in the project vicinity.

The proposed project is a Specific Plan that requires internal review with the City's General Plan policies regarding public transit, bicycle and pedestrian access, and facilities. As identified in the Specific Plan, the proposed project would concentrate employment in Riverside County, which provides an opportunity for the Riverside Transit Agency (RTA) to explore the feasibility of public transportation options for workers and visitors to the Specific Plan area. Additionally, the proposed project could accommodate bus stops and shelters provided by RTA, consistent with its transportation plans. The Specific Plan also includes lighting and design standards for pedestrian circulation in the parking lots to ensure visibility and separation of pedestrians from vehicular paths and connectivity to the onsite buildings. The proposed project would also comply with the applicable bicycle parking standards identified in the Specific Plan. The proposed project would not conflict with the City of Jurupa Valley's policies regarding complete streets and alternative transportation.

Level of Significance before Mitigation: Less than Significant.

Congestion Management Agencies

The following roadways in the project study area are identified on the Riverside County CMP roadway network:

- Rubidoux Boulevard
- Market Street
- Agua Mansa Road

The following roadways in the project study area are identified on the San Bernardino County CMP roadway network:

- Cedar Avenue
- Riverside Avenue

- Agua Mansa Road
- Rancho Avenue

Impacts to these segments were analyzed in accordance with CMP requirements and LOS standards as identified in Impacts T-1 (see Tables 5.15-8 through 5.14-31). As identified previously, the proposed project would have potentially significant impacts to intersections and segments, including segments that are included on the Riverside County and San Bernardino County CMP.

Level of Significance before Mitigation: Potentially Significant.

Caltrans

Main Line

RivTAM provides freeway projections for Year 2035. Table 5.15-32, *Horizon Year 2035 Freeway Mainline Operations Analysis – Alternative 1*, and Table 5.15-33, *Horizon Year 2035 Freeway Mainline Operations Analysis – Alternative 2*, presents the analysis for the Year 2035 morning (AM) and evening (PM) peak hour traffic conditions for Alternative 1 and Alternative 2, respectively. SR-60 currently provides three general use and one high occupancy vehicle lane in each direction within the study area. As shown in the table, one freeway segment is projected to operate at an unacceptable LOS for Year 2035 With Project – Alternative 1 and Year 2035 With Project – Alternative 2 traffic conditions:

- Eastbound (EB) SR-60 between from Market Street to Main Street (PM peak hour).

Table 5.15-32 Horizon Year 2035 Freeway Mainline Operations Analysis – Alternative 1

	AM Peak Hour Year 2035 W/O Project			AM Peak Hour Year 2035 W/Project			PM Peak Hour Year 2035 W/O Project			PM Peak Hour Year 2035 W/Project		
Segment	Trips	Vol/ Cap	LOS	Trips	Vol/ Cap	LOS	Trips	Vol/ Cap	LOS	Trips	Vol/ Cap	LOS
SR-60 WB Main Street to Market Street	8,017	0.94	E	8,137	0.96	E	7,982	0.94	E	8,004	0.94	E
SR-60 WB Market Street to Rubidoux Boulevard	7,833	0.92	D	7,837	0.92	D	7,933	0.93	E	7,933	0.93	E
SR-60 WB Rubidoux Boulevard to Valley Way	7,648	0.90	D	7,654	0.90	D	7,448	0.88	D	7,530	0.89	D
SR-60 EB Valley Way to Rubidoux Boulevard	7,435	0.87	D	7,504	0.88	D	8,206	0.97	E	8,218	0.97	E
SR-60 EB Rubidoux Boulevard to Valley Way	7,556	0.89	D	7,556	0.89	D	8,405	0.99	E	8,410	0.99	E
SR-60 EB Market Street to Main Street	7,572	0.89	D	7,583	0.89	D	8,601	1.01	**F**	8,743	1.03	**F**

Source: Ganddini 2018.
Notes: V/C: volume-to-capacity ratio; LOS: level of service; SR-60: State Route 60; WB: westbound; EB: eastbound
Bold: Exceeds LOS E significance criteria.

Table 5.15-33 Horizon Year 2035 Freeway Mainline Operations Analysis – Alternative 2

	AM Peak Hour Year 2035 W/O Project			AM Peak Hour Year 2035 W/Project			PM Peak Hour Year 2035 W/O Project			PM Peak Hour Year 2035 W/Project		
Segment	Trips	Vol/ Cap	LOS	Trips	Vol/ Cap	LOS	Trips	Vol/ Cap	LOS	Trips	Vol/ Cap	LOS
SR-60 WB Main Street to Market Street	8,017	0.94	E	8,107	0.95	E	7,982	0.94	E	8,006	0.94	E
SR-60 WB Market Street to Rubidoux Boulevard	7,833	0.92	D	7,835	0.92	D	7,933	0.93	E	7,933	0.93	E
SR-60 WB Rubidoux Boulevard to Valley Way	7,648	0.90	D	7,655	0.90	D	7,448	0.88	D	7,520	0.88	D
SR-60 EB Valley Way to Rubidoux Boulevard	7,435	0.87	D	7,487	0.88	D	8,206	0.97	E	8,220	0.97	E
SR-60 EB Rubidoux Boulevard to Valley Way	7,556	0.89	D	7,556	0.89	D	8,405	0.99	E	8,408	0.99	E
SR-60 EB Market Street to Main Street	7,572	0.89	D	7,584	0.89	D	8,601	1.01	**F**	8,723	1.03	**F**

Source: Ganddini 2018.
Notes: V/C: volume-to-capacity ratio; LOS: level of service; SR-60: State Route 60; WB: westbound; EB: eastbound
Bold: Exceeds LOS E significance criteria.

Level of Significance before Mitigation: Potentially Significant.

Merge/Diverge Analysis

A ramp junction is an area of competing traffic demands. Entering on-ramp vehicles merge into the adjacent traffic lane competing for space with upstream freeway traffic combining into one stream. In a merge area, individual on-ramp vehicles attempt to find gaps in the adjacent freeway lane traffic stream. The action of individual merging vehicles entering the traffic stream introduces turbulence to traffic flow in the vicinity of the ramp gore area. Approaching freeway vehicles move toward the left to avoid this turbulence, or create gaps for entering vehicles. Exiting off-ramp vehicles diverge from upstream traffic, separating into two streams. Exiting vehicles must occupy the lane adjacent to the freeway stream or the off-ramp. This has a redistributing effect on other freeway vehicles as they move left to avoid the turbulence of the immediate diverge area.

Ramps have a limited storage capacity. If capacity is exceeded at the merge point, local congestion and queuing occurs, which may ultimately spill back onto the roadway network. The same is true for diverging vehicles. If capacity is exceeded at the diverge point, queuing can back onto the freeway mainline. Both queuing scenarios should be avoided.

The merge/diverge analysis analyzes the following interchanges:

- I-10 at Cedar Avenue
- I-10 at Riverside Avenue
- SR-60 at Rubidoux Boulevard

- SR-60 at Market Street.

The Year 2035 traffic volume projections have been obtained from the RivTAM for Year 2035 traffic conditions. The freeway ramp merge/diverge analysis was conducted using the HCM 2010 methodology using the HCS+ software, version 6.65. The analysis is based on the typical weekday AM and PM peak hour traffic volumes for Buildout Year (2035) traffic conditions. Caltrans has defined LOS C as an acceptable level of service for ramp merging/diverging.

Table 5.15-34, *Horizon Year 2035 Freeway Merge/Diverge Analysis*, summarizes results of the merge/diverge analyses for the interchanges above based on the projected traffic data and existing area measurements. Many of the merge/diverge locations are projected to operate at LOS E or F since the projected freeway volumes exceed the capacity available based on the number of lanes currently provided.

Table 5.15-34 Horizon Year 2035 Freeway Merge/Diverge Analysis

	Year 2035 Without Project		Year 2035 With Project Alternative 1		Year 2035 With Project Alternative 2	
	Peak Hour Density- LOS		Peak Hour Density- LOS		Peak Hour Density- LOS	
Intersection	AM	PM	AM	PM	AM	PM
I-10 Freeway WB On-Ramp at Cedar Avenue Merge	**38.5-F**	24.4-C	**38.7-F**	26.1-C	**38.7-F**	26.0-C
I-10 Freeway WB Off-Ramp at Cedar Avenue Diverge	25.2-C	13.3-B	25.2-C	13.3-B	25.2-C	13.3-B
I-10 Freeway EB Off-Ramp at Cedar Avenue Diverge	11.8-B	25.5-C	12.3-B	25.7-C	12.2-B	25.7-C
I-10 Freeway EB On-Ramp at Cedar Avenue Merge	21.7-C	**37.7-F**	21.7-C	**37.7-F**	21.7-C	**37.7-F**
I-10 Freeway WB On-Ramp at Riverside Avenue Merge	25.0-C	16.3-B	25.0-C	16.4-B	25.0-C	16.4-B
I-10 Freeway WB Off-Ramp at Riverside Avenue Diverge	**36.6-F**	22.0-C	**37.2-F**	22.3-C	**37.1-F**	22.3-C
I-10 Freeway EB Off-Ramp at Riverside Avenue Diverge	12.0-B	**32.4-F**	12.0-B	**32.4-F**	12.0-B	**32.4-F**
10 Freeway EB On-Ramp at Riverside Avenue Merge	22.0-C	**39.4-F**	22.2-C	**40.1-F**	22.2-C	**40.0-F**
SR-60 Freeway WB On-Ramp at Rubidoux Boulevard Merge	**35.5-E**	33.2-D	**35.9-E**	34.4-D	**35.9-E**	34.4-D
SR-60 Freeway WB Off-Ramp at Rubidoux Boulevard Diverge	34.2-D	**35.1-E**	34.2-D	**35.2-E**	34.2-D	**35.2-E**
SR-60 Freeway EB Off-Ramp at Rubidoux Boulevard Diverge	33.6-D	**38.4-E**	34.5-D	**38.7-E**	34.4-D	**38.8-E**
SR-60 Freeway EB On-Ramp at Rubidoux Boulevard Merge	33.3-D	33.3-D	33.3-D	33.4-D	33.3-D	33.4-D
R-60 Freeway WB On-Ramp at Market Street Merge	31.2-D	**36.0-E**	31.2-D	**36.0-E**	31.2-D	36.0-E
SR-60 Freeway WB Off-Ramp at Market Street Diverge	**36.9-E**	**35.9-E**	**38.5-E**	**36.6-E**	**38.3-E**	**36.6-E**

Table 5.15-34 Horizon Year 2035 Freeway Merge/Diverge Analysis

Intersection	Year 2035 Without Project Peak Hour Density- LOS		Year 2035 With Project Alternative 1 Peak Hour Density- LOS		Year 2035 With Project Alternative 2 Peak Hour Density- LOS	
	AM	PM	AM	PM	AM	PM
SR-60 Freeway EB Off-Ramp at Market Street Diverge	**35.9-E**	**38.9-E**	35.9-D	**38.9-E**	**35.9-E**	**38.9-E**
SR-60 Freeway EB On-Ramp at Market Street Merge	32.4-D	**36.4-F**	33.0-D	**38.2-F**	32.9-D	**38.0-F**

Source: Ganddini 2018
Notes: V/C: volume-to-capacity ratio; LOS: level of service; I-10: Interstate 10; SR-60: State Route 60; WB: westbound; EB: eastbound
Bold: Exceeds LOS D significance criteria.

Level of Significance before Mitigation: Potentially Significant.

Impact T-2 Threshold: Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

On September 27, 2013, SB 743 was signed into law. The Legislature found that with adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of greenhouse gas emissions (GHG), as required by the California Global Warming Solutions Act of 2006 (AB 32). Additionally, AB 1358, described above, requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users. SB 743 started a process that would fundamentally change transportation impact analysis as part of CEQA compliance. These changes will include the elimination of auto delay, level of service (LOS), and similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts under CEQA..

As part of the new CEQA Guidelines, the new criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." OPR developed alternative metrics and thresholds based on VMT. The guidelines were certified by the Secretary of the Natural Resources Agency in December 2018, and automobile delay, as described solely by level of service of similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment. There is an opt-in period until July 1, 2020, for agencies to adopt new VMT-based criteria. As such, automobile delay is still considered a significant impact, and the City will continue to use the established LOS criteria for determining significant impacts.

For informational purposes, Table 5.9-35, *Project-Generated Daily Vehicle Miles Traveled,* shows the daily VMT generated by passenger vehicles and trucks associated with the project.

Table 5.15-35 Project-Generated Daily Vehicle Miles Traveled

Intersection	Passenger Vehicle Daily VMT	Truck Daily VMT	Total
Alternative 1	48,426	98,280	146,706
Alternative 2	69,580	89,800	159,380

Source: Urban Crossroads 2019

Because this EIR is circulated for public review before July 1, 2020, the City, as the lead agency, was not required to use a VMT metric in its analysis of traffic impacts. For this reason, this EIR uses a LOS metric in its traffic analysis, and is thus in compliance with the standards in effect at the time of its circulation.

Level of Significance before Mitigation: Less than significant.

Impact T-3 Threshold: Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Specific Plan provides a conceptual right-of-way improvement plan both within and outside the site. These new right-of-way improvements may include new turning lanes, curb-cuts and driveways, new traffic signals, bikeways, road rehabilitation, new traffic signs, entryway signage, emergency vehicle access, curb, gutters, sidewalks, parkway landscaping, and street trees. The Specific Plan includes a Circulation Plan (see Figure 3-6, *Circulation Plan*, in Chapter 3, *Project Description*) to facilitate vehicular access to the surrounding streets. The Circulation Plan identifies vehicular access points for trucks and autos and automobiles only (i.e., no truck ingress/egress) and truck restrictions.

Additionally, a spur of the Union Pacific Railroad (UPRR) for freight travel runs at length through the western portion of the site. The project includes an internal crossing between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard that would warrant review by UPRR. The internal circulation includes special railroad safety features for internal streets and driveways crossing the railroad tracks. UPRR would need to grant an easement for new driveways and ingress/egress points that cross the rail line and may require design features to be installed to ensure safe travels/access over their railroad. Connectivity between Buildings 1 through 5 (Industrial Park) and Rubidoux Boulevard may not be possible because access across the railroad spur line by UPRR may not be granted. The project includes an alternative design (see Alternative 1A and Alternative 2A) in the event UPRR does not grant an easement.

As required by the City of Jurupa Valley, the proposed project would design new infrastructure in accordance with the City of Jurupa Valley and applicable Riverside County standards. All onsite and site-adjacent improvements, including traffic signing/striping and project driveways, sight distance requirements, are to be approved by the City of Jurupa Valley Public Works Department. With adherence to the design standards of the City and Riverside County and review of the proposed infrastructure improvements by City staff and UPRR, the proposed project would not substantially increase hazards.

Level of Significance before Mitigation: Less than significant.

Impact T-4 Threshold: Would the project result in inadequate emergency access?

Regional access is provided via several major roads and highways. Rubidoux Boulevard and Market Street provide access to SR-60. Agua Mansa Road provides access to Riverside Avenue and Rancho Avenue. Riverside Avenue to the east provides access to SR-60, I-10, and I-215 via Center Street. Rancho Avenue provides an alternate route to I-10 via Agua Mansa Road. The proposed connection to Brown Avenue, accessed via Agua Mansa Road or Hall Avenue, would provide one additional shared truck and automobile driveway into the Specific Plan area. Emergency access to the Specific Plan area is provided around each proposed building, through private streets, parking areas, and truck courts. As identified previously under Impact T-3, the roadways and internal circulation would be designed to meet City standards, including standards for emergency vehicle access. With adherence to the design standards of the City and review of the proposed infrastructure improvements by City staff, the proposed project would not substantially increase hazards.

Level of Significance before Mitigation: Less than Significant.

5.15.5 Cumulative Impacts

The analyses in Impact T-1 for each of the traffic scenarios evaluates traffic conditions at local jurisdictions, CMP, and state-controlled intersections for cumulative conditions with and without the project utilizing the HCM methodology. Cumulative traffic impacts consider the impacts of future growth and development in the City of Jurupa Valley and vicinity on the roadway system serving the area using the RivTAM subregional transportation model. The model scenarios include infrastructure changes and changes to socioeconomic data (population and employment) that generate the trips in the model. The future year scenario includes expected growth in population and employment of all cities in the study area and incorporates several cumulative projects, including major projects such as the Rio Vista Specific Plan and Market Street Commercial. Thus, the analysis of 2020 and 2035 conditions considered cumulative impacts of the project.

As identified in Impact T-1, the proposed project would result in cumulatively considerable impacts to the following intersections:

- #1. Cedar Avenue at I-10 westbound (WB) Ramps
- #2. Cedar Avenue at I-10 eastbound (EB) Ramps
- #5. Cedar Avenue at Jurupa Avenue
- #6. Rubidoux Boulevard at Tarragona Drive/ El Rivino Road (Site Access Alternative 1A and 2A only)
- #7. Rubidoux Boulevard at Building 6 Access
- #8 Rubidoux Boulevard at Project Access
- #10. Rubidoux Boulevard at 20th Street / Market Street
- #11. Rubidoux Boulevard at 24th Street
- #12. Rubidoux Boulevard at 26th Street
- #13. Rubidoux Boulevard at 28th Street
- #14. Rubidoux Boulevard at 30th Street / SR-60 WB Off-Ramp
- #16. Rubidoux Boulevard at SR-60 EB Ramps

- #18. Building 6 Access at El Rivino Road
- #19. Project Access at El Rivino Road
- #20. Cactus Avenue / Project Access at El Rivino Road
- #21. Building 1 Auto Access at El Rivino Road
- #22. Hall Avenue at El Rivino Road
- #23. Hall Avenue at Building 1 Access
- #24. Agua Mansa Road at El Rivino Road
- #25. Agua Mansa Road at Holly Place
- #29. Agua Mansa Road at Market Street
- #30. Market Street at Hall Avenue
- #32. Market Street at SR-60 WB Ramps
- #33. Market Street at SR-60 EB Ramps
- #36. Riverside Avenue at Slover Avenue

Furthermore, the proposed project would result in cumulatively considerable impacts to the following segments:

- Market Street between Agua Mansa Road and Hall Avenue
- Market Street between Hall Avenue and Rivera Street
- Agua Mansa Road between Market Street and Brown Avenue
- Agua Mansa Road between Hall Avenue and El Rivino Road
- El Rivino Road between Cedar Avenue and Cactus Avenue

Level of Significance before Mitigation: Potentially Significant.

5.15.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, project design features, and standard conditions of approval, the following impacts would be less than significant: T-2, T-3, T-4, T-5, T-6, and T-7.

Without mitigation, the following impacts would be **potentially significant**:

- **Impact T-1** The Existing Plus Project Scenario would generate traffic volumes that would result in direct impacts and would cumulatively contribute to traffic congestion that exceeds the LOS standards at intersections and segments in the study area.
- **Impact T-1** The Near-Term (2020) Project Scenario would generate traffic volumes that would cumulatively contribute to traffic congestion that exceeds the LOS standards at intersections and segments in the study area.
- **Impact T-1** The Horizon Year (2035) Project Scenario would generate traffic volumes that would cumulatively contribute to traffic congestion that exceeds the LOS standards at intersections and segments in the study area.

- **Impact T-1** The project would generate traffic volumes that would cumulatively contribute to traffic congestion that exceeds the service standards of the San Bernardino County congestion management agency, Riverside County congestion management agency, and Caltrans.

5.15.7 Mitigation Measures

As briefly summarized in Section 5.15.1, applicable to this project are two distinct sets of fees that are collected for purposes of constructing transportation improvements to mitigate development project impacts to the transportation system. The two fee programs are the City of Jurupa Valley Development Impact Fee (DIF) program and the Transportation Uniform Mitigation Fee (TUMF) program. The TUMF program is a Riverside County countywide program.

5.15.7.1 CITY OF JURUPA VALLEY DEVELOPMENT IMPACT FEES

The City of Jurupa Valley incorporated on July 1, 2011. The City of Jurupa Valley's Municipal Code (JVMC) is codified by Ordinance 2018-12, and the City's DIF fees are included in the JVMC, Chapter 3.75. Chapter 3.75.060, Definitions, states that the City of Jurupa Valley utilizes the "Riverside County Public Facilities Needs List Through the Year 2010" (PFNL) as a basis to collect its DIF fees. The relevant excerpts from the PFNL are provided in Appendix K3, Attachment "B." The City collects DIF fees from development projects, based on land use, to ensure funds are available for the construction of all required infrastructure to support development/growth without impacting the City's General Fund.

5.15.7.2 TRANSPORTATION UNIFORM MITIGATION FEES

The City of Jurupa Valley is a member agency of the Western Riverside Council of Governments (WRCOG), which administers the Transportation Uniform Mitigation Fee (TUMF) program for its member agencies. The purpose of the WRCOG is to unify Western Riverside County so that it can speak with a collective voice on important issues that affect its members. Representatives from 18 cities, the Riverside County Board of Supervisors, the Eastern and Western Municipal Water Districts, and the Morongo Band of Mission Indians have seats on the WRCOG Executive Committee, the group that sets policy for the organization, and the Riverside County Superintendent of Schools is an ex-officio member. Recognizing that many issues related to growth are not constrained by political boundaries, WRCOG focuses on several regional matters, which include transportation infrastructure. WRCOG developed and administers the TUMF, a program that ensures that new development pays its fair share for the increased traffic that it creates. WRCOG requires all member agencies to collect TUMF fees. Included in the TUMF program are projects within the City of Jurupa Valley (Appendix K3, Attachment "C").

Both fee programs (DIF and TUMF) have been created and approved by the governing agencies to ensure sufficient funding is collected to construct the required infrastructure identified in each program. Therefore, by payment of each fee, project impacts are mitigated for improvements identified on each fee program. In cases where a project is conditioned to construct infrastructure identified on a fee program, the development project is eligible for fee credit.

Impact T-1 – Circulation System, Roadways

The following mitigation measures customized for each alternative are in addition to the requirement for the applicant to implement PDF T1 through PDF T8.

5.15.7.3 ALTERNATIVE 1

Intersections

Alt1 T-1 The project applicant shall construct the following intersection improvements prior to the issuance of the occupancy permit (each intersection is followed by its number as included in the traffic reports, Appendix K):

- Rubidoux Blvd./Building 6 access (#7):
  - Construct a westbound right turn lane
- Rubidoux Blvd. /Project Access (EW)(#8):
  - Construct NB RT (northbound right turn) lane
  - Construct SB LT (southbound left turn) lane
  - Construct WB LT (westbound left turn) lane
  - Construct WB RT (westbound right turn) lane
  - Construct new signal
- Rubidoux Blvd. @ Production Circle/Project Access (#9):
  - Construct new traffic signal (required by Cal Portland contingent upon development level and meeting signal warrant)
- Building 6 Access (NS)/El Rivino Road (#18):
  - Construct NB RT lane
  - Construct 2nd EB through lane
  - Construct EB RT lane
  - Construct WB LT lane
- Project Access (NS)/El Rivino Road (#19):
  - Construct NB LT lane
  - Construct NB RT lane
  - Construct 2nd EB through lane
  - Construct EB RT lane
  - Construct WB LT lane
- Cactus Avenue/Project Access @ El Rivino Road (#20):
  - Construct NB LT lane
  - Construct NB shared through/RT lane
  - Construct 2nd EB through lane

    - Construct WB LT lane

- Building 1 Auto Access/El Rivino Road (#21):
    - Construct NB/RT lane
    - Construct 2nd EB through lane
    - Construct EB RT lane
    - Construct WB LT lane

- Hall Avenue/El Rivino Road (#22):
    - Construct NB LT lane
    - Construct EB LT lane
    - Construct WB LT lane
    - Construct new traffic signal

- Hall Avenue/Building 1 Access (EW) (#23)
    - Construct NB LT lane
    - Construct SB RT lane
    - Construct EB LT lane
    - Construct EB RT lane

Alt1 T-2 The project applicant shall pay DIF and TUMF fees that will fund the following improvements:

- Rubidoux Blvd. @ 20th Street/Market Street (#10)
    - Install NB RT overlap
    - Modify signal phasing
    - Construct 2 WB LT lanes
    - Traffic signal modification
    - Install NB RT overlap e
    - Construct 2nd SB LT lane

- Rubidoux Blvd. @ 24th Street (#11)
    - Construct new traffic signal
    - Construct NB LT lane
    - Construct SB LT lane

- Rubidoux Blvd. @ 26th Street (#12)
    - Construct NB LT lane
    - Construct SB LT lane
    - Construct new traffic signal

- Rubidoux Blvd. @ 28th Street (#13)
    - Construct EB LT lane
    - Construct WB LT lane

- Rubidoux Blvd. @ 30th Street / SR60 WB Off Ramp (#14)
  - Construct WB LT lane
- Rubidoux Blvd. @ SR60 WB Ramp (#15)
  - Construct new traffic signal
- Rubidoux Blvd. @ SR60 EB Ramp (#16)
  - Construct NB RT lane
  - Construct EB LT lane
- Agua Mansa Road @ Holly Street (#25)
  - Construct new traffic signal
- Agua Mansa Road @ Market Street (#29)
  - Construct SB LT lane
  - Construct SB Through lane
  - Construct second SB RT lane
- Market Street @ Hall Avenue (#30)
  - Construct N/S 2-Way LT median
  - Construct new traffic signal
- Market Street @ SR60 WB ramp (#32)
  - Restripe SB RT lane to Shared through/RT lane (2035 Requirement)

Alt1 T-3 The project applicant shall contribute fair share funding for the following intersection improvements prior to issuance of the first occupancy permit: Fair Share calculations are presented in Tables 49 and 50 of the TIA (Appendix K1).

- Hall Avenue/El Rivino Road (#22)
  - Construct EB LT lane
  - Construct WB LT lane
  - Construct new traffic signal
- Market Street/SR60 EB Ramps (#33) (Caltrans)
  - Construct 2nd SB LT lane
- Cedar Avenue/I-10 WB Ramp (#1) (Caltrans)
  - Construct 2nd WB RT lane
  - Construct WB LT lane
- Cedar Avenue/I-10 EB Ramp (#2) (Caltrans)
  - Construct EB RT lane

- Cedar Avenue @ Jurupa Avenue (#5)
  - Construct WB LT lane
  - Construct EB LT lane
- Agua Mansa Road/El Rivino Road (#24)(SB)
  - Construct new traffic signal
- Riverside Avenue @ Slover Avenue (#36)
  - Construct SB RT lane

Roadway Segments

Alt1 T-4 The project applicant shall contribute fair share (FS) funding or pay DIF/TUMF fees for the following roadway segment prior to issuance of the first occupancy permit:

- Agua Mansa Road between Market Street and Brown Avenue (2020 Requirement, DIF)
  - Construct two additional lanes to widen from two lanes to four lanes
- Agua Mansa Road between Hall Street and El Rivino Road (2035 Requirement, FS)
  - Construct two additional lanes to widen from two lanes to four lanes (east side pavement currently at ultimate; west wise widening only required (from S/O El Rivino Rd. to S/O Holly Street (approximately 1,200 ft)
- Rubidoux Blvd between El Rivino and Production Circle
  - Improve Rubidoux Blvd. along project frontage (east side from El Rivino Road to southerly edge of Parcel 7; included in PDF T-8)
- Market Street between Agua Mansa Road and Hall Avenue (DIF/TUMF)
  - Construct two additional lanes to widen from two lanes to four lanes
- Market Street between Hall Avenue and Rivera Street (DIF/TUMF/FS)
  - Construct two additional lanes to widen from two lanes to four lanes

5.15.7.4 ALTERNATIVE 2

Intersections

Alt2 T-1 The project applicant shall construct the following intersection improvements prior to the issuance of the occupancy permit (each intersection is followed by its number as included in the traffic reports, Appendix K):

- Rubidoux Blvd./Building 6 access (#7):
  - Construct a WB RT lane
- Rubidoux Blvd. /Project Access (EW)(#8):
  - Construct NB RT (northbound right turn) lane

  - Construct SB LT (southbound left turn) lane
  - Construct WB LT (westbound left turn) lane
  - Construct WB RT (westbound right turn) lane
  - Construct new signal
- Rubidoux Blvd. @ Production Circle/Project Access (#9)
  - Construct new traffic signal (required by Cal Portland contingent upon development level and meeting signal warrant)
- Building 6 Access (NS)/El Rivino Road (#18)
  - Construct NB RT lane
  - Construct 2nd EB through lane
  - Construct EB RT lane
  - Construct WB LT lane
- Project Access (NS)/El Rivino Road (#19)
  - Construct NB LT lane
  - Construct NB RT lane
  - Construct 2nd EB through lane
  - Construct EB RT lane
  - Construct WB LT lane
- Cactus Avenue/Project Access @ El Rivino Road (#20)
  - Construct NB LT lane
  - Construct NB shared through/RT lane
  - Construct 2nd EB through lane
  - Construct EB RT lane
  - Construct WB LT lane
- Building 1 Auto Access/El Rivino Road (#21)
  - Construct NB/RT lane
  - Construct 2nd EB through lane
  - Construct EB RT lane
  - Construct WB LT lane
- Hall Avenue/El Rivino Road (#22)
  - Construct NB LT lane
  - Construct EB LT lane
  - Construct WB LT lane
  - Construct new traffic signal
- Hall Avenue/Building 1 Access (EW) (#23)
  - Construct NB LT lane
  - Construct SB RT lane

- Construct EB LT lane
- Construct EB RT lane

Alt2 T-2 The project applicant shall pay DIF and TUMF fees that will fund the following improvements:

- Rubidoux Blvd. @ 20th Street/Market Street (#10)
  - Install NB RT overlap
  - Modify signal phasing
  - Construct 2 WB LT lanes
  - Traffic signal modification
  - Install NB RT overlap
  - Construct 2nd SB LT lane
- Rubidoux Blvd. @ 24th Street (#11)
  - Construct new traffic signal
  - Construct NB LT lane
  - Construct SB LT lane
- Rubidoux Blvd. @ 26th Street (#12)
  - Construct NB LT lane
  - Construct SB LT lane
    Construct new traffic signal
- Rubidoux Blvd. @ 28th Street (#13)
  - Construct EB LT lane
  - Construct WB LT lane
- Rubidoux Blvd. @ 30th Street / SR60 WB Off Ramp (#14)
  - Construct WB LT lane
- Rubidoux Blvd. @ SR60 WB Ramp (#15)
  - Construct new traffic signal
- Rubidoux Blvd. @ SR60 EB Ramp (#16)
  - Construct NB RT lane
  - Construct EB LT lane
- Agua Mansa Road @ Holly Street (#25)
  - Construct new traffic signal
- Agua Mansa Road @ Market Street (#29)
  - Construct SB LT lane
  - Construct SB Through lane
  - Construct second SB RT lane

- Market Street @ Hall Avenue (#30)
  - Construct N/S 2-Way LT median
  - Construct new traffic signal
- Market Street @ SR60 WB ramp (#32)
  - Restripe SB RT lane to Shared through/RT lane

Alt2 T-3 The project applicant shall contribute fair share funding for the following intersection improvements prior to issuance of the first occupancy permit:

- Hall Avenue/El Rivino Road (#22)
  - Construct EB LT lane
  - Construct WB LT lane
  - Construct new traffic signal
- Market Street/SR60 EB Ramps (#33) (Caltrans)
  - Construct 2nd SB LT lane
- Cedar Avenue/I-10 WB Ramp (#1) (Caltrans)
  - Construct 2nd WB RT lane
  - Construct WB LT lane
- Cedar Avenue/I-10 EB Ramp (#2) (Caltrans)
  - Construct EB RT lane
- Cedar Avenue @ Jurupa Avenue (#5)
  - Construct WB LT lane
  - Construct EB LT lane
- Agua Mansa Road/El Rivino Road (#24)(SB)
  - Construct new traffic signal
- Riverside Avenue @ Slover Avenue (#36)
  - Construct SB RT lane Roadway Segments

Alt2 T-4 The project applicant shall contribute fair share (FS) funding or pay DIF/TUMF fees for the following roadway segment prior to issuance of the first occupancy permit:

- Agua Mansa Road between Market Street and Brown Avenue (DIF)
  - Construct two additional lanes to widen from two lanes to four lanes
- Agua Mansa Road between Hall Street and El Rivino Road (FS)
  - Construct two additional lanes to widen from two lanes to four lanes (east side pavement currently at ultimate; west side widening only required from S/O El Rivino Rd. to S/O Holly Street (approximately 1,200 ft)

- El Rivino between Cedar Avenue and Cactus Avenue
  - Construct 1 additional EB lane to widen from 1 EB lane to 2 EB lanes and maintain 1 WB lane
- Market Street between Agua Mansa Road and Hall Avenue (DIF/TUMF)
  - Construct two additional lanes to widen from two lanes to four lanes
- Market Street between Hall Avenue and Rivera Street (DIF/TUMF/FS)
  - Construct two additional lanes to widen from two lanes to four lanes

5.15.7.5 ALTERNATIVE 1A

Intersections

Alt1A T-1 The project applicant shall construct the following intersection improvements prior to the issuance of the occupancy permit (each intersection is followed by its number as included in the traffic reports, Appendix K):

- Rubidoux Blvd./Building 6 access (#7):
  - Construct a westbound right turn lane
- Rubidoux Blvd. /Project Access (EW)(#8):
  - Construct NB RT (northbound right turn) lane
  - Construct SB LT (southbound left turn) lane
  - Construct WB LT (westbound left turn) lane
  - Construct WB RT (westbound right turn) lane
  - Construct new signal
- Rubidoux Blvd. @ Production Circle/Project Access (#9)
  - Construct new traffic signal (required by Cal Portland contingent upon development level and meeting signal warrant)
- Building 6 Access (NS)/El Rivino Road (#18)
  - Construct NB RT lane
  - Construct 2nd EB through lane
  - Construct EB RT lane
  - Construct WB LT lane
- Project Access (NS)/El Rivino Road (#19)
  - Construct NB LT lane
  - Construct NB RT lane
  - Construct 2nd EB through lane
  - Construct EB RT lane
  - Construct WB LT lane

- Cactus Avenue/Project Access @ El Rivino Road (#20)
  - Construct NB LT lane
  - Construct NB shared through/RT lane
  - Construct 2nd EB through lane
  - Construct WB LT lane
- Building 1 Auto Access/El Rivino Road (#21)
  - Construct NB/RT lane
  - Construct 2nd EB through lane
  - Construct EB RT lane
  - Construct WB LT lane
- Hall Avenue/El Rivino Road (#22)
  - Construct NB LT lane
  - Construct EB LT lane
  - Construct WB LT lane
  - Construct new traffic signal
- Hall Avenue/Building 1 Access (EW) (#23) (E+P Requirement)
  - Construct NB LT lane

Alt1A T-2 The project applicant shall pay DIF and TUMF fees prior to each building occupancy that will fund the following improvements:

- Rubidoux Blvd. @ Tarragon/El Rivino (#6)
  - Construct NB RT lane
  - Construct EB LT lane
  - Restripe WB Left/Thru lane to shared Thru/Right turn lane
  - Restripe WB Right turn lane to shared Thru/Right turn lane
- Rubidoux Blvd. @ 20th Street/Market Street (#10)
  - Install NB RT overlap
  - Modify signal phasing Construct 2 WB LT lanes Traffic signal modification
  - Construct 2nd SB LT lane
- Rubidoux Blvd. @ 24th Street (#11)
  - Construct new traffic signal
  - Construct NB LT lane
  - Construct SB LT lane
- Rubidoux Blvd. @ 26th Street (#12)
  - Construct NB LT lane
  - Construct SB LT lane
  - Construct new traffic signal

- Rubidoux Blvd. @ 28th Street (#13)
  - Construct EB LT lane
  - Construct WB LT lane
- Rubidoux Blvd. @ 30th Street / SR60 WB Off Ramp (#14)
  - Construct WB LT lane
- Rubidoux Blvd. @ SR60 WB Ramp (#15)
  - Construct new traffic signal
- Rubidoux Blvd. @ SR60 EB Ramp (#16)
  - Construct NB RT lane
  - Construct EB LT lane
- Agua Mansa Road @ Holly Street (#25)
  - Construct new traffic signal
- Agua Mansa Road @ Market Street (#29)
  - Construct SB LT lane
  - Construct SB Through lane
  - Construct second SB RT lane
- Market Street @ Hall Avenue (#30)
  - Construct N/S 2-Way LT median
  - Construct new traffic signal
- Market Street @ SR60 WB ramp (#32)
  - Restripe SB RT lane to Shared through/RT lane

Alt1A T-3 The project applicant shall contribute fair share funding for the following intersection improvements prior to issuance of the first occupancy permit:

- Hall Avenue/El Rivino Road (#22)
  - Construct EB LT lane
  - Construct WB LT lane
  - Construct new traffic signal
- Market Street/SR-60 EB Ramps (#33) (Caltrans)
  - Construct 2nd SB LT lane
- Cedar Avenue/I-10 WB Ramp (#1) (Caltrans)
  - Construct 2nd WB RT lane
  - Construct WB LT lane

- Cedar Avenue/I-10 EB Ramp (#2) (Caltrans)
  - Construct EB RT lane
- Cedar Avenue @ Jurupa Avenue (#5)
  - Construct WB LT lane
  - Construct EB LT lane
- Agua Mansa Road/El Rivino Road (#24)(SB)
  - Construct new traffic signal
- Riverside Avenue @ Slover Avenue (#36)
  - Construct SB RT lane

Roadway Segments

Alt1A T-4 The project applicant shall contribute fair share (FS) funding or pay DIF/TUMF fees for the following roadway segment prior to issuance of the first occupancy permit:

- Agua Mansa Road between Market Street and Brown Avenue (2020 Requirement, DIF)
  - Construct two additional lanes to widen from two lanes to four lanes
- Agua Mansa Road between Hall Street and El Rivino Road (2035 Requirement, DIF/FS)
  - Construct two additional lanes to widen from two lanes to four lanes (east side pavement currently at ultimate; west side widening only required from S/O El Rivino Rd. to S/O Holly Street (approximately 1,200 ft)
- El Rivino between Cedar Avenue and Cactus Avenue (2020 Requirement, FS)
  - Construct 1 additional EB lane to widen from 1 EB lane to 2 EB lanes and maintain 1 WB lane
- Improve Rubidoux Blvd. along project frontage (DIF)
  - east side from El Rivino Road to southerly edge of Parcel 7
- Market Street between Agua Mansa Road and Hall Avenue (2020 Requirement, DIF/TUMF)
  - Construct two additional lanes to widen from two lanes to four lanes
- Market Street between Hall Avenue and Rivera Street (DIF/TUMF/FS)
  - Construct two additional lanes to widen from two lanes to four lanes

5.15.7.6 ALTERNATIVE 2A

Intersections

Alt2A T-1 The project applicant shall construct the following intersection improvements prior to the issuance of the occupancy permit (each intersection is followed by its number as included in the traffic reports, Appendix K):

- Rubidoux Blvd./Building 6 access (#7):
  - Construct a westbound right turn lane
- Rubidoux Blvd. /Project Access (EW)(#8):
  - Construct NB RT lane
  - Construct SB LT lane
  - Construct WB LT lane
  - Construct WB RT lane
  - Construct new signal
- Rubidoux Blvd. @ Production Circle/Project Access (#9):
  - Construct new traffic signal (required by Cal Portland contingent upon development level and meeting signal warrant)
- Building 6 Access (NS)/El Rivino Road (#18):
  - Construct NB RT lane
  - Construct 2nd EB through lane
  - Construct EB RT lane
  - Construct WB LT lane
- Project Access (NS)/El Rivino Road (#19):
  - Construct NB LT lane
  - Construct NB RT lane
  - Construct 2nd EB through lane
  - Construct EB RT lane
  - Construct WB LT lane
- Cactus Avenue/Project Access @ El Rivino Road (#20):
  - Construct NB LT lane
  - Construct NB shared through/RT lane
  - Construct 2nd EB through lane
  - Construct WB LT lane
- Building 1 Auto Access/El Rivino Road (#21):
  - Construct NB/RT lane
  - Construct 2nd EB through lane

  - Construct EB RT lane
  - Construct WB LT lane
- Hall Avenue/El Rivino Road (#22):
  - Construct NB LT lane
  - Construct EB LT lane
  - Construct WB LT lane
  - Construct new traffic signal
- Hall Avenue/Building 1 Access (EW)(#23):
  - Construct NB LT lane
  - Construct SB RT lane
  - Construct EB LT lane
  - Construct EB RT lane

Alt2A T-2 The project applicant shall pay DIF and TUMF fees prior to each building occupancy that will fund the following improvements:

- Rubidoux Blvd. @ Tarragon/El Rivino (#6) (
  - Construct NB RT lane
  - Construct EB LT lane
  - Restripe WB Left/Thru lane to shared Thru/Right turn lane
  - Restripe WB Right turn lane to shared Thru/Right turn lane
- Rubidoux Blvd. @ 20th Street/Market Street (#10)
  - Install NB RT overlap
  - Modify signal phasing
  - Construct 2 WB LT lanes
  - Traffic signal modification
  - Construct 2nd SB LT lane
- Rubidoux Blvd. @ 24th Street (#11)
  - Construct new traffic signal
  - Construct NB LT lane
  - Construct SB LT lane
- Rubidoux Blvd. @ 26th Street (#12)
  - Construct NB LT lane
  - Construct SB LT lane
  - Construct new traffic signal
- Rubidoux Blvd. @ 28th Street (#13)
  - Construct EB LT lane
  - Construct WB LT lane

- Rubidoux Blvd. @ 30th Street / SR60 WB Off Ramp (#14)
  - Construct WB LT lane
- Rubidoux Blvd. @ SR60 WB Ramp (#15)
  - Construct new traffic signal
- Rubidoux Blvd. @ SR60 EB Ramp (#16)
  - Construct NB RT lane
  - Construct EB LT lane
- Agua Mansa Road @ Holly Street (#25)
  - Construct new traffic signal
- Agua Mansa Road @ Market Street (#29)
  - Construct SB LT lane
  - Construct SB Through lane
  - Construct second SB RT lane
- Market Street @ Hall Avenue (#30)
  - Construct N/S 2-Way LT median
  - Construct new traffic signal
- Market Street @ SR60 WB ramp (#32)
  - Restripe SB RT lane to Shared through/RT lane

Alt2A T-3 The project applicant shall contribute fair share funding for the following intersection improvements prior to issuance of the first occupancy permit:

- Market Street/SR60 EB Ramps (#33) (Caltrans)
  - Construct 2nd SB LT lane
- Cedar Avenue/I-10 WB Ramp (#1) (Caltrans)
  - Construct 2nd WB RT lane
  - Construct WB LT lane
- Cedar Avenue/I-10 EB Ramp (#2) (Caltrans)
  - Construct EB RT lane
- Cedar Avenue @ Jurupa Avenue (#5)
  - Construct WB LT lane
  - Construct EB LT lane
- Agua Mansa Road/El Rivino Road (#24)(SB)
  - Construct new traffic signal

- Riverside Avenue @ Slover Avenue (#36)
  - Construct SB RT lane

Roadway Segments

Alt2A T-4 The project applicant shall contribute fair share funding for the following roadway segment prior to issuance of the first occupancy permit:

- Agua Mansa Road between Market Street and Brown Avenue (DIF)
  - Construct two additional lanes to widen from two lanes to four lanes
- Agua Mansa Road between Hall Street and El Rivino Road (DIF/FS)
  - Construct two additional lanes to widen from two lanes to four lanes (east side pavement currently at ultimate; west side widening only required from S/O El Rivino Rd. to S/O Holly Street (approximately 1,200 ft)
- El Rivino between Cedar Avenue and Cactus Avenue
  - Construct 1 additional EB lane to widen from 1 EB lane to 2 EB lanes and maintain 1 WB lane
- Market Street between Agua Mansa Road and Hall Avenue (DIF/TUMF)
  - Construct two additional lanes to widen from two lanes to four lanes
- Market Street between Hall Avenue and Rivera Street (DIF/TUMF)
  - Construct two additional lanes to widen from two lanes to four lanes

Impact T-1

Caltrans' Main Line

The future construction of an additional eastbound general use lane or additional eastbound high occupancy vehicle lane would mitigate the deficient LOS to the SR-60 eastbound (EB) lanes. However, the Riverside County Transportation Commission (RCTC) does not have an improvement programmed for the SR-60 Freeway between Market Street and Main Street.

Caltrans' Merge/Diverge Analysis

Widening of the I-10 and the SR-60 in the both directions with one additional travel lane would accommodate the projected Year 2035 traffic conditions. Additionally, future potential interchange reconfigurations may be beneficial in reducing LOS.

5.15.8 Level of Significance After Mitigation

Site-specific circulation and access PDFs and Mitigation Measures are depicted on Figure 5.15-5, *Circulation Recommendations – Alternatives 1 and 2*, for Alternative 1 and Alternative 2. Site-specific circulation and access PDFs and Mitigation Measures are depicted on Figure 5.15-6, *Circulation Recommendations – Site Access Alternatives 1A and*

2A, for Alternative 1A and Alternative 2A. Intersection and roadway improvements outlined in PDFs and Mitigation Measures for each respective development alternative and site access alternative (1A and 2A) are summarized in Table 5.15-36, *Summary of Intersection Improvements – Alternatives 1 and 2*, for Alternatives 1 and 2 and Table 5.15-37, *Summary of Intersection Improvements – Site Access Alternatives 1A and 2A*, for Site Access Alternatives 1A and 2A. A more detailed list by project scenario, Existing, Year 2020, Year 2035 (all with and without project), of required project improvements (intersections and roadway segments) and funding sources is included in Appendix K(3), Attachments D–G. Additionally, prior to issuance of building permits, the project applicant would be required to make the required per unit fee payment associated with the Western Riverside County TUMF and the City of Jurupa Valley Development Impact Fee (DIF).

The traffic reports for this project have identified improvements required to mitigate project-related and cumulative impacts to less than significant. Such improvements can be categorized as follows:

1. Improvements required by project applicant.
2. Improvements that are programmed for DIF/TUMF fees.
3. Improvements designated for "fair share' contributions (not within fee programs and both within and outside of the City of Jurupa's jurisdiction).
4. Improvements deemed infeasible (lack of right of way, etc.).

Improvements/mitigation that falls within categories 1 and 2 are deemed mitigated to less than significant. Impacts that fall within categories 3 and 4 are deemed significant and unavoidable. Although fair share improvements may be likely and the appropriate responsibility is assigned to the project applicant, there is no guarantee that these improvements will be made or when they would be constructed. Similarly, impacts requiring improvements deemed infeasible would be significant and unavoidable.

The following summarizes the level of significance after mitigation for intersections and roadway segments, respectively.

5.15.8.1 INTERSECTIONS

Improvements Required of Project Applicant

For all development scenarios, the project applicant would be responsible for constructing 100 percent of the necessary 'Half Width" improvements for the following intersections: #s 7, 8, 9, 18, 19, 20, 21, and 23. These generally include locations that would provide project access. The project being constructed on the north side of El Rivino Road is responsible for all necessary improvements on the north side of El Rivino Road. In addition to project access improvements, the project may also construct through-lane improvements that are potentially eligible for DIF credit along Rubidoux Boulevard.

Intersections Eligible for Fee-Based Mitigation

For Alternatives 1 and 2, the second group of intersections (Intersections 10, 11, 12, 13, 14, 15, 16, 30, and 32) are locations that are included in the City of Jurupa Valley DIF program and/or the WRCOG TUMF program.

For Alternatives 1A and 2A, the second group of intersections (Intersections 6, 10, and 29) are locations that are included in the City of Jurupa Valley DIF program and/or the WRCOG TUMF program.

The project responsibility at these locations is to pay fees into the appropriate programs as described per each alternative. If the project constructs improvements at these intersections, credit / reimbursement for any such improvements is appropriate.

Fair Share Payments

The third group of intersections are locations where the project is not anticipating constructing the necessary improvements, and the locations are not included in an improvement program wherein mitigation requirements are satisfied through the payment of appropriate fair share amounts. Intersections in this third group are typically only impacted under future conditions for both No Project and With Project conditions, meaning that the project is only a small part of a cumulative impact. Nevertheless, due to the uncertainty and unknown timing of improvements to these intersections, the project's impacts would be significant and unavoidable.

Significant Intersection Impacts

Alternatives 1 and 2

- No. 22 – Hall Avenue/ El Rivino Road, City of Jurupa Valley
- No. 33 – Market Street/SR60 EB ramps, Caltrans
- No. 5 – Cedar Avenue/Jurupa Avenue, County of San Bernardino
- No. 24 – Agua Mansa Road/El Rivino Road, County of San Bernardino
- No. 36 – Riverside Avenue/Slover Avenue, City of Rialto
- No.1 – Cedar Avenue/I-10 WB ramps
- No. 2 – Cedar Avenue/I-10 EB ramps

Alternatives 1A and 2A

- Same as for Alternative 1 and 2 with the exception of Intersection No. 33 for which impacts would not be significant.

Per discussions with the San Bernardino County Transportation Authority (SBCTA), the improvements at the I-10/Cedar Avenue interchange (Intersections #1 and 2) are fully funded. The design completed by SBCTA includes the lane requirements needed to mitigate the project-related impacts. Construction completion is anticipated in 2021. It is recommended that the project offer a fair share contribution for intersections to mitigate project-related impacts at intersections outside of the City of Jurupa Valley.

Impacts that require fair share payments and are currently not included in any program (e.g., Capital Improvement Program), including those within the City of Jurupa Valley, would be considered significant and unavoidable and would require a statement of overriding considerations.

5.15.8.2 ROADWAY SEGMENTS

The project-related and cumulative impacts on area roadway segments are detailed in the Traffic Impact Analysis (Appendix K1) and described in summary tables A1-2, A2-2, A1 A-2 and A2A-2 in Appendix K3. Mitigation Measures for each respective scenario (Alternatives 1, 2, 1A, and 2A) in Section 5.15.7 detail the required improvements, fee programs, and fair share contributions required to mitigate the project's impacts on roadway segments.

The entire impacted segment of Rubidoux Boulevard is included in the City DIF program. Any improvements constructed by the project along Rubidoux Boulevard could therefore be eligible for DIF program credit.

Market Street from Rubidoux Boulevard to the Santa Ana River is included in the City DIF program. The same segment of Market Street is also included in the County of Riverside TUMF program. Payment of fees would adequately mitigate project impacts for the Market Street segment(s) that are included in the fee programs. Market Street from the southeast side of the Santa Ana River to Rivera Street is not included in the fee programs. A portion of this approximately quarter-mile-long roadway segment is already widened to four lanes.

Agua Mansa Road segment impacts are generally located within the area that is included in the City DIF program. There is a short segment from Holly Street to El Rivino Road that is not included in the City DIF program. This approximately 1,000-foot-long stretch of Agua Mansa Road is in unincorporated San Bernardino County. The fair share cost for this widening is addressed as part of the fair share cost estimate for the intersections of Agua Mansa Road at El Rivino Road (Intersection #24) and Agua Mansa Road at Holly Street (Intersection #25). Additionally, since Agua Mansa Road requires improvements (e.g., widening from a 2-lane facility to a 4-lane facility) for opening year (2020) without the project, the project shall mitigate its impact by paying DIF fees since this roadway is included in the City's DIF program.

In summary, the following project-related roadway impacts are dependent upon fair share funding and would be significant and unavoidable due to the uncertainty and unknown timing of improvements to these segments:

Significant Roadway Segment Impacts

Alternative 1

- Market Street between Hall Avenue and Rivera Street (City of Jurupa Valley and City of Riverside)
- Agua Mansa Road between Hall Street and El Rivino Road (City of Jurupa Valley and County of San Bernardino)

Alternative 2

- El Rivino between Cedar Avenue and Cactus Avenue (City of Jurupa Valley, City of Rialto, and County of San Bernardino)
- Market Street between Hall Avenue and Rivera Street (City of Jurupa Valley and City of Riverside)

- Agua Mansa Road between Hall Street and El Rivino Road (City of Jurupa Valley and County of San Bernardino)

Alternatives 1A and 2A

- El Rivino between Cedar Avenue and Cactus Avenue (City of Jurupa Valley, City of Rialto, and County of San Bernardino)
- Market Street between Hall Avenue and Rivera Street (City of Jurupa Valley and City of Riverside)
- Agua Mansa Road between Hall Street and El Rivino Road (City of Jurupa Valley and County of San Bernardino)

Table 5.15-36 Summary of Intersection Improvements – Alternatives 1 and 2

ID	Intersection	Juris	Improvement	Existing Plus Project (Impact T-1)		Year 2020 (Impact T-1)		Year 2035 (Impact T-1)		Funding Source			Significant Unavoidable
				Alt 1	Alt 2	Alt 1	Alt 2	Alt 1	Alt 2	Project Improvement (AMCP)	DIF/TUMF	Fair Share Contribution	
1.	Cedar Avenue (NS) at I-10 Freeway WB Ramps (EW)	CAL	Construct WBL turn lane			X	X	X	X			X	Yes
			Construct a second WBR turn lane	**X**	**X**	X	X	X	X			X	
2	Cedar Avenue (NS) at I-10 Freeway EB Ramps (EW)	CAL	Construct EBR turn lane			X	X	X	X			X	Yes
5	Cedar Avenue (NS) at Jurupa Avenue (EW)	SB	Construct EBL turn lane			X	X	X	X				Yes
			Construct WBL turn lane			X	X	X	X				
7	Rubidoux Boulevard (NS) at Building 6 Access (EW)	JV	Construct WBR turn lane	X	X	X	X	X	X	X			No
8	Rubidoux Boulevard (NS) at Project Access (EW)	JV	Construct NBR turn lane	X	X	X	X	X	X	X			No
			Construct SBL turn lane	X	X	X	X	X	X	X			
			Construct WBL turn lane	X	X	X	X	X	X	X			
			Construct WBR turn lane	X	X	X	X	X	X	X			
			Install traffic signal	X	X	X	X	X	X	X			
9	Rubidoux Blvd (NS) at Production Circle (EW)	JV	Construct New Signal. (Meets warrants, but mitigation not recommended) Required[3]										No

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Table 5.15-36 Summary of Intersection Improvements – Alternatives 1 and 2

ID	Intersection	Juris	Improvement	Existing Plus Project (Impact T-1)		Year 2020 (Impact T-1)		Year 2035 (Impact T-1)		Funding Source			Significant Unavoidable
				Alt 1	Alt 2	Alt 1	Alt 2	Alt 1	Alt 2	Project Improvement (AMCP)	DIF/TUMF	Fair Share Contribution	
10	Rubidoux Boulevard (NS) at 20th Street / Market Street (EW)	JV	Install NBR turn overlap	**X**	X	X	X	X	X		X		No
			Construct a second SBL turn lane			X	X	X	X		X		
			Construct two WBL turn lanes	X	X	X	X	X	X		X		
			Modify traffic signal phasing	X	X	X	X	X	X		X		
11	Rubidoux Boulevard (NS) at 24th Street (EW)	JV	Construct NBL turn lane			X	X	X	X		X		No
			Construct SBL turn lane			X	X	X	X		X		
			Install traffic signal	X	X	X	X	X	X		X		
12	Rubidoux Boulevard (NS) at 26th Street (EW)	JV	Construct NBL turn lane					X	X		X		No
			Construct SBL turn lane					X	X		X		
			Install traffic signal	X	X	X		X	X		X		
13	Rubidoux Boulevard (NS) at 28th Street (EW)	JV	Construct EBL turn lane					X	X		X		No
			Construct WBL turn lane					X	X		X		
14	Rubidoux Boulevard (NS) at 30th Street / SR-60 WB Off-Ramp (EW)	CAL	Construct a second WBL turn lane			X	X				X		No
15	Rubidoux Boulevard (NS) at SR-60 WB On-Ramp (EW)	CAL	Install traffic signal	X	X	X	X	X	X		X		No
16	Rubidoux Boulevard (NS) at SR-60 Freeway EB Ramps (EW)	CAL	Construct NBR turn lane			X	X				X		No
			Construct EBL turn lane			X	X				X		

Table 5.15-36 Summary of Intersection Improvements – Alternatives 1 and 2

ID	Intersection	Juris	Improvement	Existing Plus Project (Impact T-1)		Year 2020 (Impact T-1)		Year 2035 (Impact T-1)		Funding Source			Significant Unavoidable
				Alt 1	Alt 2	Alt 1	Alt 2	Alt 1	Alt 2	Project Improvement (AMCP)	DIF/TUMF	Fair Share Contribution	
18	Building 6 Access (NS) at El Rivino Road (EW)	JV / SB	Construct NBR turn lane	X	X	X	X	X	X	X			No
			Construct a second EBT lane	X	X	X	X	X	X	X			
			Construct EBR turn lane	X	X	X	X	X	X	X			
			Construct WBL turn lane	X	X	X	X	X	X	X			
19	Project Access (NS) at El Rivino Road (EW)	JV / RIA	Construct NBL turn lane	X	X	X	X	X	X	X			No
			Construct NBR turn lane	X	X	X	X	X	X	X			
			Construct a second EBT lane	X	X	X	X	X	X	X			
			Construct EBR turn lane	X	X	X	X	X	X	X			
			Construct WBL turn lane	X	X	X	X	X	X	X			
20	Cactus Avenue / Project Access (NS) at El Rivino Road (EW)	JV RIA SB	Construct NBL turn lane	X	X	X	X	X	X	X			No
			Construct NB shared/right turn lane	X	X	X	X	X	X	X			
			Construct a second EBT lane	X	X	X	X	X	X	X			
			Construct EBR turn lane	X	X	X	X	X	X	X			
			Construct a WB shared T/R turn lane[4]	X	X	X	X	X	X				
			Construct WBL turn lane	X	X	X	X	X	X	X			

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Table 5.15-36 Summary of Intersection Improvements – Alternatives 1 and 2

ID	Intersection	Juris	Improvement	Existing Plus Project (Impact T-1)		Year 2020 (Impact T-1)		Year 2035 (Impact T-1)		Funding Source			Significant Unavoidable
				Alt 1	Alt 2	Alt 1	Alt 2	Alt 1	Alt 2	Project Improvement (AMCP)	DIF/TUMF	Fair Share Contribution	
21	Building 1 Auto Access (NS) at El Rivino Road (EW)	JV SB	Construct NBR turn lane	X	X	X	X	X	X	X			No
			Construct a second EBT lane	X	X	X	X	X	X	X			
			Construct EBR turn lane	X	X	X	X	X	X	X			
			Construct WBL turn lane	X	X	X	X	X	X	X			
22	Hall Avenue (NS) at El Rivino Road (EW)	JV SB	Construct NBL turn lane			X	X	X	X	X			Yes
			Construct EBL turn lane			X	X	X	X			X	
			Construct WBL turn lane			X	X	X	X			X	
			Install traffic signal			X	X	X	X			X	
23	Hall Avenue (NS) at Building 1 Access	JV	Construct NBL turn lane	X	X	X	X	X	X	X			No
			Construct SBR turn lane	X	X	X	X	X	X	X			
			Construct EBL turn lane	X	X	X	X	X	X	X			
			Construct EBR turn lane	X	X	X	X	X	X	X			
24	Agua Mansa Road at El Rivino Road (EW)	RIA SB	Install traffic signal	X	X	X	X	X	X			X	**Yes**
25	Agua Mansa Road (NS) at Holly Place (EW)	SB	Install traffic signal					X	X		X		No

Table 5.15-36 Summary of Intersection Improvements – Alternatives 1 and 2

ID	Intersection	Juris	Improvement	Existing Plus Project (Impact T-1)		Year 2020 (Impact T-1)		Year 2035 (Impact T-1)		Funding Source			Significant Unavoidable
				Alt 1	Alt 2	Alt 1	Alt 2	Alt 1	Alt 2	Project Improvement (AMCP)	DIF/TUMF	Fair Share Contribution	
29	Agua Mansa Road (NS) at Market Street (EW)	JV	Construct SBL turn lane	X	X	X	X	X	X		X		**No**
			Construct SBT lane			X	X	X	X		X		
			Construct a second SBR turn lane					X	X		X		
30	Market Street (NS) at Hall Avenue (EW)	JV	Install traffic signal					X	X		X		**No**
30	Market Street at Hall Avenue		Construct N/S 2-Way LT Median	X	X						X		**No**
32	Market Street (NS) at SR-60 Freeway WB Ramps (EW)	CAL	Restripe SBR turn lane to shared T/R turn lane					X	X		X		**No**
33	Market Street (NS) at SR-60 Freeway EB Ramps (EW)	CAL	Construct a second SBL turn lane			X	X	X	X			X	**Yes**
36	Riverside Avenue (NS) at Slover Avenue (EW)	RIA	Construct SBR turn lane					X	X			X	**Yes**

Source: Ganddini 2018.

Notes: CAL: Caltrans; COL: Colton; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; NB: northbound; SB: southbound; EB: eastbound; WB: westbound; L : left; T: through; R: right; Impr: improvement; Prog: program; Non-Prog: non-program; Alt: alternative; Juris: jurisdiction; SU: significant and unavoidable

Bold Underline: Project Direct Impact.

[1] Improvement relates to a project access point and the project is fully responsible for the construction of the improvement and are identified as Project Design Features (PDFs).

[2] Programed improvements include those identified WRCOG's TUMF Improvements from Jurupa Valley Center, County of San Bernardino Regional Transportation Development Mitigation Plan Report (2014), and SBCTA's Development Mitigation Nexus Study (2016).

[3] LOS impacts at intersections with heavy traffic movements on the major roadways and minimal movements on the minor roadway are not accurately reflected with the HCM methodology. Due to the disparate traffic volumes on each street, acceptable gaps will occur due to upstream/downstream signalized intersections, allowing traffic on the minor roadway to make their turning movements; however, HCM does not model these gaps in traffic. A traffic signal warrant analysis was conducted, and this intersection does not meet the California Manual on Uniform Traffic Control Devices traffic warrant criteria. Therefore, traffic signalization is not a recommended mitigation measure for this intersection.

[4] The widening of El Rivino Road for a second westbound through-lane is the responsibility of properties adjacent to El Rivino Road to the north of the roadway.

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Table 5.15-37 Summary of Intersection Improvements – Site Access Alternatives 1A and 2A

ID	Intersection	Juris	Improvement	Existing Plus Project Access Alternative (Impact T-1)		Year 2020 Project Access Alternative (Impact T-1)		Year 2035 Project Access Alternative (Impact T-1)		Funding Source			Significant Unavoidable
				Alt 1A	Alt 2A	Alt 1A	Alt 2A	Alt 1A	Alt 2A	Project-Improvement (AMCP)	DIF/TUMF	Fair Share Contribution	
1.	Cedar Avenue (NS) at I-10 Freeway WB Ramps (EW)	CAL	Construct WBL turn lane			X	X	X	X		X		No
			Construct a second WBR turn lane	**X**	**X**	X	X	X	X		X		
2	Cedar Avenue (NS) at I-10 Freeway EB Ramps (EW)	CAL	Construct EBR turn lane			X	X	X	X		X		No
5	Cedar Avenue (NS) at Jurupa Avenue (EW)	SB	Construct EBL turn lane Construct WB LT lane			X X	X X	X X	X X			X	Yes
6	Rubidoux Boulevard (NS) at Tarragona Drive (EW)	JV	Construct NBR turn lane			X	X	X	X		X		**No**
			Construct EBL turn lane			X	X	X	X		X		
			Restripe WB L/T lane to T/R turn lane			X	X	X	X		X		
			Restripe WBR turn lane to T/R turn lane			X	X	X	X		X		
7	Rubidoux Boulevard (NS) at Building 6 Access (EW)	JV	Construct WBR turn lane	X	X					X			No
8	Rubidoux Boulevard (NS) at Project Access (EW)	JV	Construct NBR turn lane	X	X	X	X	X	X	X			No
			Construct SBL turn lane	X	X	X	X	X	X	X			
			Construct WBL turn lane	X	X	X	X	X	X	X			
			Construct WBR turn lane	X	X	X	X	X	X	X			
			Install traffic signal	X	X	X	X	X	X	X			
9	Rubidoux Blvd (NS) at Production Circle (EW)	JV	Install traffic signal	X	X	X	X	X	X				No

Table 5.15-37 Summary of Intersection Improvements – Site Access Alternatives 1A and 2A

ID	Intersection	Juris	Improvement	Existing Plus Project Access Alternative (Impact T-1)		Year 2020 Project Access Alternative (Impact T-1)		Year 2035 Project Access Alternative (Impact T-1)		Funding Source			Significant Unavoidable
				Alt 1A	Alt 2A	Alt 1A	Alt 2A	Alt 1A	Alt 2A	Project-Improvement (AMCP)	DIF/TUMF	Fair Share Contribution	
10	Rubidoux Boulevard (NS) at 20th Street / Market Street (EW)	JV	Install NBR turn overlap	**X**	**X**	X	X	X	X		X		**No**
			Construct a second SBL turn lane			X	X	X	X		X		
			Construct two WBL turn lanes	**X**	**X**	X	X	X	X		X		
			Modify traffic signal phasing	**X**	**X**	X	X	X	X		X		
11	Rubidoux Boulevard (NS) at 24th Street (EW)	JV	Construct NBL turn lane			X	X	X	X		X		**No**
			Construct SBL turn lane			X	X	X	X		X		
			Install traffic signal	X	X	X	X	X	X		X		
12	Rubidoux Boulevard (NS) at 26th Street (EW)	JV	Construct NBL turn lane					X	X		X		**No**
			Construct SBL turn lane					X	X		X		
			Install traffic signal	X	X			X	X		X		
13	Rubidoux Boulevard (NS) at 28th Street (EW)	JV	Construct EBL turn lane					X	X		X		**No**
			Construct WBL turn lane								X		
14	Rubidoux Boulevard (NS) at 30th Street / SR-60 WB Off-Ramp (EW)	CAL	Construct a second WBL turn lane			X	X				X		No
15	Rubidoux Boulevard (NS) at SR-60 WB On-Ramp (EW)	CAL	Install traffic signal	X	X	X	X	X	X		X		No
16	Rubidoux Boulevard (NS) at SR-60 Freeway EB Ramps (EW)	CAL	Construct NBR turn lane			X	X				X		No
			Construct EBL turn lane			X	X				X		

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Table 5.15-37 Summary of Intersection Improvements – Site Access Alternatives 1A and 2A

ID	Intersection	Juris	Improvement	Existing Plus Project Access Alternative (Impact T-1)		Year 2020 Project Access Alternative (Impact T-1)		Year 2035 Project Access Alternative (Impact T-1)		Funding Source			Significant Unavoidable
				Alt 1A	Alt 2A	Alt 1A	Alt 2A	Alt 1A	Alt 2A	Project-Improvement (AMCP)	DIF/TUMF	Fair Share Contribution	
18	Building 6 Access (NS) at El Rivino Road (EW)	JV / SB	Construct NBR turn lane	X	X	X	X	X	X	X			No
			Construct a second EBT lane	X	X	X	X	X	X	X			
			Construct EBR turn lane	X	X	X	X	X	X	X			
			Construct WBL turn lane	X	X	X	X	X	X	X			
19	Project Access (NS) at El Rivino Road (EW)	JV / RIA	Construct NBL turn lane	X	X	X	X	X	X	X			No
			Construct NBR turn lane	X	X	X	X	X	X	X			
			Construct a second EBT lane	X	X	X	X	X	X	X			
			Construct EBR turn lane	X	X	X	X	X	X	X			
			Construct WBL turn lane	X	X	X	X	X	X	X			
20	Cactus Avenue / Project Access (NS) atEl Rivino Road (EW)	JV RIA SB	Construct NBL turn lane	X	X	X	X	X	X	X			No
			Construct NB shared T/right turn lane	X	X	X	X	X	X	X			
			Construct a second EBT lane	X	X	X	X	X	X	X			
			Construct EBR turn lane	X	X	X	X	X	X	X			
			Construct a WB T/R turn lane[3]	X	X	X	X	X	X				
			Construct WBL turn lane	X	X	X	X	X	X	X			

Table 5.15-37 Summary of Intersection Improvements – Site Access Alternatives 1A and 2A

ID	Intersection	Juris	Improvement	Existing Plus Project Access Alternative (Impact T-1)		Year 2020 Project Access Alternative (Impact T-1)		Year 2035 Project Access Alternative (Impact T-1)		Funding Source			Significant Unavoidable
				Alt 1A	Alt 2A	Alt 1A	Alt 2A	Alt 1A	Alt 2A	Project-Improvement (AMCP)	DIF/TUMF	Fair Share Contribution	
21	Building 1 Auto Access (NS) at El Rivino Road (EW)	JV SB	Construct NBR turn lane	X	X	X	X	X	X	X			No
			Construct a second EBT lane	X	X	X	X	X	X	X			
			Construct EBR turn lane	X	X	X	X	X	X	X			
			Construct WBL turn lane	X	X	X	X	X	X	X			
22	Hall Avenue (NS) at El Rivino Road (EW)	JV SB	Construct NBL turn lane			X	X	X	X	X			**Yes**
			Construct SBL turn lane			X	X	X	X			X	
			Construct EBL turn lane			X	X	X	X			X	
			Construct WBL turn lane			X	X	X	X			X	
			Install traffic signal			X	X	X	X			X	
23	Hall Avenue (NS) at Building 1 Access	JV	Construct NBL turn lane	X	X	X	X	X	X	X			No
			Construct SBR turn lane	X	X	X	X	X	X	X			
			Construct EBL turn lane	X	X	X	X	X	X	X			
			Construct EBR turn lane	X	X	X	X	X	X	X			
24	Agua Mansa Road at El Rivino Road (EW)	RIA SB	Install traffic signal	X	X	X	X	X	X			X	**Yes**
25	Agua Mansa Road (NS) at Holly Place (EW)	SB	Install traffic signal					X	X			X	**Yes**
29	Agua Mansa Road (NS) at Market Street (EW)	JV	Construct SBL turn lane	X	X	X	X	X	X		X		**No**
			Construct SBT lane			X	X	X	X		X		

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Table 5.15-37 Summary of Intersection Improvements – Site Access Alternatives 1A and 2A

ID	Intersection	Juris	Improvement	Existing Plus Project Access Alternative (Impact T-1)		Year 2020 Project Access Alternative (Impact T-1)		Year 2035 Project Access Alternative (Impact T-1)		Funding Source			Significant Unavoidable
				Alt 1A	Alt 2A	Alt 1A	Alt 2A	Alt 1A	Alt 2A	Project-Improvement (AMCP)	DIF/TUMF	Fair Share Contribution	
			Construct a second SBR turn lane					X	X			X	
30	Market Street (NS) at Hall Avenue (EW)	JV	Install traffic signal					X	X		x		**No**
30	Market Street (NS) at Hall Avenue (EW)	JV	Construct N/S 2-Way LT Median	x	x	x	x	X	X		x		**No**
32	Market Street (NS) at SR-60 Freeway WB Ramps (EW)	CAL	Restripe SBR turn lane to shared T/R turn lane					X	X		x		**No**
33	Market Street (NS) at SR-60 Freeway EB Ramps (EW)	CAL	Construct a second SBL turn lane			X	X	X	X			X	**Yes**
36	Riverside Avenue (NS) at Slover Avenue (EW)	RIA	Construct SBR turn lane					X	X			X	**Yes**

Source: Ganddini 2018.

Notes: CAL: Caltrans; COL: Colton; JV: Jurupa Valley; RIA: Rialto; RIV: Riverside; SB: Unincorporated San Bernardino County; NB: northbound; SB: southbound; EB: eastbound; WB: westbound; L : left; T: through; R: right; Impr: improvement; Prog: program; Non-Prog: non-program; Alt: alternative; Juris: jurisdiction; SU: significant and unavoidable

Shaded: These trip distributions do not change under Site Access Alternative 1A and 2A. Therefore, the improvements identified for Alternative 1 and 2 are applicable to the Site Access Alternatives.

Bold Underline: Project Direct Impact.

[1] Improvement relates to a project access point and the project is fully responsible for the construction of the improvement and are identified as Project Design Features (PDFs).

[2] Programed improvements include those identified WRCOG's TUMF Improvements from Jurupa Valley Center, County of San Bernardino Regional Transportation Development Mitigation Plan Report (2014), and SBCTA's Development Mitigation Nexus Study (2016).

[3] LOS impacts at intersections with heavy traffic movements on the major roadways and minimal movements on the minor roadway are not accurately reflected with the HCM methodology. Due to the disparate traffic volumes on each street, acceptable gaps will occur due to upstream/downstream signalized intersections, allowing traffic on the minor roadway to make their turning movements; however, HCM does not model these gaps in traffic. A traffic signal warrant analysis was conducted, and this intersection does not meet the California Manual on Uniform Traffic Control Devices traffic warrant criteria. Therefore, traffic signalization is not a recommended mitigation measure for this intersection.

[4] The widening of El Rivino Road for a second westbound through-lane is the responsibility of properties adjacent to El Rivino Road to the north of the roadway.

5.15.9 References

Ganddini. 2018, October 9. Agua Mansa Commerce Park Traffic Impact Analysis.

———. 2019, August 7. Agua Mansa Commerce Park Supplemental Traffic Analysis.

Jurupa Valley, City of. 2017, September. City of Jurupa Valley General Plan. http://www.jurupavalley.org/Departments/Development-Services/Planning/General-Plan.

Southern California Association of Governments (SCAG). 2016, April 7. Final 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life. http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx.

Urban Crossroads. 2019, January 28 (revised). Agua Mansa Commerce Park Specific Plan, Air Quality Impact Analysis, City of Jurupa Valley.

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5.16 TRIBAL CULTURAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Agua Mansa Commerce Park Specific Plan project (proposed project) to impact tribal cultural resources. Tribal cultural resources include landscapes, sacred places, or objects with cultural value to a California Native American Tribe. Other potential impacts to cultural resources (i.e., prehistoric, historic, and disturbance of human remains) are evaluated in Section 5.4, *Cultural Resources*.

The following analysis is based in part on information obtained from:

- *Phase I Cultural Resources Assessment of the Proposed Agua Mansa Commerce Park, City of Jurupa Valley, County of Riverside, California*, MIG, December 14, 2017.

A complete copy of this study and the Native American consultation documentation are in the Technical Appendices of this Draft EIR (Volume II, Appendix E).

5.16.1 Environmental Setting

5.16.1.1 REGULATORY BACKGROUND

Federal

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites that are on federal lands and Indian lands.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, or objects of cultural patrimony to lineal descendants and culturally affiliated Indian tribes.

State

Public Resources Code

Archaeological resources are protected pursuant to a wide variety of state policies and regulations enumerated under the California Public Resources Code. In addition, cultural resources are recognized as a nonrenewable resource and therefore receive protection under the California Public Resources Code and CEQA.

> **California Public Resources Code 5097.9–5097.991** provides protection to Native American historical and cultural resources, and sacred sites and identifies the powers and duties of the Native American Heritage Commission (NAHC). It also requires notification to descendants of

> discoveries of Native American human remains and provides for treatment and disposition of human remains and associated grave goods.

Health and Safety Code

The discovery of human remains is regulated per California Health and Safety Code Section 7050.5, which states that:

> In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation…until the coroner…has determined…that the remains are not subject to…provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible…. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and…has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Senate Bill 18

Existing law provides limited protection for Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places. These places may include sanctified cemeteries, religious, ceremonial sites, shrines, burial grounds, prehistoric ruins, archaeological or historic sites, Native American rock art inscriptions, or features of Native American historic, cultural, and sacred sites.

Senate Bill 18 on Traditional Tribal Cultural Places was signed into law in September 2004 and went into effect on March 1, 2005. It places new requirements upon local governments for developments within or near traditional tribal cultural places (TTCP). SB 18 requires local jurisdictions to provide opportunities for involvement of California Native Americans tribes in the land planning process for the purpose of preserving traditional tribal cultural places. The Final Tribal Guidelines recommend that the NAHC provide written information as soon as possible but no later than 30 days after receiving notice of the project to inform the lead agency if the proposed project is determined to be in proximity to a TTCP and another 90 days for tribes to respond to a local government if they want to consult with the local government to determine whether the project would have an adverse impact on the TTCP. There is no statutory limit on the consultation duration. Forty-five days before the action is publicly considered by the local government council, the local government refers action to agencies, following the CEQA public review time frame. The CEQA public distribution list may include tribes listed by the NAHC who have requested consultation or it may not. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, it would be included in the project's EIR.

Per SB 18, the law institutes a new process which would require a city or county to consult with the NAHC and any appropriate Native American tribe for the purpose of preserving relevant TTCP prior to the adoption,

revision, amendment, or update of a city's or county's general plan. Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, the Final Tribal Guidelines advise that SB 18 requirements extend to specific plans as well, since state planning law requires local governments to use the same process for amendment or adoption of specific plans as general plans (defined in Government Code § 65453). In addition, SB 18 provides a new definition of TTCP, requiring a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies or the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, or ceremonies. Previously, the site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities. In addition, SB 18 law also amended Civil Code Section 815.3 and adds California Native American tribes to the list of entities that can acquire and hold conservation easements for the purpose of protecting their cultural places.

Assembly Bill 52

The Native American Historic Resource Protection Act (AB 52) took effect July 1, 2015, and incorporates tribal consultation and analysis of impacts to tribal cultural resources (TCR) into the CEQA process. It requires TCRs to be analyzed like any other CEQA topic and establishes a consultation process for lead agencies and California tribes. Projects that require a Notice of Preparation of an EIR or Notice of Intent to adopt a ND or MND are subject to AB 52. A significant impact on a TCR is considered a significant environmental impact, requiring feasible mitigation measures.

TCRs must have certain characteristics:

1) Sites, features, places, cultural landscapes (must be geographically defined), sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historic Resources or included in a local register of historical resources. (PRC § 21074(a)(1))

2) The lead agency, supported by substantial evidence, chooses to treat the resource as a TCR. (PRC § 21074(a)(2))

The first category requires that the TCR qualify as a historical resource according to PRC Section 5024.1. The second category gives the lead agency discretion to qualify that resource—under the conditions that it supports its determination with substantial evidence and considers the resource's significance to a California tribe. The following is a brief outline of the process (PRC §§ 21080.3.1–3.3).

1) A California Native American tribe asks agencies in the geographic area with which it is traditionally and culturally affiliated to be notified about projects. Tribes must ask in writing.

2) Within 14 days of deciding to undertake a project or determining that a project application is complete, the lead agency must provide formal written notification to all tribes who have requested it.

3) A tribe must respond within 30 days of receiving the notification if it wishes to engage in consultation.

4) The lead agency must initiate consultation within 30 days of receiving the request from the tribe.

5) Consultation concludes when both parties have agreed on measures to mitigate or avoid a significant effect to a TCR, OR a party, after a reasonable effort in good faith, decides that mutual agreement cannot be reached.

6) Regardless of the outcome of consultation, the CEQA document must disclose significant impacts on TCRs and discuss feasible alternatives or mitigation that avoid or lessen the impact.

5.16.1.2 EXISTING CONDITIONS

Natural Setting

The project site, formerly the Riverside Cement Plant, comprises office buildings, labs, manufacturing and processing facilities, quarries, a lake, and vacant land located east of Rubidoux Boulevard, south of El Rivino Road, west of Hall Avenue, and north of West Riverside Canal in the northeast quadrant of the City of Jurupa Valley, County of Riverside. The elevation within the study area ranges from approximately 700 feet above mean sea level (amsl) in the north-northeast to 940 feet above amsl and is surrounded by gentle slopes to the east and south.

Geologically, the study area is located in the Peninsular Ranges Province of Southern California, dominated by granitic rocks of Mesozoic age that intruded pre-existing sedimentary strata. A tertiary stratum was deposited west of the eroded granitic rocks, and as the area was uplifted, some of these strata formed upland coastal plains. The study area is located east of the coastal plains in an area dominated by granitic rocks that are mainly quartz diorite. The study area was developed for mining activities because of two steeply dipping limestone formations approximately 200 to 300 feet thick in the south end of the study area. The limestone formations are roughly parallel with an upper and lower formation—the upper formation is known as Sky Blue Hill, and the lower formation is known as Chino Limestone. Thin, poorly developed soils and minor sedimentary strata locally cover the bedrock on the study area.

The Jurupa Valley, in which the study area lies, is located in the eastern end of the Jurupa Mountains on the south side of the San Bernardino Valley. The Santa Ana River drains the San Bernardino Valley toward the southwest and is approximately one-half mile east of the study area.

Tribal Cultural Setting

The study area is near the traditional territory of the Gabrieleno, Serrano, Luiseño, and Cahuilla. These ethnographic groups are described below.

Gabrieleno

The Gabrieleno are Takic-speakers and are descended from Late Prehistoric populations of the region. The name Gabrieleno was given to the local inhabitants by Spanish missionaries who established a mission (San Gabriel) in Gabrieleno territory in 1771. However, self-identification for the broader group of Native Americans who inhibited the Los Angeles basin includes the names Tongva (or Tong-v) and Kizh (Kij or

Kichereno); nevertheless, there is evidence that these names initially referred to local collection/gathering areas or smaller bands of people within the larger group that we now call Gabrieleno. Important food resources for these people would have been acorns, agave, wild seeds and nuts, game, and fish. Gabrieleno villages were self-contained and had an autonomous political structure consisting of non-localized lineages where the largest and dominant lineage's leader was usually the village chief. The villages were located near fresh water and raw material resources. Villagers would have utilized temporary camps throughout their localized territories for hunting, gathering, and raw material trips away from the main village.

Serrano

The Serrano people speak the Takic language, which is similar to dialects spoken by the Luiseno, Cahuilla, and Gabrieleno. The name Serrano comes from the Spanish word: "mountaineer or highlander" and refers to the indigenous people inhabiting the San Bernardino Mountains east of the Cajon Pass who may have settled along the Santa Ana River as early as 8,000 B.C. Their territory has been difficult to define precisely, but it can be reliably characterized as extending northeast from the San Bernardino Mountains to the Mojave River region and southeast to the Tejon Creek area. The Serrano people were hunter-gatherers. Villages were based on exogamous moieties (marriage outside of one's clan) and their size ranged between 25 to 100 people. The Yuhaviatam clan is known as the San Manuel Band of Mission Indians, and the Maarenga' yam clan is known as the Morongo Band of Mission Indians, with a further clan division for the Soboba Band of Luiseno Indians. The villagers lived in large communal dwellings made from tree branches that were covered with woven mats. In 1771, the Serrano were subjugated and absorbed into the San Gabriel Mission system that resulted in the loss of their freedom, culture, and customs. In 1891, the United States created the "San Manuel" Indian Reservation after Chief Santos Manuel. From this date forward the Serrano Indians have been known as the San Manuel Band of Mission Indians.

Luiseño

The Luiseño are a Takic-speaking people that are usually associated with coastal and inland areas of present-day Orange and southern Riverside counties, with cultural and social behavioral characteristics similar to those of the Cahuilla, a tribal group generally linked with areas northeast of the San Jacinto Mountains. In fact, exchanges between the Luiseno and Cahuilla have been well documented. In context, the study area is considered a Luiseño area, though evidence of a Cahuilla presence may be identified. The term Luiseño derives from the mission named San Luis Rey and has been used in the region to refer to those Takic-speaking people associated with Mission San Luis Rey. The Luiseño shared boundaries with the Cahuilla, Cupeño, Gabrielino, and Kumeyaay groups on the east, north, and south, respectively. These different bands shared cultural and language traditions with the Luiseño. The Luiseño territory extended from the coast to Agua Hedionda Creek on the south to near Aliso Creek on the northwest. The boundary extended inland to Santiago Peak, then across to the eastern side of Elsinore Fault Valley, then southward to the east of Palomar Mountain, then around the southern slope above the valley of San Jose. Their habitat covered every ecological zone from the ocean, sandy beaches, shallow inlets, coastal chaparral, grassy valleys, and oak groves, among various other niches. The Luiseño social structure is unclear; however, each village was a clan-tribelet—a group of people patrilineally related who owned an area in common and who were politically and economically autonomous from neighboring groups. The Luiseño were not organized into exogamous moieties such as were their neighbors,

the Cahuilla, Cupeño, and Serrano. The hereditary village chief held an administrative position that combined and controlled religious, economic, and warfare powers. Marriage was arranged by the parents of children, and important lineages were allied through marriage. Reciprocally useful alliances were arranged between groups in different ecological niches and became springboards of territorial expansion, especially following warfare and truces.

Cahuilla

The Cahuilla occupied a large area in the geographic center of southern California that was bisected by the Cocopa-Maricopa Trail as well as the Santa Fe and Yuman Trails. They occupied an area from the summit of the San Bernardino Mountains in the north to Borrego Springs and the Chocolate Mountains in the south, portions of the Colorado Desert west of Orocopia Mountain to the east, and the San Jacinto Plain near Riverside and the eastern slopes of Palomar Mountain to the west.

European Contact

European contact with the Native American groups that likely inhabited the study area and surrounding region began in 1542 when Spanish explorer, Juan Rodriguez Cabrillo, arrived by sea during his navigation of the California coast. Sebastian Vizcaino arrived in 1602 during his expedition to explore and map the western coast that Cabrillo visited 60 years earlier. In 1769, another Spanish explorer, Gaspar de Portola, passed through Luiseño/Kumeyaay territory and interacted with the local indigenous groups. In 1798, Mission San Luis Rey was established by the Spanish and it likely integrated the Native Americans from the surrounding region. Multiple epidemics took a great toll on Native American populations between approximately 1800 and the early 1860s, along with the cultural and political upheavals that came with European, Mexican, and American settlement. In the beginning of the nineteenth century, some Spaniards who had worked at the missions began to set up what would later be known as the "Ranchos." The Rancho era in California history was a period when the entire state was divided into large parcels of land equaling thousands of acres each. These large estates were ruled over in a semi-feudal manner by men who had been deeded the land by first the Spanish crown, and later the Mexican government. In 1821 Mexico won independence from Spain and began to dismantle the mission system in California. As the missions began to secularize, they were transformed into small towns, and most Native Americans would later be marginalized into reservations or into American society. It was during this time that "Americans" began to enter California. Many of the American Californians married into the Rancho families, a development that would transform land ownership in Mexican California. By the time the United States annexed California after the Mexican-American War in 1850, much of the Rancho lands were already in the hands of Americans.

5.16.1.3 STUDY METHODOLOGY

Cultural Resources Records Search

On August 26, 2016, MIG conducted a records search at the California Historical Resources Information System-Eastern Information Center at the California University, Riverside (CHRIS-EIC). The records search included a review of all recorded archaeological and historical resources within a one-mile radius of the study area as well as a review of cultural resource reports and historic topographic maps on file. In addition, MIG

reviewed the California Points of Historical Interest CPHI, the California Historical Landmarks, the National Register of Historic Places, the California Register of Historical Resources, the California State Historic Resources Inventory listings, local registers (Riverside County and the City of Jurupa Valley), historical topographic maps, and historical aerial photographs. The purpose of the records search was to determine whether or not there are previously recorded archaeological or historical resources within the study area that required evaluation and treatment. The results also provide a basis for assessing the sensitivity of the study area for additional and buried cultural resources.

Sacred Lands File Search and Native American Consultation

On August 15, 2016, MIG commissioned a Sacred Lands File records search of the study area through the NAHC and conducted follow-up consultation with the 16 Native American groups or individuals (inclusive of Luiseño and Cahuilla groups) identified by the NAHC as having affiliation with the study area vicinity. Each Native American group or individual listed was sent a project notification letter and map and was asked to convey any knowledge regarding prehistoric or Native American resources (archaeological sites, sacred lands, or artifacts) located within the study area or surrounding vicinity. The letter included information such as study area location and a brief description of the proposed project. Results of the search and follow-up consultation provided information as to the nature and location of additional prehistoric or Native American resources to be incorporated in the assessment whose records may not be available at the CHRIS-EIC.

Pedestrian Field Survey

On September 12 and 13, 2016, MIG conducted a pedestrian field survey on portions of the study area that were either undeveloped or vacant as these areas are undistributed by the associated cement plant activities and may exhibit visible ground-surface archaeological (prehistoric and historic) and paleontological resources. MIG surveyed 100 percent of the undeveloped and vacant areas within the study area. The field survey was carried out on foot, and survey transects were spaced no more than 10 meters apart between each interval. All previously recorded and newly identified archaeological or historic materials were examined closely to determine the extent of the cultural deposit (site, structure or isolate).

5.16.2 Notice of Preparation/Scoping Comments

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. The comments from the NOP review that will be addressed in the tribal cultural resources section are included in Table 5.16-1.

Table 5.16-1 NOP Written Comments Summary

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
Native American Heritage Commission (NAHC) Gayle Totton, M.A., PhD Associate Governmental Program Analyst	7/24/17	• Provides details on Senate Bill 18 (SB 18) and Assembly Bill 52 (AB 52) requirements. • Recommends lead agencies consult with all California Native American tribes traditionally and culturally affiliated with the project area per AB 52 and SB 18 requirements • States that lead agencies should contact appropriate regional California Historical Research Information System Centers for an archaeological records search of the project area; prepare a professional cultural resources assessment report; contact the NAHC for a Sacred Lands File search and Native American Tribal Consultation List. • Lead agencies should include mitigation to reduce impacts to potentially inadvertently discovered archaeological resources during project construction, including plans for the disposition of recovered cultural items and human remains.	• Section 5.4, *Cultural Resources* • Section 5.16, *Tribal Cultural Resources*

All comments are organized based on date received.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.16.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to tribal cultural resources are based on criteria in Appendix G of the CEQA Guidelines.

TCR-1 Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

5.16.4 Applicable Policies and Design Features

5.16.4.1 PLANS, POLICIES, AND PROGRAMS

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to tribal cultural resources. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP 5.16-1 The project is required to comply with the applicable provisions of California and Safety Code Section 7050.5 as well as Public Resources Code Section 5097 et seq.

5.16.4.2 PROJECT DESIGN FEATURES

No existing PDFs are applicable to the tribal cultural resources of the proposed project.

5.16.5 Environmental Impacts

The following impact analysis addresses thresholds of significance that are considered potentially significant impacts.

Impact TCR-1 **Threshold: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:**

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii) significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

As part of the cultural resources' assessment prepared by MIG, a Sacred Land Files request was submitted to the NAHC on August 15, 2016, to inquire about the presence/absence of sacred or religious sites in the vicinity of the project area. On August 16, 2016, the NAHC responded that there are no sacred lands within the project area or a half-mile radius, and provided a list of Native American tribes with traditional lands or cultural places within the boundaries of Riverside County. On August 31, 2016, MIG, on behalf of the City of Jurupa Valley, sent certified letters to 35 Native American contacts notifying them of the proposed project and requesting comments or concerns for the project area. MIG received letter responses from the Agua Caliente Band of Cahuilla Indians, Pala Band of Mission Indians, Rincon Band of Luiseno Indians, Santa Rosa Band of Cahuilla Indians, Viejas Band of Kumeyaay Indians, Soboba Band of Luiseno Indians, and Gabrieleno Band of Mission

Indians-Kizh Nation. Follow-up calls were conducted by MIG for all other Native American contacts. In total, the following 10 tribal responses were received:

1. **The Agua Caliente Band of the Cahuilla Indians** stated that a records check of their cultural registry revealed that this project is not located within the tribe's traditional use area. Therefore, they defer to the other tribes in the area and the letter concluded their consultation effort.

2. **The Gabrieleno/Tongva San Gabriel Band of Mission Indians** stated that the project locale lies in an area where the ancestral and traditional territories of the Kizh (Kitc) Gabrieleño villages such as Hurungna, adjoined and overlapped with each other, at least during the Late Prehistoric and Protohistoric Periods. The tribe requested that tribal monitors be present during all ground-disturbing construction work.

3. **The Rincon Band of Mission Indians** stated that the project locale lies in the aboriginal territory of the Luiseno people; however, it is not within Rincon's historic boundaries. The tribe did not provide any additional information regarding this project, but deferred to the Pechanga Band of Luiseno Indians or Soboba Band of Luiseno Indians, who are closer to the project area.

4. **The Viejas Band of Kumeyaay Indians** determined that the project site has little significance or ties to the Viejas. The tribe recommended that MIG contact tribe(s) closer to the cultural resources. However, the tribe wishes to be kept informed on any inadvertent discovery of Native American cultural artifacts found within the project site.

5. **Santa Rosa Band of Mission Indians** stated that they defer further consultation to the Soboba Band of Luiseno Indians.

6. **The Pala Band of Mission Indians** stated that they had consulted their maps and determined that the project as described is not within the boundaries of the recognized Pala Indian Reservation. The project is also beyond the boundaries of the territory that the tribe considers its traditional use area. Therefore, they had no objection to the continuation of project activities as currently planned and deferred to the wishes of tribes in closer proximity to the project area.

7. **Torres-Martinez Desert Cahuilla Indians** stated that they defer further consultation to the Soboba Band of Mission Indians.

8. **Soboba Band of Luiseno Indians** stated that the project area is considered sensitive by the people of Soboba, as there are existing sites in the surrounding area. An in-house database search identified multiple areas of potential impact. The tribe requested consultation with the City and that their letter be forwarded to the lead agency and summarized in the final report.

9. **Morongo Band of Mission Indians** stated the tribe defers to the San Manuel Band of Mission Indians.

Results of the records research conducted at the CHRIS-SCCIC, the Sacred Lands File Search commissioned through the NAHC, follow-up Native American scoping, and the pedestrian field survey failed to indicate known TCR within the study area as specified in Public Resources Code (PRC) 210741, 5020.1(k), or 5024.1. However, there are four previously recorded prehistoric resources within a one-mile radius of the study area.

The four resources have been identified as P-33-024750 (rock shelter, with lithic scatter), P-33-024756 (rock shelter, with hearth), and P-33-024751 (bedrock milling feature), and P-33-024772 (isolate; mano fragment), which suggests the possibility of encountering buried archaeological resources associated with TCRs in the study area, given the proven prehistoric occupation of the region, the identification of multiple surface archaeological resources, and the favorable natural conditions that would have attracted prehistoric inhabitants to the area (e.g., ephemeral drainages, natural spring, and vegetation communities).

SB 18 Consultation

In accordance with SB 18 requirements, the City submitted a Local Government Tribal Consultation List Request to the NAHC to obtain a list of SB 18–specific Native American tribes. The NAHC provided a list of tribal representatives who may have knowledge of Native American cultural resources in the project area. The City sent invitation letters to the Native American representatives provided by the NAHC on October 20, 2016 (Tam 2017), formally inviting tribes to consult with the City on the proposed project.

Responses were received from the Pala Band of Mission Indians on October 31, 2016, and Viejas Band of Kumeyaay Indians on November 22, 2016. The Pala Band of Mission Indians determined the project site is not within the boundaries of the recognized Pala Indian Reservation and is also beyond the boundaries of the territory that the tribe considers its traditional use area. Therefore, the tribe has no objection to the continuation of project activities and defers to the wishes of tribes in closer proximity to the project site. The Viejas Band of Kumeyaay Indians determined the site has little cultural significance or ties to the tribe and also defers to other tribes closer to the site. However, the tribe requests to be informed of any inadvertent discoveries of cultural artifacts, cremation sites, or human remains.

AB 52 Consultation

Per AB 52 requirements, the City is also required to initiate consultation with AB 52–specific Native American tribes. Native American tribes are required to request to be notified of projects within any jurisdiction. For the City of Jurupa Valley, the Gabrieleño Band of Mission Indians–Kizh Nation and the Soboba Band of Luiseño Indians are identified as AB 52–specific tribes. Thus, the City sent an invitation letter to the tribal representatives on October 20, 2016 (Tam 2017), formally inviting the tribes to consult with the City on the proposed project.

Andrew Salas of the Gabrieleño Band of Mission Indians–Kizh Nation replied to the City's invitation letter on November 4, 2016, and stated similar concerns as their response to the Sacred Land Files search. Joseph Ontiveros of the Soboba Band of Luiseno Indians replied to the City's letter on November 21, 2016, and requested to initiate formal consultation with the City. Annette Tam, City of Jurupa Valley's Senior Planner, informed Mr. Ontiveros that the City's standard mitigation measures, which have been worked out in consultation with the Soboba Band of Luiseno Indians, will be implemented on the project. These mitigation measures are detailed in MM TCR-1, MM TCR-2, and MM TCR-3.

Level of Significance before Mitigation: Impact TCR-1 would be potentially significant. Mitigation Measures MM TCR-1 to MM TCR-3 are required to reduce Impact TCR-1 to less than significant.

5.16.6 Cumulative Impacts

Cumulative impacts to tribal cultural resources occur when the impacts of the proposed project, in conjunction with other projects and development in the region, result in multiple and/or cumulative impacts to tribal cultural resources in the area. Each future project in the City of Jurupa Valley will be required to evaluate that project's impacts to site-specific tribal cultural resources as part of the CEQA review, including tribal consultation as required by AB 52 or SB 18. Where significant impacts to tribal cultural resources are identified, projects would be required to either avoid impacts or implement feasible mitigation measures to reduce impacts. Consequently, impacts to tribal cultural resources would not be cumulatively considerable.

5.16.7 Level of Significance Before Mitigation

Without mitigation, the following impacts would be **potentially significant:**

- **Impact TCR-1** Potential impact to a cultural tribal resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

5.16.8 Mitigation Measures

Impact TCR-1

MM TCR-1 **Native American Monitoring.** Prior to the issuance of a grading permit, the applicant shall contact the consulting Native American tribe(s) that have requested monitoring through consultation with the City during the AB 52 process. The applicant shall coordinate with the tribe(s) to develop a tribal monitoring agreement(s). A copy of the agreement shall be provided to the Jurupa Valley Planning Department prior to the issuance of a grading permit.

MM TCR-2 **Treatment of Discovered Native American Resources.** If a significant tribal cultural resource is discovered on the property, ground-disturbing activities shall be suspended 100 feet around the resource(s). A representative of the appropriate Native American tribe(s), the project proponent, and the City Planning Department shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented to protect the identified tribal cultural resources from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary to document the size and content of the discovery such that the resource(s) can be evaluated for significance under CEQA criteria. The research design shall list the sampling procedures appropriate to exhaust the research potential of the tribal cultural resources in accordance with current professional archaeology standards. The treatment plan shall require monitoring by the appropriate Native

American tribe(s) during data recovery and shall require that all recovered artifacts undergo basic field analysis and documentation or laboratory analysis, whichever is appropriate. At the completion of the basic field analysis and documentation or laboratory analysis, any recovered tribal cultural resources shall be processed and curated according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility, or, the artifacts may be delivered to the appropriate Native American tribe(s) if that is recommended by the City of Jurupa Valley. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the Jurupa Valley Planning Department, the Eastern Information Center, and the appropriate Native American tribe(s).

MM TCR-3 **Disposition of Discovered Native American Resources.** In the event that Native American cultural resources are inadvertently discovered during the course of grading for this project. The following procedures will be carried out for treatment and disposition of the discoveries:

The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and nonhuman remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the Jurupa Valley Planning Department with evidence of same:

a) A fully executed reburial agreement with the appropriate culturally affiliated Native American tribes or bands. This shall include measures and provisions to protect the reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed.

b) A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation.

c) If more than one Native American Group is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center by default.

d) Should reburial of collected cultural items be preferred, it shall not occur until after the Phase IV monitoring report has been submitted to the Jurupa Valley Planning Department. Should curation be preferred, the developer/permit applicant is responsible for all costs, and the repository and curation method shall be described in the Phase IV monitoring report.

5.16.9 Level of Significance After Mitigation

The mitigation measures identified above would reduce impact TCR-1 to a level that is less than significant. Therefore, no significant unavoidable adverse impacts relating to tribal cultural resources remain.

5.16.10 References

Tam, Annette (senior planner). 2017, October 3. Correspondence to JoAnn Hadfield (principal, PlaceWorks). City of Jurupa Valley.

MIG. 2017, December 14. Phase I Cultural Resources Assessment of the Proposed Agua Mansa Commerce Park, City of Jurupa Valley, County of Riverside, California.

5.17 UTILITIES AND SERVICE SYSTEMS

This section of the Draft Environmental Impact Report (DEIR) discusses the current conditions for utility providers, including water, wastewater, stormwater, solid waste, electricity, and natural gas services, and the Agua Mansa Commerce Park Specific Plan project's (proposed project) effects on these providers.

The following is based in part on service provider questionnaire responses and information obtained from:

- *Hydrology & Water Quality Report for Agua Mansa Commerce Park, Jurupa Valley, California*, Langan Engineering and Environmental Services, Inc., November 21, 2018.
- Utility Report for Agua Mansa Commerce Park, Jurupa Valley, California, Langan Engineering and Environmental Services, Inc., January 21, 2019.
- Water Supply Assessment for the Agua Mansa Commerce Park, Rubidoux Community Services District, December 2016.
- Addendum to Water Supply Assessment for the Agua Mansa Commerce Park, Rubidoux Community Services District, December 15, 2016.

Complete copies of these studies and the service provider questionnaire responses are included in the Technical Appendices to this Draft EIR (Volume II, Appendices H, J, L, and M).

5.17.1 Wastewater Treatment and Collection

5.17.1.1 ENVIRONMENTAL SETTING

Regulatory Background

Federal

Clean Water Act and National Pollution Elimination Discharge System

The Clean Water Act establishes regulations to control the discharge of pollutants into the waters of the United States and regulates water quality standards for surface waters (US Code, Title 33, §§ 1251 et seq.). Under the act, the US Environment Protection Agency is authorized to set wastewater standards and runs the National Pollutant Discharge Elimination System (NPDES) permit program. Under the NPDES program, permits are required for all new developments that discharge directly into Waters of the United States. The federal Clean Water Act requires wastewater treatment of all effluent before it is discharged into surface waters. NPDES permits for such discharges in the project region are issued by the Santa Ana Regional Water Quality Control Board.

State

State Water Resources Control Board: Statewide General Waste Discharge Requirements

The General Waste Discharge Requirements specify that all federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California need to develop a Sewer Master Plan. The plan evaluates existing sewer collection systems and provides a framework for undertaking the construction of new and replacement facilities in order to maintain proper levels of service. The master plan includes inflow and infiltration studies to analyze flow monitoring and water use data, a capacity assurance plan to analyze the existing system with existing land use and unit flow factors, a condition assessment and sewer system rehabilitation plan, and a financial plan with recommended capital improvements and financial models.

Local

City General Plan Policies

The specific policies outlined in the City's General Plan that are related to wastewater facilities and that apply to the proposed project are listed in Table 5.9-2, *City of Jurupa Valley General Plan Consistency Analysis*.

City of Riverside's Regional Water Quality Control Plant NPDES Permit

Wastewater discharge requirements for the City of Riverside's Regional Water Quality Control Plant are detailed in Order No. RS-2013-0016 NPDES No. CA0105350. The permit includes the conditions needed to meet applicable technology-based requirements at a minimum. The permit includes limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Rubidoux Community Services District Ordinance No. 105

The collection system of the Rubidoux Community Services District (RCSD) conveys untreated sewage to the regional wastewater treatment facilities of the City of Riverside, which are considered publicly owned treatment works. Ordinance No. 105 ensures wastewater discharge into RCSD's sewer system is compliant with the NPDES permit conditions, bio-solid use and disposal requirements, and any other federal or state laws.

The ordinance also includes the RCSD's Industrial Pre-Treatment program, including all currently adopted limits for the discharge of pollutants as adopted by the RCSD and as applicable to the specific industrial user.

Rubidoux Community Services District Water and Sanitary Sewer Design and Construction Manual

The RCSD Water and Sanitary Sewer Design and Construction Manual ensures that water and sewer facilities constructed for the RCSD are complete, correctly operating, and in compliance with government codes and good water and wastewater industry practice. The manual also provides interested parties with the RCSD's procedures, policies, and requirements for the design and construction of new water and wastewater infrastructure.

Existing Conditions

The site is currently outside of the RCSD's wastewater service area; however, the site's surrounding uses are served by the RCSD. The annexation of the project site into the RCSD's wastewater service area is currently under review with the Riverside County Local Agency Formation Commission (LAFCO). Thus, the following text describes existing conditions for the RCSD's wastewater conveyance and treatment systems as they relate to the project site.

Wastewater Conveyance

Wastewater collection of onsite sewage is conveyed to septic fields also located within the project site. The site is currently outside of the RCSD service area; however, the site's surrounding uses are served by the RCSD. There is an existing 12-inch sewer line in Rubidoux Boulevard to the southwest of the site and an existing 8-inch sewer line in Brown Avenue to the east side of the site. Existing on-site sewer is conveyed to septic fields on-site, with no flow reaching these existing public lines.

Wastewater Treatment

All wastewater collected by the RCSD is conveyed through regional wastewater conveyance facilities to the City of Riverside Regional Water Quality Control Plant (WQCP). The WQCP is located at 5950 Acorn Street in the City of Riverside about six miles southwest of the site. The current capacity of the WQCP is 40 million gallons per day (mgd) (Riverside 2015). RCSD has a purchased treatment capacity of 3.055 mgd (Dudek 2005). Currently, RCSD uses 2 mgd of its purchased treatment capacity and thus has a remaining treatment capacity of approximately 1.055 mgd (LAFCO 2014).

Since the project site is outside of RCSD's service area and currently uses a septic system onsite, the WQCP does not treat any of the project site's existing sewage flow.

5.17.1.2 NOTICE OF PREPARATION / SCOPING COMMENTS

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of utilities and service systems.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.17.1.3 THRESHOLDS OF SIGNIFICANCE

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to utilities and service systems are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

WW-1(a) Require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction of which could cause significant environmental effects.

WW-1(b) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

5.17.1.4 APPLICABLE POLICIES AND DESIGN FEATURES

Plans, Policies, and Programs

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to wastewater treatment and collection. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP WW-1 The proposed project will be designed, constructed, and operated in accordance with the Rubidoux Community Services District Ordinance No. 105. All wastewater discharges into RCSD facilities shall be required to comply with the discharge standards set forth to protect the public sewage system. Any industrial user that generates a high-strength wastewater must apply for a permit and comply with the RCSD Industrial Pre-Treatment program.

PPP WW-2 The project's sewer infrastructure improvements will be designed, constructed, and operated in accordance with Rubidoux Community Services District Water and Sanitary Sewer Design and Construction Manual.

Project Design Features

There are no PDFs that apply to wastewater treatment and collection.

5.17.1.5 ENVIRONMENTAL IMPACTS

The installation of wastewater facilities as proposed by the project would result in physical impacts to the surface and subsurface of the project site. These impacts are considered to be part of the project's construction phase and are evaluated throughout this DEIR. In instances where impacts have been identified for the project's construction phase, Plans, Policies, Programs (PPP), Project Design Features (PDF), or Mitigation Measures (MM) are required to reduce impacts to less-than-significant levels. Accordingly, additional measures beyond those identified throughout this DEIR would not be required.

Impact WW-1: Threshold: Would the project (a) require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction of which could cause significant environmental effects; or (b) result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The project site is just outside of the existing RCSD wastewater service area boundary. In order for the project to receive RCSD's wastewater services, the site would need to be annexed into the RCSD service area through formal application with the Riverside County LAFCO. The annexation of the project site into the RCSD's wastewater service area is currently under review with the Riverside County LAFCO. The following analysis assumes the annexation is approved.

Buildout of the Agua Mansa Commerce Park Specific Plan would allow two development alternatives:

- **Alternative 1:** 4,216,000 SF of Industrial Park, 200,000 SF of Business Park, and 64,000 SF of Research and Development
- **Alternative 2:** 4,216,000 SF of Industrial Park, 150,000 SF Business Park, 25,000 SF of retail, and 64,000 SF of Research and Development

To determine the worst-case scenario, both buildout scenarios are analyzed.

Wastewater Treatment Capacity

Buildout of the proposed project would generate approximately 9,172 gallons per day (gpd) of wastewater under Alternative 1 and 8,932 gpd of wastewater under Alternative 2 as detailed in Table 5.17-1.

Table 5.17-1 Estimated Water Demand and Wastewater Generation

Proposed Land Use	Buildout	Estimated Employment[1]	Water Demand[2]	Wastewater Generation[3]
ALTERNATIVE 1(No Retail)				
Industrial	4,216,000 SF	844	16,880 GPD	6,752 GPD
Business Park	200,000 SF	100	5,000 GPD	2,000 GPD
Research and Development	41,000 SF[4]	21	1,050 GPD	420 GPD
Open Space	70.9 acres	0	0 GPD	0 GPD
TOTAL	**4,480,000 SF**	**965**	**22,930 GPD**	**9,172 GPD**
ALTERNATIVE 2 (Retail Overlay)				
Industrial	4,216,000 SF	844	16,880 GPD	6,752 GPD
Business Park	150,000 SF	75	3,750 GPD	1,500 GPD
Retail	25,000 SF	13	650 GPD	260 GPD
Research and Development	41,000 SF[4]	21	1,050 GPD	420 GPD
Open Space	70.9 acres	0	0 GPD	0 GPD
TOTAL	**4,455,000 SF**	**953**	**22,330 GPD**	**8,932 GPD**

Source: Langan 2019.
GPD = gallons per day
1 Employment generation factors: 1 employee per 5,000 SF Industrial use; 1 employee per 2,000 SF Business Park/Retail Use
2 Water demand rates: 20 GPD per employee for Industrial use; 50 GPD per employee for Business Park/Retail Use
3 Wastewater generation is estimated to be approximately 40 percent of water demand per RCSD requirements.
4 It should be noted that only 41,000 SF of the 64,000 SF for research and development are included in this analysis since 23,000 SF already exists on site and is not associated with additional water demand and wastewater generation.

As stated above, the current capacity of the WQCP is 40 mgd, of which the RCSD has 3.055 mgd of purchased treatment capacity. Currently, the RCSD uses only 2 mgd of that capacity; thus, RCSD has a remaining wastewater treatment capacity of 1.055 mgd in the WQCP. Under both development options, the proposed project's generated wastewater would represent less than one percent of the RCSD's remaining purchased treatment capacity at the WQCP. Therefore, wastewater generated by the proposed project would be adequately treated at the WQCP.

Wastewater Treatment Quality

The WQCP is required by federal and state law to meet applicable standards of treatment plant discharge requirements subject to NPDES Permit No. CA0105350 issued by the Santa Ana Regional Water Quality Control Board in 2013 under Order No. RS-2013-0016. The NPDES permit regulates the amount and type of pollutants that the system can discharge into receiving waters. WQCP is operating in compliance with state waste discharge requirements and federal NPDES permit requirements, as set forth in the NPDES permit and order. Compliance with Ordinance No. 105 ensures wastewater discharge into RCSD's sewer system from the proposed project is compliant with the NPDES permit conditions, bio-solid use and disposal requirements, and any other federal or state laws. Furthermore, RCSD has an existing industrial pre-treatment program that focuses on industrial discharges. The industrial pre-treatment program complies with the City's requirements for industrial dischargers. However, total dissolved solids (TDS) are naturally occurring in the groundwater within the region, including the RCSD service area. These naturally occurring TDS contribute to the

concentration of TDS in the wastewater received from within the RCSD service area and subsequently conveyed to the WQCP. Because of TDS concentration, the City of Riverside has opposed any further annexation to the RCSD until the RCSD addresses the TDS levels. The RCSD is developing a TDS Reduction Plan that will comprehensively review options to reduce TDS to Permit limits in wastewater delivered to the City of Riverside. Options anticipated to be included in the TDS Reduction Plan are reduction of TDS in potable water deliveries and more control on Customer Use Increment.

Therefore, the additional wastewater (quantity and type) that would be generated by the proposed project and treated by the WQCP could impede the WQCP's ability to continue to meet its wastewater treatment requirements and impacts on wastewater treatment requirements could be potentially significant.

Wastewater Conveyance

As shown on Figure 5.17-1, *Conceptual Sewer Plan*, proposed sewer infrastructure onsite would include two new sewer connections to the existing sewer lines in Rubidoux Boulevard and Brown Avenue to the southwest and east, respectively. There is a 12-inch sewer line in Rubidoux Boulevard to the southwest of the site and an 8-inch sewer line in Brown Avenue to the east of the project site. Since the project site currently uses a septic system, no sewage flows into the existing RCSD sewer lines in Rubidoux Boulevard and Brown Avenue.

Each proposed building would have a minimum of two points of sewer connection. Any offsite construction of the expansion of sewer infrastructure would be contained within existing public road rights-of-way in accordance with the RCSD and City of Jurupa Valley standards and specifications. Additionally, during the engineering design and plan check process for each project, the City of Jurupa Valley and the RCSD would assess the infrastructure needs of such improvements to ensure that adequate wastewater infrastructure is available. On-site construction of the proposed sewer infrastructure will be within project limits and proposed private roads and will be constructed in compliance with the Rubidoux Community Services District Water and Sanitary Sewer Design and Construction Manual. Therefore, the project would not require or result in construction that would cause significant environmental effects on undeveloped green space. Impacts related to wastewater conveyance would be less than significant.

Level of Significance before Mitigation: With implementation of PPP WW-1 and PPP WW-2, Impact WW-1 (b) would be potentially significant. Mitigation Measure WW-1 is required to reduce impacts to less than significant. With implementation of PPP WW-1 and PPP WW-2, Impact WW-1 (a) would be less than significant.

5.17.1.6 CUMULATIVE IMPACTS

The area considered for cumulative impacts is RCSD's service area—7.5 square miles with a population of about 33,441 people. The 2040 projected quantities of wastewater that need to be treated at WQCP is 2,350 acre-feet per year (afy), an increase of 138 afy from 2015 production rates (RCSD 2016). RCSD has a purchased treatment capacity of 3.055 mgd from the WQCP. Currently, RCSD uses 2 mgd of its purchased treatment capacity and thus has a remaining treatment capacity of approximately 1.055 mgd (or 1182.6 afy). There is sufficient wastewater treatment capacity in the region for the cumulative increase in wastewater generation, and cumulative impacts would be less than significant. Project impacts would not be cumulatively considerable.

5.17.1.7 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

With implementation of PPP WW-1 and PPP WW-2, Impact WW-1 (a) would be less than significant.

With the implementation of PPP WW-1 and PPP WW-2, Impact WW-1 (b) would be potentially significant.

5.17.1.8 MITIGATION MEASURES

Impact WW-1 (b)

MM WW-1 The proposed project shall comply with the RCSD TDS Reduction Plan; or if the TDS Reduction Plan has not been adopted prior to the issuance of the first building permit; then the proposed project shall coordinate with RCSD to develop a plan that will insure wastewater delivered into RCSD's sewer collection system for treatment at the City's Treatment Plant will not have a TDS concentration exceeding 650 mg/l. The TDS control methods will be accomplished using standards mutually agreed to with RCSD and may include TDS removal treatment for potable water delivered to the proposed project in whole, or for each individual building within the proposed project. TDS removal is not required for irrigation systems or fire protection systems.

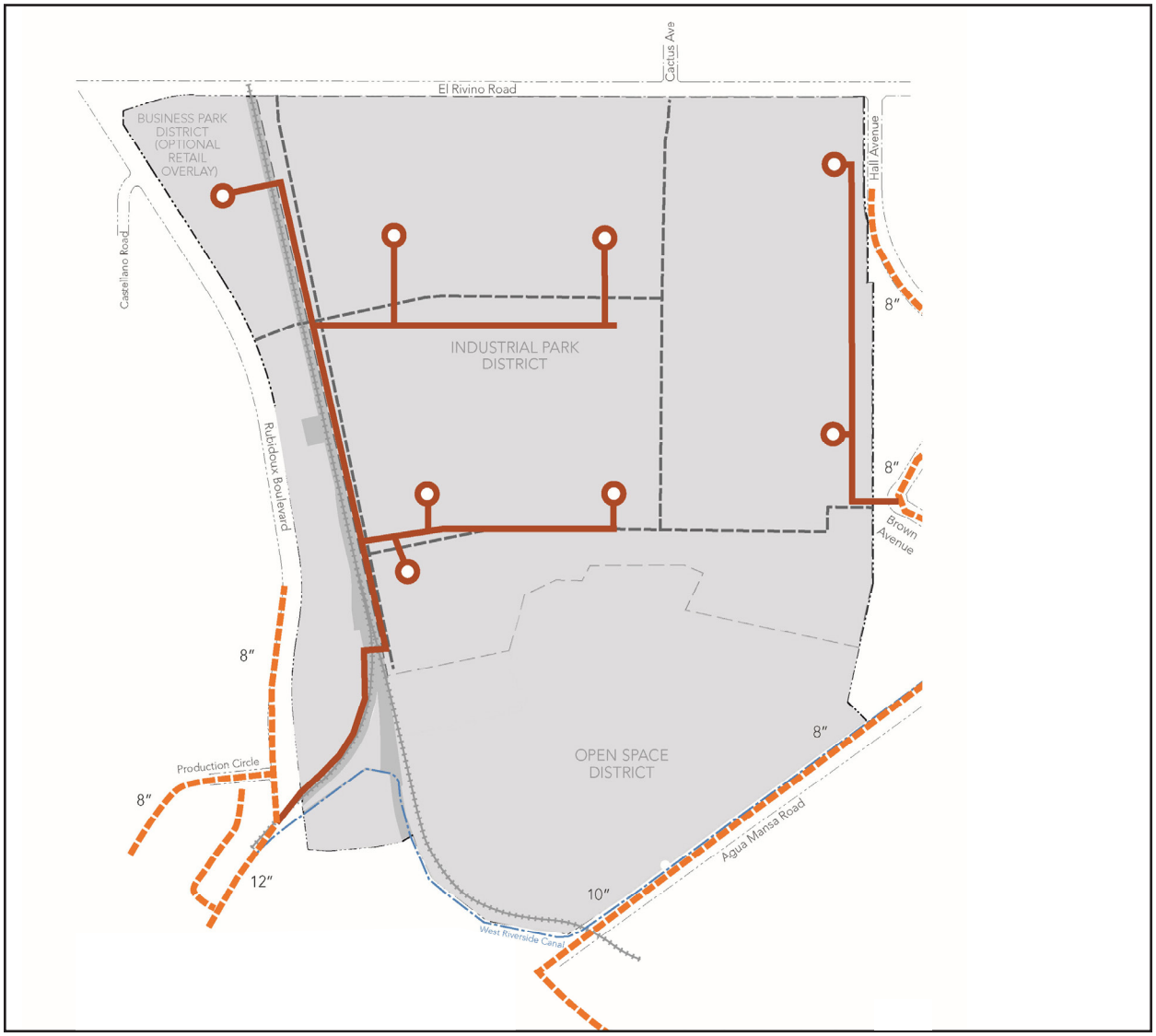
5.17.1.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impact WW-1 (b)

Implementation of Mitigation Measure MM WW-1 would require the project applicant to comply with the recommended action(s) in the TDS Reduction Plan. Compliance with mitigation measure MM WW-1 would ensure that wastewater generated from the proposed project and conveyed to the WQCP would not violate the requirements of the NPDES permit. Implementation of MM WW-1 would reduce impacts to less than significant.

Figure 5.17-1 - Conceptual Sewer Plan

5. Environmental Analysis



Agua Mansa Commerce Park Specific Plan Area Boundary

Existing Rubidoux Community Services District Sewer

Proposed Sewer/Connection

Railroad

Canal

0 1,000
Scale (Feet)

Source: MIG, 2019

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5.17.2 Water Supply and Distribution Systems

5.17.2.1 ENVIRONMENTAL SETTING

Regulatory Background

State

Mandatory Water Conservation

Following Governor Brown's declaration of a state of emergency on July 15, 2014, the State Water Resources Control Board (SWRCB) adopted Resolution No. 2014-0038. The emergency regulation was partially repealed by Resolution No. 2017-0024. The remaining regulation prohibits several activities, including (1) the application of potable water to outdoor landscapes in a manner that causes excess runoff; (2) the use of a hose to wash a motor vehicle except where the hose is equipped with a shut-off nozzle; (3) the application of potable water to driveways and sidewalks; (4) the use of potable water in nonrecirculating ornamental fountains; and (5) the application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall. The SWRCB resolution also directed urban water suppliers to submit monthly water monitoring reports to the SWRCB.

Urban Water Management Planning Act

The Urban Water Management Planning Act of 1983 (Water Code §§ 10610 et seq.) requires water suppliers to:

- Plan for water supply and assess reliability of each source of water over a 20-year period in 5-year increments.
- Identify and quantify adequate water supplies, including recycled water, for existing and future demands in normal, single-dry, and multiple-dry years.
- Implement conservation and the efficient use of urban water supplies.

Significant new requirements for quantified demand reductions have been added by the Water Conservation Act of 2009 (Senate Bill 7 of Special Extended Session 7 or SBX7-7), which amends the Urban Water Management Planning Act and adds new water conservation provisions to the Water Code.

Senate Bill 221

Senate Bill 221 (SB 221) prohibits approval of a tentative map, a parcel map for which a tentative map was not required, or a development agreement for subdivisions of more than 500 dwelling units unless the legislative body of a city or county provides written verification from the applicable public water system that a sufficient water supply is available or will be available prior to completion of the project. Sufficient water supply is defined as "the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection that will meet the projected demand associated with the proposed subdivision, in addition to existing and planned future uses, including, but not limited to, agricultural and industrial uses"(CLI 2016).

In determining sufficient water supply, all of the following factors must be considered:

- Availability of water supplies over a historical record of at least 20 years.
- Applicability of an urban water shortage contingency analysis prepared pursuant to Section 10632 of the Water Code that includes actions to be undertaken by the public water system in response to water supply shortages.
- Reduction in water supply allocated to a specific water use sector pursuant to a resolution or ordinance adopted or a contract entered into by the public water system.
- Amount of water from other water supply projects such as conjunctive use, reclaimed water, water conservation, and water transfer.

In addition, the written verification of the public water system's ability or inability to provide a sufficient water supply to meet the projected demands from the proposed subdivision must be supported by substantial evidence. If the written verification relies on projected water supplies that are not currently available, the availability of said supplies must be based on written contracts or other proof of valid rights to the identified water supply; copies of a capital outlay program for financing the delivery of a sufficient water supply; securing of applicable federal, state, and local permits for construction of necessary infrastructure; and any necessary regulatory approvals.

Senate Bill 610

Senate Bill 610 (SB 610) (2001) amended the Urban Water Management Planning Act to mandate that a city or county approving certain projects subject to CEQA: 1) identify any public water system that may supply water for the project and 2) request those public water systems to prepare a specified water supply assessment.[1] The assessment must include:

- A discussion of whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection would meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.
- The identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts.
- A description of the quantities of water received in prior years by the public water system under the existing water supply entitlements, water rights, or water service contracts.

[1] Under Water Code § 10912(a)(5), SB 610 applies to a CEQA project defined as "a proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area." Thus, a water supply assessment was prepared for the proposed project.

- A demonstration of water supply entitlements, water rights, or water service contracts.
- The identification of other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts with the same source of water as the public water system.
- Additional information is required if groundwater is included in the supply for the proposed project.

If SB 610 applies to a project, the water supply assessment must be included in any environmental document prepared for the project and may include an evaluation of any information in that environmental document. The assessment must determine if the projected water supplies will be sufficient to satisfy the demands of the project as well as existing and planned future uses. A Water Supply Assessment (WSA) was prepared for the proposed project and is included as Appendix M to this DEIR.

Additionally, SB 610 requires new information to be included as part of an urban water management plan (UWMP) if groundwater is identified as a source of water available to the supplier. Information must include a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 prohibits eligibility for funds from specified bond acts until the UWMP is submitted to the state.

20x2020 Water Conservation Plan

The 20x2020 Water Conservation Plan, issued by the Department of Water Resources in 2010 pursuant to the Water Conservation Act of 2009 (SBX7-7), established a water conservation target of 20 percent reduction in water use by 2020 compared to 2005 baseline use.

Local

City of Jurupa Valley General Plan Policies

The specific policies outlined in the City's General Plan that are related to water facilities and that apply to the proposed project are listed in Table 5.9-2, *City of Jurupa Valley General Plan Consistency Analysis*.

Rubidoux Community Services District Urban Water Management Plan

The RCSD UWMP is required under Water Code Sections 10610 through 10656 of the Urban Water Management Planning Act, effective January 1, 1984. The act requires all urban water suppliers to prepare, adopt, and file a UWMP with the California Department of Water Resources every five years. The RCSD 2015 UWMP outlines current water demands, sources, and supply reliability to the City by forecasting water use based on climate, demographics, and land use changes in the City. The plan also provides demand management measures to increase water use efficiency for various land use types, and details a water supply contingency plan in case of shortage emergencies.

City of Jurupa Valley Municipal Code Chapter 9.283

The City of Jurupa Valley's municipal code, Chapter 9.283, Water Efficient Landscape Design Requirements, established a structure for planning, designing, installing, maintaining, and managing water efficient landscapes in new construction and rehabilitated projects that conserve and promote the efficient use of water.

Existing Conditions

The site is currently outside of the RCSD's water service area; however, the site's surrounding uses are served by the RCSD. The annexation of the project site into the RCSD's water service area is currently under review with the Riverside County LAFCO. Thus, the following text describes existing conditions for the RCSD's water supply, treatment, and conveyance as they relate to the project site.

Water Supply

The sole source of potable water supply for the RCSD is groundwater extracted from the southern portion of the Riverside Groundwater Basin. The Basin encompasses the RCSD's entire service area. RCSD currently does not purchase or otherwise obtain water from a wholesale water supplier, and recycled water is not currently available to it. RCSD expects that groundwater extracted from the Basin by six potable and six non-potable (irrigation only) groundwater wells will continue to be its primary (and possibly only) source of water through the year 2040, and possibly beyond (RCSD 2016). For emergencies, the RCSD has an emergency potable water interconnection with the Jurupa Community Services District (Appel 2017). The Riverside South Groundwater Basin is the portion of the Riverside Groundwater Basin in Riverside County. (The Riverside North Groundwater Basin is the portion in San Bernardino County.) The Riverside Basin is between the Chino Groundwater Basin on the northwest and the Colton Groundwater Basin on the northeast.

Historical and Projected Groundwater Production

The amount of groundwater pumped by the RCSD from the Riverside South Groundwater Basin and the projected amount to be pumped by the RCSD through 2040 is detailed in Table 5.17-2.

Table 5.17-2 Historic and Projected Groundwater Production

Year	Groundwater Production (afy)
2010	6,527
2015	7,801
2020	10,397
2025	11,045
2030	11,754
2035	12,465
2040	13,202

Source: RCSD 2016.
afy = acre-feet per year

Groundwater Sufficiency

On March 1, 1963, Western Municipal Water District (Western) filed a suit for a general adjudication of water rights within the Riverside North Groundwater Basin. Judgment No. 78426 (hereafter referred to as the 1969 Judgment) established the rights to extract water from three groundwater basins (Riverside North, Colton, and Riverside South) and provided for replenishment in the event actual extractions exceed those rights.

In accordance with the 1969 Judgment, RCSD can extract groundwater from the Riverside South Groundwater Basin without restrictions until the combined credit of the Colton, Riverside North, and Riverside South groundwater basins are depleted. Once the available credit is depleted, Western will be obligated to provide groundwater replenishment. It is anticipated that the cost for replenishment will be allocated to all groundwater extractors, including the RCSD (Western 2017).

Water Conveyance

The site is currently outside of the RCSD water service area, but the site's surrounding uses are served by the RCSD. There is a 24-inch water main in Rubidoux Boulevard southwest of the project site. RCSD states that there are currently no deficiencies in water conveyance infrastructure and facilities (Appel 2017).

5.17.2.2 NOTICE OF PREPARATION / SCOPING COMMENTS

An NOP for the proposed project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of utilities and service systems.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.17.2.3 THRESHOLDS OF SIGNIFICANCE

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to utilities and service systems are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

W-1(a) Require or result in the relocation or construction of new or expanded water treatment facilities, the construction or relocation of which could cause significant environmental effects.

W-1(b) Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

5.17.2.4 APPLICABLE POLICIES AND DESIGN FEATURES

Plans, Policies, and Programs

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to water supply and distribution systems. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP W-1 The proposed project will be designed, constructed, and operated in accordance with the Rubidoux Community Services District Ordinance No. 859.

PPP W-2 The landscaping for the proposed project will be planned, designed, installed, and maintained in accordance with the City of Jurupa Valley Municipal Code Chapter 9.283.

PPP WW-2 The project's water infrastructure improvements will be designed, constructed, and operated in accordance with Rubidoux Community Services District Water and Sanitary Sewer Design and Construction Manual.

Project Design Features

PDF W-1 The project shall provide a landscaping and irrigation plan for review and approval by City staff. The landscape plan shall be designed for the intended function of the project and for the efficient use of water. The landscape plan shall address conditions of the Specific Plan area such as controlling erosion, filtering stormwater, screening of unsightly elements, creating shade, and softening the appearance of walls or structures. Both the landscaping and irrigation plans shall incorporate water conservation features.

PDF W-2 Proposed landscaping should be in line with the base plant palette established for the project. The palette features water-efficient, drought-tolerant species native to the region, and includes colorful shrubs and groundcovers, ornamental grasses and succulents, and evergreen and deciduous trees. Similar plant materials which exhibit very low or low water demand may be substituted for the species included in the plant palette if the alternative plants are climate appropriate and enhance the thematic setting. Requests to substitute plant material not listed in the plant palette shall require the approval of the Planning Director.

5.17.2.5 ENVIRONMENTAL IMPACTS

The installation of water facilities as proposed by the project would result in physical impacts to the surface and subsurface of the project site. These impacts are considered to be part of the project's construction phase and are evaluated throughout this DEIR. In instances where impacts have been identified for the project's construction phase, Plans, Policies, Programs (PPP), Project Design Features (PDF), or Mitigation Measures (MM) are required to reduce impacts to less-than-significant levels. Accordingly, additional measures beyond those identified throughout this DEIR would not be required.

- **Impact W-1** Threshold: Would the project (a) require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects; and (b) have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

  The project site is just outside of the existing RCSD water service area boundary but within the RCSD's ultimate services boundary. In order for the project to receive RCSD's water services, the site would need to be annexed into the RCSD service area through formal application with the Riverside County LAFCO. The annexation of the project site into the RCSD's sewer and water service area is currently under review with the Riverside County LAFCO.

Water Demand

Project operation is expected to use about 22,930 gpd (26 afy) for Alternative 1 and 22,330 gpd (25 afy) for Alternative 2, as shown in Table 5.17-1. The RCSD forecasts that it has sufficient water supplies to meet water demands in its service area through 2040 (RCSD 2016a). The WSA for the project indicates that the project site was identified in the District's 1999 Water Facilities Master Plan as the Riverside Cement Company property with an annual water demand of approximately 300 afy (RCSD 2016b). Therefore, the water demand estimate for the proposed project is accounted for in the District's Water Facilities Master Plan. Therefore, the City's forecast of adequate water supplies through 2040 applies to the proposed project. Project development would not require the project to obtain new or expanded water supplies, and impacts would be less than significant.

Proposed Water Conservation Strategies

Chapter 4.8 of the Specific Plan details landscaping requirements for the Agua Mansa Commerce Park and requires all projects to provide a landscaping and irrigation plan for review and approval by City staff. The landscape plan shall be designed for the intended function of the project and for the efficient use of water. The landscape plan shall address conditions of the Specific Plan area such as controlling erosion, filtering stormwater, screening of unsightly elements, creating shade, and softening the appearance of walls or structures. Both the landscaping and irrigation plans shall incorporate water conservation features.

Proposed landscaping should consist of drought-tolerant plants, as feasible. Drought-tolerant plant selection palettes should include colorful shrubs and groundcovers, ornamental grasses and succulents, evergreen and deciduous trees, and species native to the area or naturalized to the area. A plant palette in Table 5.1 of the Specific Plan features water-efficient, drought-tolerant species native to the region. Similar plant materials that exhibit very low to low water demand may be substituted for species in Table 5.1 of the Specific Plan.

Furthermore, landscaping will be implemented in line with RCSD Ordinance No. 859 and Jurupa Valley Municipal Code Chapter 9.283.

Fire Flow Requirements

A fire hydrant is at the corner of Rubidoux Boulevard and Avalon Street (1800 Avalon Street). To supplement the utility report prepared for this project, Langan tested the fire hydrant to determine whether there was adequate water pressure and flow to meet the fire flow requirement needs for the project. Fire water distribution would require a looped system with one connection coming from the existing 24-inch water main in Rubidoux Boulevard. Each building would have one connection for the fire sprinkler system within that building with a demand of 4,000 gallons per minute. Fire hydrants would be installed around the project site per the coverage and spacing requirements in the California Fire Code. Additionally, the fire flow calculation would be confirmed during the final design of the onsite fire water infrastructure system once final building demand is confirmed.

Water Conveyance

As shown in Figure 5.17-2, *Conceptual Water Plan*, onsite water main infrastructure and one new connection to the existing water main in Rubidoux Boulevard to the southwest would serve the domestic water needs for the proposed project. Each building would have a meter and a minimum of two points of connection. The offsite

construction of water infrastructure improvements would be contained within existing public road rights-of-way in accordance with the RCSD and City of Jurupa Valley standards and specifications. Onsite construction of the required water infrastructure improvements would be within project boundary limits and proposed internal roadways and will be constructed in compliance with the Rubidoux Community Services District Water and Sanitary Sewer Design and Construction Manual.

Additionally, during the engineering design and plan check process for each project, the City of Jurupa Valley and the RCSD would assess the infrastructure needs of such improvements to ensure that adequate water infrastructure is available. Impacts related to water conveyance would be less than significant.

Level of Significance before Mitigation: With implementation of PPP W-1, PPP W-2, PPP-WW-2, PDF W-1, and PDF W-2, Impact W-1 (a) and (b) would be less than significant.

5.17.2.6 CUMULATIVE IMPACTS

The area considered for cumulative water supply impacts is RCSD's service area. Other projects in the service area would increase water demands. RCSD forecasts that it will have sufficient water supplies in its service area over the 2020 to 2040 period (see "Water Demand" under Impact W-1). Other projects of certain sizes and types would be required to have water supply assessments prepared. If RCDS did not already have sufficient projected water supplies for such projects, it would be required to provide its plans for acquiring the needed supplies, including the cost and time frame needed. The RCSD would be required to consider the results of water supply assessments in its CEQA findings on such projects. Cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

5.17.2.7 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

With the implementation of PPP W-1, PPP W-2, PPP WW-2, PDF W-1, and PDF W-2, Impact W-1(a) and (b) would be less than significant.

5.17.2.8 MITIGATION MEASURE

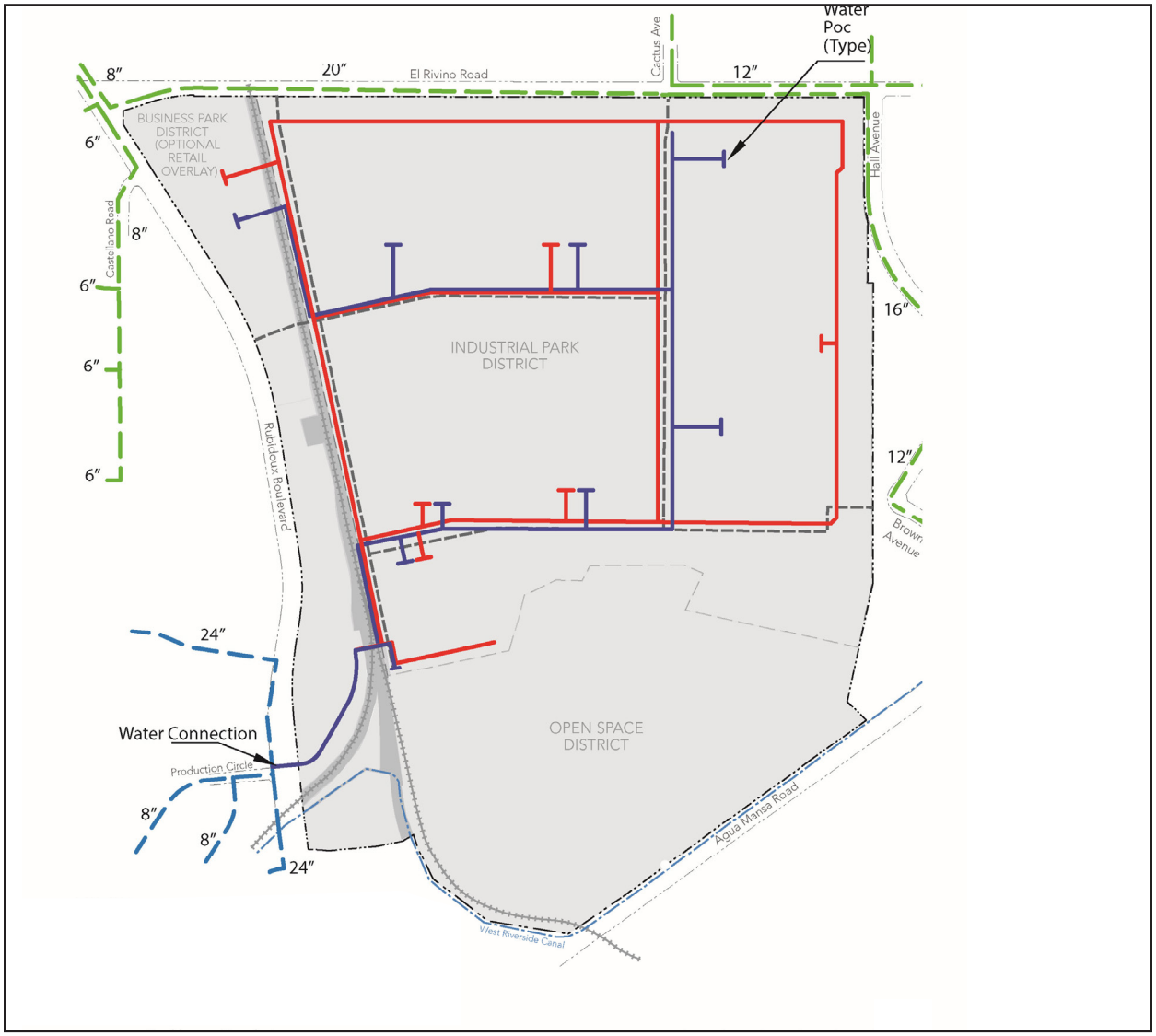
No mitigation measures are required.

5.17.2.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

Figure 5.17-2 - Conceptual Water Plan

5. Environmental Analysis



Agua Mansa Commerce Park Specific Plan Area Boundary
Existing Rubidoux Community Services District Water
Existing West Valley Water District Water
Proposed Water
Proposed Fire Water
Backbone Circulation
Railroad
Canal

0 1,000
Scale (Feet)

Source: MIG, 2019

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5.17.3 Storm Drainage Systems

5.17.3.1 ENVIRONMENTAL SETTING

Regulatory Background

National Pollutant Discharge Elimination System Program

The SWRCB has adopted a statewide Construction General Permit (ORDER NO. 2012-0006-DWQ) for stormwater discharges associated with construction activity. These regulations prohibit the discharge of stormwater from construction projects that include one acre or more of soil disturbance. Construction activities subject to this permit include clearing, grading, and other disturbance to the ground, such as stockpiling or excavation, that results in soil disturbance of at least one acre of total land area. Individual developers are required to submit a Notice of Intent to the SWRCB for coverage under the NPDES permit and would be obligated to comply with its requirements.

The NPDES Construction General Permit requires all dischargers to (1) develop and implement a Stormwater Pollution Prevention Plan (SWPPP), which specifies best management practices (BMP) to be used during construction of the project; (2) eliminate or reduce nonstorm water discharge to stormwater conveyance systems; and (3) develop and implement a monitoring program of all BMPs specified. The two major objectives of the SWPPP are to (1) help identify the sources of sediment and other pollutants that affect the water quality of stormwater discharges and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as nonstorm water discharges.

Santa Ana Regional Water Quality Control Board

Waste discharge requirements for stormwater entering municipal storm drainage systems are set forth in the municipal stormwater (MS4) permit for the portion of Riverside County in the Santa Ana Watershed, Order No. R8-2010-0033, issued by the Santa Ana Regional Water Quality Control Board in 2010.

City of Jurupa Valley

General Plan Policies

The specific policies outlined in the City's General Plan that are related to storm drainage systems and that apply to the proposed project are listed in Table 5.9-2, *City of Jurupa Valley General Plan Consistency Analysis*.

Municipal Code

The purpose of Chapter 6.05, *Storm Water/ Urban Runoff Management and Discharge Controls*, of the City of Jurupa Valley Municipal Code is to ensure the future health, safety, and general welfare of city residents by:

1) Reducing pollutants in storm water discharges to the maximum extent practicable;

2) Regulating illicit connections and discharges to the storm drain system;

3) Regulating non-storm water discharges to the storm drain system. (4) The intent of this chapter is to protect and enhance the water quality of county/city watercourses, water bodies, ground water, and wetlands in a manner pursuant to and consistent with applicable requirements contained in the Santa Ana Region Order No. R8-2010-0033, NPDES No. CAS 618033 regulated by the State of California, California Regional Water Quality Control Board, parented by the Federal Clean Water Act (Title 33 U.S.C. Section 1251 et seq.), Porter-Cologne Water Quality Control Act (Wat. Code Section 13000 et seq.), any applicable state or federal regulations promulgated thereto, and any related administrative orders or permits issued in connection therewith.

Existing Conditions

Local Drainage

The project site is directly tributary to the Santa Ana River via existing infrastructure owned and operated by the Riverside County Flood Control and Water Conservation District (RCFC). The infrastructure includes the Belltown Market Street storm drain system, the Agua Mansa Brown Avenue storm drain, Wilson Street storm drain, laterals, and outlet erosion control basins.

The Belltown Market system drainage area is generally bounded by El Rivino Road (San Bernardino/Riverside County Line) on the north, 20th Street to the south, the Jurupa Mountains to the west, and the project site to the east. The system also currently collects runoff from areas within San Bernardino County, north of El Rivino Road. However, current development plans and infrastructure improvements in El Rivino Road may reduce or eliminate this tributary flow.

The Agua Mansa Brown Avenue system drainage area is generally bounded by El Rivino Road and Hall Avenue to the north, Holly Street to the east, Agua Mansa Road to the west, and Wilson Street to the south.

Site Hydrology

Approximately 172 acres of the project site are tributary to the Belltown Market system, 22 acres are tributary to the Agua Mansa Brown Avenue system, and 91 acres are retained within the site. The existing surface water hydrology includes approximately 92 acres from San Bernardino County (City of Rialto) north of El Rivino Road. According to the Rialto Commerce Center EIR, a development is planned for this former golf course site, which may include the installation of a storm drain in El Rivino Road to collect and convey the surface water runoff to the east. If this drain is constructed, the 92-acre tributary area would be removed from the proposed project site's hydrology. For purposes of this report, it is assumed that the offsite area will be collected and conveyed to the Santa Ana River by offsite improvements to be constructed as part of the Rialto Commerce Center project.

The existing surface water hydrology also includes approximately 322 acres of the Jurupa Mountains, west of Rubidoux Boulevard. The northern section (approximately 283 acres) directs surface water runoff to Rubidoux Boulevard, which is hydraulically connected to an existing basin within the site. The southern section of the offsite area (approximately 39 acres) directs surface water runoff directly to the Belltown Market system.

Additional details regarding existing local surface water and drainage onsite are provided in Section 5.8, *Hydrology and Water Quality*.

5.17.3.2 NOTICE OF PREPARATION / SCOPING COMMENTS

An NOP for the proposed project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of utilities and service systems.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.17.3.3 THRESHOLDS OF SIGNIFICANCE

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to utilities and service systems are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project:

SD-1 Would require or result in the relocation or construction of new or expanded stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects.

5.17.3.4 APPLICABLE POLICIES AND DESIGN FEATURES

Plans, Policies, and Programs

These include existing regulatory requirements, such as plans, policies, or programs, applied to the project based on federal, state, or local law currently in place and which effectively reduce impacts related to storm drainage systems. These requirements are included in the project's Mitigation Monitoring and Reporting Program to ensure compliance:

PPP HYD-1 As required by Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls, Section B (1), any person performing construction work in the city shall comply with the provisions of this chapter, and shall control stormwater runoff so as to prevent any likelihood of adversely affecting human health or the environment. The City Engineer shall identify the BMPs that may be implemented to prevent such deterioration and shall identify the manner of implementation. Documentation on the effectiveness of BMPs implemented to reduce the discharge of pollutants to the MS4 shall be required when requested by the City Engineer.

PPP HYD-3 As required by Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls, Section C, new development or redevelopment projects shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. The City Engineer shall identify the BMPs that may be implemented to prevent such deterioration and shall identify the manner of

implementation. Documentation on the effectiveness of BMPs implemented to reduce the discharge of pollutants to the MS4 shall be required when requested by the City Engineer. The BMPs may include, but are not limited to, the following and may, among other things, require new developments or redevelopments to do any of the following:

(1) Increase permeable areas by leaving highly porous soil and low lying area undisturbed by:

(a) Incorporating landscaping and open space into the project design;

(b) Using porous materials for or near driveways, drive aisles, parking stalls and low volume roads and walkways; and

(c) Incorporating detention ponds and infiltration pits into the project design.

(2) Direct runoff to permeable areas by orienting it away from impermeable areas to swales, berms, green strip filters, gravel beds, rain gardens, pervious pavement or other approved green infrastructure and French drains by:

(a) Installing rain-gutters oriented towards permeable areas;

(b) Modifying the grade of the property to divert flow to permeable areas and minimize the amount of storm water runoff leaving the property; and

(c) Designing curbs, berms or other structures such that they do not isolate permeable or landscaped areas.

(3) Maximize stormwater storage for reuse by using retention structures, subsurface areas, cisterns, or other structures to store storm water runoff for reuse or slow release.

(4) Rain gardens may be proposed in-lieu of a water quality basin when applicable and approved by the City Engineer.

PPP HYD-4 As required by Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls, Section E, any person or entity that owns or operates a commercial and/or industrial facility(s) shall comply with the provisions of this chapter. All such facilities shall be subject to a regular program of inspection as required by this chapter, any NPDES permit issued by the State Water Resource Control Board, Santa Ana Regional Water Quality Control Board, Porter-Cologne Water Quality Control Act (Wat. Code Section 13000 et seq.), Title 33 U.S.C. Section 1251 et seq. (Clean Water Act), any applicable state or federal regulations promulgated thereto, and any related administrative orders or permits issued in connection therewith.

PPP HYD-6 The project will be constructed and operated in accordance with the Riverside County MS4 Permit (Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-

0100). The MS4 Permit requires new development and redevelopment projects to adopt a water quality management plan to:

- Control contaminants into storm drain systems
- Educate the public about stormwater impacts
- Detect and eliminate illicit discharges
- Control runoff from construction sites
- Implement BMPs and site-specific runoff controls and treatments

Project Design Features

PDF HYD-1 The proposed project will implement low-impact development strategies that will include: bioretention facilities or rain gardens (lined with underdrains as necessary), extended detention basins, lined grass swales and channels, vegetated filter strips, and rainwater harvesting and re-use.

PDF HYD-2 The onsite detention basins would be designed to ensure that post-development flows do not exceed the capacity of the existing storm drainage infrastructure systems. The proposed project would also connect to the Belltown Market Street and Agua Mansa Brown Avenue systems at the same locations that are currently being utilized, in the southwest and northeast corners of the site, respectively.

5.17.3.5 ENVIRONMENTAL IMPACTS

The installation of storm drainage facilities as proposed by the project would result in physical impacts to the surface and subsurface of the project site. These impacts are considered to be part of the project's construction phase and are evaluated throughout this DEIR. In instances where impacts have been identified for the project's construction phase, Plans, Policies, Programs (PPP), Project Design Features (PDF), or Mitigation Measures (MM) are required to reduce impacts to less-than-significant levels. Accordingly, additional measures beyond those identified throughout this DEIR would not be required.

Impact SD-1 Would the project require or result in the relocation or construction of new or expanded stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects?

Development of the proposed project would alter the onsite drainage patterns with the development of the buildings, roadways, and associated site improvements. The project would also alter the percentage of tributary area to each of the two systems (Belltown Market Street and Agua Mansa Brown Avenue systems), with more area being directed to the Belltown Market Street system.

The proposed project would include onsite stormwater detention BMPs designed in accordance with the RCFC and NPDES requirements. The surface runoff would be conveyed from the project to the BMPs, which then discharge into the existing storm drainage infrastructure and ultimately to the Santa Ana River. The proposed

project would connect to the Belltown Market Street system at the southwest corner of the site, which is the terminus of the RCFC "Line A" at the Rubidoux Boulevard and Union Pacific Railroad intersection, and would connect to the Agua Mansa Brown Avenue system at the northeast corner of the site, which is the upstream end of the system at a recently constructed (2005) concrete drop inlet. The surface runoff from the Jurupa Mountains, west of the site, would continue to pass through the project site. Although the type of drainage conveyance onsite would change, the direction of drainage would remain similar to existing conditions.

The proposed project would create excess runoff of 361,548 cubic feet to the Belltown Market tributary and 82,764 cubic feet to the Agua Mansa Brown tributary. As depicted in Figure 5.8-1 a bioretention basin south of building 5, and five extended detention basins have been placed throughout the Belltown Market tributary and are capable of capturing and storing approximately 616,080 cubic feet. Furthermore, the stormwater bioretention basin east of building 1 is capable of handling 86,320 cubic feet of runoff from the Agua Mansa Brown tributary. Thus, all additional runoff created by post-project conditions at the project's Industrial and Business Parks are mitigated by the proposed BMPs.

The Open Space District would leave the site undeveloped, resulting in no changes in current use. Drainage patterns in this portion of the site would not change, and no additional runoff would be generated.

Furthermore, the proposed project would extend the RCFC Line "A" north into and through the Industrial Park, then back to Rubidoux (north of CalPortland Building) to capture existing stormwater flow from Rubidoux. The line will be an 84-inch-diameter concrete pipe that would also be used to convey on-site stormwater into the RCFC system. The impacts of the onsite infrastructure improvement are part of the project's construction phase and are evaluated throughout this DEIR. Therefore, the overall impact would be less than significant.

Level of Significance before Mitigation: With implementation of PPP HYD-1, PPP HYD-3, PPP HYD-4, PPP HYD-6, PDF HYD-1, and PDF HYD-2, Impact SD-1 would be less than significant.

5.17.3.6 CUMULATIVE IMPACTS

Cumulative projects in the Upper Santa Ana River basin hydrologic units could increase impervious areas and thus increase local runoff rates at those project sites. However, other projects in the region would be required to capture and infiltrate runoff from two-year storms, and many other projects in the region would be required to limit post-development runoff discharges to no greater than pre-development runoff rates, in accordance with the NPDES MS4 permit. Thus, no significant cumulative drainage impact would occur, and project drainage impacts would not be cumulatively considerable.

5.17.3.7 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of PPP HYD-1, PPP HYD-3, PPP HYD-4, PPP HYD-6, PDF HYD-1, and PDF HYD-2, Impact SD-1 would be less then significant.

5.17.3.8 MITIGATION MEASURES

No mitigation measures are required.

5.17.3.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.17.4 Solid Waste

5.17.4.1 ENVIRONMENTAL SETTING

Regulatory Background

Federal

Resource Conservation and Recovery Act of 1976

The Resource Conservation and Recovery Act of 1976 (Title 40 of the Code of Federal Regulations), Part 258, contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design (liners, leachate collection, run-off control, etc.), groundwater monitoring, and closure of landfills.

State

California Green Building Standards Code

Section 5.408 (Construction Waste Reduction, Disposal, and Recycling) of the California Green Building Standards Code (CALGreen; Title 24, California Code of Regulations, Part 11) requires that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. CALGreen is updated on a three-year cycle; the 2016 CALGreen took effect on January 1, 2017.

Assembly Bill 341

Assembly Bill 341 (Chapter 476, Statutes of 2011) increased the statewide solid waste diversion goal to 75 percent by 2020. The law also mandates recycling for commercial and multifamily residential land uses.

Assembly Bill 939

Assembly Bill (AB) 939 (California Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.) established an integrated waste-management system that focused on source reduction, recycling, composting, and land disposal of waste. AB 939 required every California city and county to divert 50 percent of its waste from landfills by the year 2000. Compliance with AB 939 is measured in part by comparing solid waste disposal rates for a jurisdiction with target disposal rates; actual rates at or below target rates are consistent with AB 939. AB 939 also requires California counties to show 15 years of disposal capacity for all jurisdictions in the county or show a plan to transform or divert its waste.

Assembly Bill 1826

AB 1826 requires businesses that generate eight cubic yards or more of organic waste per week to arrange for organic waste recycling services in order to divert organic waste from disposal.

Regional

Riverside Countywide Integrated Waste Management Plan

The Countywide Integrated Waste Management Plan (CIWMP), required under AB 939, was approved in 1996 for Riverside County and 25 incorporated cities in the county.[2] The Countywide Summary Plan in the CIWMP document contains goals and policies as well as a summary of integrated waste management issues faced by the county and its cities. The Summary Plan summarizes the steps needed to cooperatively implement programs among the County's jurisdictions to meet and maintain the 50 percent diversion mandates. The Countywide Siting Element, also in the CIWMP document, demonstrates that there are at least 15 years of remaining disposal capacity to serve all the jurisdictions in the county. Disposal capacity projections are updated annually as part of the state annual reporting process to ensure there is always at least 15 years of remaining disposal capacity (RCDWR 2017).

Existing Conditions

Solid Waste Collection

Burrtec provides solid waste collection services to the City and the project site through the RCSD. Burrtec Inc. is the franchise waste hauler for the City of Jurupa Valley. Solid waste collected by Burrtec is hauled to the Robert A. Nelson Transfer Station/Material Recovery Facility (Nelson MRF) for processing. The Nelson MRF is at 1830 Agua Mansa Road, adjacent to the proposed project site. Active operations at the Nelson MRF include a municipal solid waste transfer station/material recovery facility and composting/organics processing. The maximum permitted tons per day (tpd) are 4,000 tpd for all waste material types received onsite (municipal solid waste, green and woody waste, recyclables, construction and demolition debris, etc.) (Merlan 2017).

After processing through the Nelson MRF, the residual solid waste is transferred to landfills. Currently, the project site is served primarily by the Badlands Sanitary and Lamb Canyon landfills, but may also be served by the El Sobrante Landfill. Badlands and Lamb Canyon landfills are owned and operated by the Riverside County Department of Waste Resources, and the El Sobrante Landfill is owned and operated by USA Waste of California, a subsidiary of Waste Management, Inc.

According to 2015 data (most recent data available) from the California Department of Resources Recycling and Recovery (CalRecycle), 96 percent of solid waste collected from Jurupa Valley was taken to the Badlands Sanitary and El Sobrante landfills (CalRecycle 2015a). However, all three landfill facilities are described in Table 5.17-3, *Landfills Serving Jurupa Valley*.

[2] Some present-day incorporated cities in Riverside County, including Jurupa Valley, had not been incorporated by 1996. Therefore, more than 25 cities are currently participating in the CIWMP.

Table 5.17-3 Landfills Serving Jurupa Valley

Landfill	Current Remaining Capacity (as of 1/2017)	Total Disposal Capacity (cubic yards)	Maximum Permitted Throughput (tons per day)	Average Daily Disposal (2016)	Estimated Closing Date
Badlands Sanitary Landfill 31125 Ironwood Avenue Moreno Valley, CA 92555l	7.7 million tons	34.4 million	4,500	2,527 tons	1/1/2022
El Sobrante Landfill 10910 Dawson Canyon Road Corona, CA 91719	56.4 million tons	209.9 million	5,000	2,760 tons	1/1/2045
Lamb Canyon Landfill 16411 State Hwy 79 Beaumont, CA 92223	10.5 million tons	38.9 million	5,000	1,667 tons	4/1/2029

Sources: Merlan 2017.

Collectively, Badlands, Lamb Canyon, and El Sobrante landfills have a remaining disposal capacity of 74.6 million tons for in-county waste and have disposal capacities beyond the 15-year horizon, as required by AB 939. Furthermore, all three sites have expansion potential to accommodate solid waste associated with future development in the county (Merlan 2017).

Compliance with AB 939 is measured in part by actual disposal rates compared to target rates for residents and employees, respectively; actual disposal rates at or below target rates are consistent with AB 939. Target disposal rates for Jurupa Valley are 5.3 pounds per day (ppd) per resident and 15.4 ppd per employee. Actual disposal rates in 2015 were 3.8 ppd per resident and 12.7 ppd per employee (CalRecycle 2015b). Thus, solid waste diversion in Jurupa Valley is consistent with AB 939.

Additionally, as required by the Solid Waste Facility Capacity Component element of the California Integrated Waste Management Plan (CWIMP) per AB 939, the three landfills in Western Riverside County provide more than 15 years of waste disposal capacity to the entire County, in compliance with State requirements to have 15 years of designated landfill capacity (Merlan 2017).

Solid Waste Generation

The Riverside Cement plant and facility are closed; therefore, no solid waste is currently generated onsite.

5.17.4.2 NOTICE OF PREPARATION / SCOPING COMMENTS

An NOP for the proposed project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of utilities and service systems.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.17.4.3 THRESHOLDS OF SIGNIFICANCE

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to utilities and service systems are based on criteria in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

SW-1 Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

SW-2 Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

5.17.4.4 APPLICABLE POLICIES AND DESIGN FEATURES

Plans, Policies, and Programs

PPP SW-1 The project shall comply with Section 4.408 of the 2016 California Green Building Code Standards, which requires new development projects to submit and implement a construction waste management plan in order to reduce the amount of construction waste transported to landfills. Prior to the issuance of building permits, the City of Jurupa Valley shall confirm that a sufficient plan has been submitted, and prior to final building inspections, the City of Jurupa shall review and verify the contractor's documentation that confirms the volumes and types of wastes that were diverted from landfill disposal, in accordance with the approved construction waste management plan.

PPP SW-2 The project will store and collect recyclable materials in compliance with AB 341. Green waste will be handled in accordance with AB 1826.

PPP SW-3 The project will abide by the requirements of Riverside Countywide Integrated Waste Management Plan.

Project Design Features

There are no project design features that apply to solid waste.

5.17.4.5 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are considered potentially significant impacts.

Impact SW-1 Threshold: Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Construction Phase

Prior to construction of the proposed industrial, business park, and/or retail buildings, the existing Riverside Cement Plant would need to be demolished and its debris moved offsite to appropriate landfills. The project applicant anticipates approximately 147,960 tons of demolition debris, as detailed in Table 5.17-4. Of these, 135,300 tons would be reused on-site, and 12,660 tons of material would be disposed of off-site.

Table 5.17-4 Estimated Demolition Debris

Description	Quantity (tons)	Reused On-Site (tons)	Disposed Off-Site (tons)
Mixed Demolition Debris (wood, drywall, roofing, insulation, glass)	3,000	0	3,000
Ferrous Scrap Metals	6,500	0	6,500
Nonferrous Scrap Metals	160	0	160
Green Waste	300	300	0
Concrete/Asphalt/Masonry Debris	138,000	135,000	3,000
TOTAL	**147,960**	**135,300**	**12,660**

Source: Urban Crossroads 2019.

The demolition of the existing Riverside Cement Plant may cause a strain on existing landfill capacities if waste exceeds the daily permitted capacity for any of the three landfills serving the City of Jurupa Valley. Collectively, the three landfills have a daily permitted capacity of 14,500 tpd, with an average daily in-county disposal of 6,954 tpd, as reported in 2016 (see Table 5.17-3), and a residual capacity of 7,546 tpd. The 12,660 tons of demolition waste that would be disposed of in landfills would occur over a period of approximately four months and would not exceed the daily residual capacity of the landfills.

Hazardous materials are not accepted at Riverside County landfills. Hazardous waste materials include paint, batteries, oil, asbestos, and solvents. In compliance with federal, state, and local regulations and ordinances, any hazardous waste generated in association with the project is required to be disposed of at a permitted hazardous waste disposal facility.

Waste generated during the construction phase of the proposed project would primarily consist of discarded materials from the construction of streets, common areas, infrastructure installation, and other project-related construction activities. The California Green Building Standards Code ("CALGreen'), requires all newly constructed buildings to prepare a Waste Management Plan and divert construction waste through recycling and source reduction methods. The County of San Bernardino, Department of Public Works, Solid Waste Management Division reviews and approves all new construction projects required to submit a Waste Management Plan. Mandatory compliance with CALGreen solid waste requirements will ensure that construction waste impacts are less than significant.

Operational Phase

Buildout of the proposed project under Alternative 1 (No Retail) and Alternative 2 (Retail Overlay) is estimated to generate approximately 61,313 and 61,163 ppd of solid waste, respectively, as shown in Table 5.17-5.

Table 5.17-5 Estimated Solid Waste Generation

Land Use	Buildout	Solid Waste Generation Rate (ppd)	Solid Waste Generation (ppd)
Alternative 1 (No Retail)			
Industrial Park	4,216,000 SF	1.42 per 100 SF	59,867
Business Park	200,000 SF	0.006 per SF	1,200
Research and Development	41,000 SF[1]	0.006 per SF	246
Open Space	70.9 acres	0	0
		TOTAL – Alternative 1	**61,313**
Alternative 2 (Retail Overlay)			
Industrial Park	4,216,000 SF	1.42 per 100 SF	59,867
Business Park	150,000 SF	0.006 per SF	900
Retail	25,000 SF	0.006 per SF	150
Research and Development	41,000 SF[1]	0.006 per SF	246
Open Space	70.9 acres	0	0
		TOTAL – Alternative 2	**61,163**

Source: CalRecycle 2017c.
Notes: SF = square feet; ppd = pounds per day
[1] It should be noted that only 41,000 SF of the 64,000 SF for research and development are included in this analysis since 23,000 SF already exists on site and is not associated with additional solid waste generation.

As detailed in Table 5.17-3, the three landfills serving Jurupa Valley have capacity residual capacity of 7,546 tpd. Using the development option with more projected solid waste generation—Alternative 1—the estimated 61,313 ppd or 30.7 tons per day would be adequately served by the Badlands Sanitary, Lamb Canyon, or El Sobrante landfill.

Additionally, Assembly Bill 341 requires all businesses in California that generate four cubic yards or more of waste per week to implement one of the following actions in order to reuse, recycle, compost, or otherwise divert commercial solid waste from disposal:

- Source separate recyclable and/or compostable material from solid waste and donate or self-haul the material to recycling facilities.
- Subscribe to a recycling service with their waste hauler in the service area.
- Provide recycling service to their tenants (if commercial or multifamily complex).
- Demonstrate compliance with the requirements of California Code of Regulations Title 14.

Further, AB 1826 requires businesses that generate eight cubic yards or more of organic waste per week to arrange for organic waste recycling services. Businesses subject to AB 1826 are required to implement one of the following actions in order to divert organic waste from disposal:

- Source separate organic material from all other recyclables and donate or self-haul to a permitted organic waste processing facility.
- Enter into a contract or work agreement with gardening or landscaping service provider or refuse hauler to ensure the waste generated from those services meet the requirements of AB 1826.

As part of the plan check process, the City of Jurupa Valley Planning Department would review the applicant's plans related to refuse and recyclables collection and loading areas. The plan is required to conform to the Riverside County Department of Waste Resources' Design Guidelines for Refuse and Recyclables Collection and Loading Areas per the California Solid Waste Reuse and Recycling Act of 1991, and shall show the location of and access to the collection area for refuse and recyclable materials.

Overall, sufficient landfill capacity is available in the region for the estimated solid waste generated by the proposed project during operations, and project development would not require an expansion of landfill capacity. Impacts would be less than significant for the operational phase.

Level of Significance before Mitigation: With implementation of PPP SW-1, PPP SW-2, and PPP SW-3, Impact SW-1 would still be less than significant.

Impact SW-2 Threshold: Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The Resource Conservation and Recovery Act of 1976 (United States Code Title 42, §§ 6901 et seq.) governs the creation, storage, transport, and disposal of hazardous wastes and operators of hazardous waste disposal sites.

AB 939, the Integrated Waste Management Act of 1989 (California Public Resources Code §§ 40000 et seq.) requires all local governments to develop source reduction, reuse, recycling, and composting programs to reduce tonnage of solid waste going to landfills. Cities must divert at least 50 percent of their solid waste generation into recycling. Compliance with AB 939 is measured for each jurisdiction, in part, as actual disposal amounts compared to target disposal amounts. Actual disposal amounts at or below target amounts comply with AB 939.

Target disposal rates for Jurupa Valley are 5.3 ppd per resident and 15.4 ppd per employee. Actual disposal rates in 2015 were 3.8 ppd per resident and 12.7 ppd per employee (CalRecycle 2015). Thus, solid waste diversion in Jurupa Valley is consistent with AB 939.

Level of Significance before Mitigation: With implementation of PPP SW-1, PPP SW-2, and PPP SW-3, Impact SW-2 would be less than significant.

5.17.4.6 CUMULATIVE IMPACTS

The area considered for cumulative impacts is the Western Riverside County area serviced by the Badlands Sanitary, Lamb Canyon, and El Sobrante landfills. Collectively, Badlands, Lamb Canyon, and El Sobrante landfills have a remaining disposal capacity of 74.6 million tons for in-county waste and have disposal capacities beyond the 15-year horizon, as required by AB 939. Furthermore, all three sites have expansion potential to accommodate solid waste associated with future development in the county (Merlan 2017). Thus, there is sufficient landfill capacity in the region for the cumulative increase in solid waste disposal. Cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

5.17.4.7 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of PPP SW-1, PPP SW-2, and PPP SW-3, Impacts SW-1 and SW-2 would be less than significant.

Without mitigation, the following impact would be **potentially significant**:

5.17.4.8 MITIGATION MEASURES

No mitigation measures are required.

5.17.4.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Upon implementation of Mitigation Measure U-1, impacts would be less than significant.

5.17.5 Other Utilities (Electric, Natural Gas, Telecommunications)

5.17.5.1 ENVIRONMENTAL SETTING

Regulatory Background

State

Renewables Portfolio Standard

The California Renewables Portfolio Standard (RPS) was established in 2002 under SB 1078 and was amended in 2006 and 2011. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. The California Public Utilities Commission is required to provide quarterly progress reports on progress toward RPS goals. This has accelerated the development of renewable energy projects throughout the state. Based on the third quarter 2014 report, the three largest retail energy utilities provided an average of 20.9 percent of its supplies from renewable energy sources. Since 2003, 8,248 megawatts (MW) of renewable energy projects have started operations. SB 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Senate Bill 100 (Chapter 312, Statutes of 2018)

On September 10, 2018, Governor Brown signed SB 100, which raises California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Title 24, Part 6, Building Energy Conservation Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977 and most recently revised in 2016 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the California Energy Commission adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017.

The 2016 Standards continue to improve upon the previous 2013 Standards for new construction of and additions and alterations to residential and nonresidential buildings. Under the 2016 Standards, residential and nonresidential buildings are 28 and 5 percent more energy efficient than the 2013 Standards, respectively (CEC 2015a). Buildings that are constructed in accordance with the 2013 Building Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the prior 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features. While the 2016 standards do not achieve zero net energy, they do get very close to the state's goal and make important steps toward changing residential building practices in California. The 2019 standards will take the final step to achieve zero net energy for newly constructed residential buildings throughout California (CEC 2015).

Title 20, California Code of Regulations, Sections 1601 et seq.: Appliance Efficiency Regulations

The 2012 Appliance Efficiency Regulations took effect on February 13, 2013. The regulations include standards for federally and nonfederally regulated appliances.

Title 24, Part 11, Green Building Standards

CALGreen (24 CCR Part 11) is a code with mandatory requirements for new residential and nonresidential buildings throughout California. CALGreen is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction. CALGreen contains requirements for construction site selection; storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building

condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency (CBSC 2015).

City of Jurupa Valley General Plan Policies

The specific policies outlined in the City's General Plan that are related to Electricity, Natural Gas, and Telecommunications and that apply to the proposed project are listed in Table 5.9-2, *City of Jurupa Valley General Plan Consistency Analysis*.

Existing Conditions

Electricity

The project site is in the service area of Southern California Edison (SCE). Total mid-electricity[3] consumption in SCE's service area was 106,080 gigawatt-hour (GWh) in 2015 and is forecast to increase to 118,803 GWh in 2027 (CEC 2016).

Natural Gas

The Southern California Gas Company (SCGC) provides natural gas to the City of Jurupa Valley and the project site. SCGC's service area spans much of the southern half of California, from Imperial County on the southeast to San Luis Obispo County on the northwest, to part of Fresno County on the north, to Riverside County and most of San Bernardino County on the east (CEC 2016). Total natural gas supplies available to SCGC in the year 2019 is estimated at 3,385 million cubic feet per day (MMCF/day). Supplies are forecasted to remain constant at 3,775 MMCF/day from 2020 through 2035. Total natural gas consumption in SCGC's service area is forecast to decline slightly from 2,591 MMCF/day in 2019 to 2,313 MMCF/day in 2035 (CGEU 2018).

Renewable Energy

The California Energy Commission's December 2016 Renewable Energy Tracking Progress report shows that Riverside County (incorporated and unincorporated areas) had 74 wholesale renewable energy projects on-line with a total generating capacity of 2,195 MW In addition, there were over 45,000 distributed generation systems, like rooftop solar, capable of providing 357 MW of capacity, installed at homes and buildings in the county. Also, there are 14 solar PV projects with a combined capacity of 1,508 MW with environmental permits in the county that could become operational in the future (CEC 2017).

SCE obtains electricity from conventional and renewable sources. In 2017, 34 percent of SCE's electricity was generated from natural gas; 4 percent from coal; 9 percent from nuclear power; 29 percent from renewable

[3] CEC forecast include three scenarios: a high energy demand case, a low energy demand case, and a mid-energy demand case. The high energy demand case incorporates relatively high economic/demographic growth, relatively low electricity and natural gas rates, and relatively low efficiency program and self-generation impacts. The low energy demand case includes lower economic/demographic growth, higher assumed rates, and higher efficiency program and self-generation impacts. The mid case uses input assumptions at levels between the high and low cases.

energy sources; 15 percent from large hydroelectric generators; and 9 percent from unspecified sources (SCE 2018). SCE has met the requirements of SB 100 three years early by achieving the 2020 renewable energy target in 2017.

Telecommunications

Communication services are offered regionally by franchised telecommunications providers, such as AT&T and Spectrum.

5.17.5.2 NOTICE OF PREPARATION / SCOPING COMMENTS

An NOP for the proposed project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of utilities and service systems.

In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.17.5.3 THRESHOLDS OF SIGNIFICANCE

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to utilities and service systems are based on criteria in Appendix G of the CEQA Guidelines. Although not specifically in Appendix G, the following additional threshold is also addressed in the impact analysis: a project would normally have a significant effect on the environment if the project:

OU-1 Require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects.

OU-2 Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

5.17.5.4 APPLICABLE POLICIES AND DESIGN FEATURES

Plans, Policies, and Programs

PPP OU-1 New buildings are required to achieve the current California Building Energy and Efficiency Standards (Title 24, Part 6) and California Green Building Standards Code (CALGreen) (Title 24, Part 11). The 2016 Building and Energy Efficiency Standards are effective starting on January 1, 2017. The Building Energy and Efficiency Standards and CALGreen are updated tri-annually, with a goal to achieve net zero energy for residential buildings by 2020 and nonresidential buildings by 2030.

PPP OU-2 All new appliances would comply with the 2012 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608).

Project Design Feature

PDF OU-1 The Specific Plan includes sustainable design strategies that integrate principles of environmental stewardship into building/site design and construction.

5.17.5.5 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are considered potentially significant impacts.

Impact OU-1 Threshold: Would the project require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?

Electricity

Project operation is expected to use approximately 12.6 million kilowatt hours (kWh) annually for Alternative 1 and Alternative 2 (Urban Crossroads 2018).[4]

Total mid-electricity consumption in SCE's service area is forecast to increase by approximately 12,723 GWh between 2015 and 2027 (CEC 2016). SCE forecasts that it will have sufficient electricity supplies to meet demands in its service area; and the electricity demand due to the project is within the forecast increase in SCE's electricity demands. Project development would not require SCE to obtain new or expanded electricity supplies, and impacts would be less than significant.

Natural Gas

Project operation is estimated to use about 17.1 million kilo British Thermal Units (kBTU) per year for Alternative 1, and 11.2 kBTU per year for Alternative 2 (Urban Crossroads 2018).[5]

SCGC's residual supplies were forecast to remain constant at 3,775 MMCF/day from 2020 through 2035. Total natural gas consumption in SCGC's service area is forecast to decline slightly from 2,591 MMCF/day in 2019 to 2,313 MMCF/day in 2035 (CGEU 2018). SCGC forecasts that it will have sufficient natural gas supplies to meet project gas demands, and project development would not require SCGC to obtain new or expanded gas supplies. Impacts would be less than significant.

Telecommunications

Infrastructure supporting telecommunications services will be provided and installed onsite. Concealed wireless telecommunications facilities will be installed pursuant to the requirements of the Jurupa Valley Municipal Code. Installation of telecommunication infrastructure would result in physical impacts to the surface and subsurface of the project site. These impacts are part of the project's construction phase and are evaluated

[4] It should be noted that the Air Quality Analysis Report is based on a square footage of 170,000 of light industrial use for Alternative 2, which yields a more conservative electricity demand.

[5] It should be noted that the Air Quality Analysis Report is based on a square footage of 170,000 of light industrial use for Alternative 2 which yields a more conservative natural gas demand.

throughout this DEIR. Furthermore, a number of franchised telecommunications providers are available in the region and project development would not require providers to relocate or construct new expanded infrastructure. Impacts would be less than significant.

Level of Significance before Mitigation: With implementation of PPP OU-1, Impact OU-1 would be less than significant.

Impact OU-2 Threshold: Would the proposed project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Development within the Agua Mansa Commerce Park will incorporate sustainable design strategies that integrate principles of environmental stewardship into building/site design and construction. All new construction, building additions, and alterations:

- Must conform with the State of California's Green Building Code (CALGreen) or the Building Code in effect at the time of permit issuance. LEED-equivalent buildings are encouraged.
- Development projects must be designed and constructed to consist of energy-efficient buildings to reduce air, water, and land pollution and the environmental impacts associated with energy production and consumption.
- Passive design techniques must be used to improve building energy performance through use of skylights, building orientation, landscaping, natural ventilation, natural daylighting, energy efficient light fixtures (e.g., fluorescent and LED lightings), and paint colors.
- Shade structures and trees that produce large canopies must be used to reduce heat island effects. In addition, roof and paving materials should be utilized that possess a high level of solar reflectivity.
- Recycled and other environmentally friendly building materials should be used to the maximum extent practicable.

Furthermore, the net increase in power demand associated with the proposed project is anticipated to be within the service capabilities of SCE and would not obstruct SCE's ability to implement the standards set by SB 100. The new structures would also be designed in accordance with the 2016 Building and Energy Efficiency Standards (California Code of Regulations, Title 24, Part 6) and the 2016 CALGreen (California Code of Regulations, Title 24, Part 11). All appliances would comply with the 2012 Appliance Efficiency Regulations. Therefore, project development would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

Level of Significance before Mitigation: With implementation of PPP OU-1, PPP OU-2 and PDF OU-1, Impact OU-2 would be less than significant.

5.17.5.6 CUMULATIVE IMPACTS

The area considered for cumulative impacts to electricity supplies and facilities is SCE's service area, and the area considered for natural gas is SCGC's service area. Forecast total electricity and natural gas supplies for the service areas are identified above. Other projects would increase electricity and natural gas demands.

Electricity demand forecasts are based on climate zones; economic and demographic growth forecasts from Moody's Analytics, IHS Global Insight, and the California Department of Finance; forecast electricity rates; effects of reasonably foreseeable energy efficiency and energy conservation efforts; anticipated partial electrification of portions of the transportation sector, including increasing adoption of light-duty plug-in electric vehicles; demand response measures, such as electricity rates that increase during high-demand times of day; and effects of climate change (CEC 2016).

Natural gas demand forecasts are based on economic outlook; California Public Utilities Commission–mandated energy efficiency standards and programs; renewable electricity goals; and conservation savings linked to Advanced Metering Infrastructure (CGEU 2016).

It is anticipated that electricity and natural gas demands by most other projects would be accounted for in the above-referenced demand forecasts. Other projects would be subject to independent CEQA review, including analysis of impacts to electricity and natural gas supplies. Implementation of all feasible mitigation measures would be required for any significant impacts identified. Cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

5.17.5.7 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

With implementation of PPP OU-1, Impact OU-1 would be less than significant.

With implementation of PPP OU-1, PPP OU-2 and PDF OU-1, Impact OU-2 would be less than significant.

5.17.5.8 MITIGATION MEASURES

No mitigation measures are required.

5.17.5.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.17.6 References

Appel, Steven W. (assistant general manager/district engineer). 2017, September 20. Service Provider Questionnaire Response. Rubidoux Community Services District.

California Department of Resources Recycling and Recovery (CalRecycle). 2015a. Jurisdiction Disposal by Facility: Jurupa Valley. https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility.

———. 2015b. Per Capita Disposal Rates Trends: Jurupa Valley. http://www.calrecycle.ca.gov/LGCentral/Reports/Viewer.aspx?P=JurisdictionID%3d628%26ReportName%3dDPGraphPopEmpNumbers%26ShowParameters%3dfalse%26AllowNullParameters%3dFalse.

———. 2017a. Facility/Site Summary Details: Badlands Sanitary Landfill (33-AA-0006). http://www.calrecycle.ca.gov/SWFacilities/Directory/33-AA-0006/Detail/.

———. 2017b. Facility/Site Summary Details: El Sobrante Landfill (33-AA-0217). http://www.calrecycle.ca.gov/SWFacilities/Directory/33-AA-0217/Detail/.

———. 2017c. Estimated Solid Waste Generation Rates. https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates.

California Energy Commission (CEC). 2016, December 5. California Energy Demand Updated Forecast, 2017-2027. https://efiling.energy.ca.gov/getdocument.aspx?tn=214635.

———. 2017, March, Riverside County Renewable Energy Fact Sheet. https://www.drecp.org/counties/factsheets/Riverside_county.pdf.

California Gas and Electric Utilities (CGEU). 2018. 2018 California Gas Report. https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf.

California Legislative Information (CLI). 2016, September 24. Senate Bill No. 1262: Chapter 594. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB1262.

Dudek. 2005, February. Riverside LAFCO Water & Wastewater Municipal Service Review. https://lafco.org/wp-content/uploads/documents/archives/2.WesternRiverside.MSR.Final.pdf.

Merlan, Jose L. (urban/regional planner). 2017, September 18. Service Provider Questionnaire Response. Riverside County Department of Waste Resources.

Riverside, City of. 2015. Riverside Water Quality Control Plant. https://riversideca.gov/publicworks/sewer/wqcp.asp.

Riverside County Department of Waste Resources (RCDWR). 2017. Countywide Integrated Waste Management Plan. http://www.rcwaste.org/business/planning/ciwmp.

Riverside Local Agency Information Commission (LAFCO). 2014, December. City of Jurupa Valley Municipal Service Review. https://lafco.org/wp-content/uploads/documents/archives/Jurupa_Valley_MSR_-_Final.pdf.

Rubidoux Community Services District (RCSD). 2016a, July. Urban Water Management Plan. https://www.rcsd.org/files/1c50eaec3/RCSD-FINAL-DRAFT-2015-UWMP-%2807-20-2016%29.pdf.

———. 2016b, December. Water Supply Assessment for the Aqua Mansa Commerce Park. .

Southern California Edison (SCE). 2018, July. 2017 Power Content Label. https://www.sce.com/sites/default/files/inline-files/2017PCL_0.pdf.

Urban Crossroads. 2019, January 28. Agua Mansa Commerce Park Specific Plan Air Quality Impact Analysis.

Western San Bernardino Watermaster (Western). August, 2017. Annual Report of the Western San Bernardino Watermaster. https://www.wmwd.com/DocumentCenter/View/3910/WSB-Annual-Report-2017.

6. Significant Unavoidable Adverse Impacts

Pursuant to Section 15126.2(b) of the CEQA Guidelines, this EIR considers the significant environmental effects which cannot be avoided if the proposed project is implemented. At the end of Chapter 1, *Executive Summary*, is a table that summarizes the impacts, mitigation measures, and levels of significance before and after mitigation. Mitigation measures would reduce the level of impact, but the following impacts would remain significant, unavoidable, and adverse after mitigation measures are applied:

6.1 AIR QUALITY

- **Impact AQ-1:** The project has the potential to result in or cause National AAQS or California AAQS violations. Construction-source emissions would exceed the applicable SCAQMD regional thresholds for NO_X. Operational-source emissions would exceed the applicable SCAQMD regional thresholds for NO_X, VOCs, and PM_{10}. Additionally, the project proposes a General Plan Amendment to industrial warehousing, and the amendment is not in the current AQMP. Therefore, the project would have the potential to conflict with the AQMP, and impacts are considered significant and unavoidable.

- **Impact AQ-2:** After implementation of MM AQ-1 through AQ-3, project construction-source emissions would still potentially exceed the applicable SCAQMD thresholds for VOCs and NO_X due to the potential of construction overlapping. No feasible mitigation measures exist that would reduce these emissions to levels that are less than significant. Moreover, the majority of construction-source NO_X emissions would be generated from the hauling of soil during grading activities by trucks that cannot be mitigated. Since the City does not have regulatory authority to control tailpipe emissions, no feasible mitigation measures exist that would reduce NO_X emissions to levels that are less than significant; thus, these emissions are considered significant and unavoidable.

  Furthermore, even with implementation of MM AQ-4 through MM AQ-6 and PDF-AQ-1 through PDF-AQ-4, project operational emissions would still exceed regional thresholds of significance established by the SCAQMD for emissions of VOCs, NO_X, and PM_{10}. It is important to note that the majority of VOC emissions are derived from consumer products. For analytical purposes, consumer products include cleaning supplies, aerosols, and other industrial consumer products. Therefore, the project applicant cannot meaningfully control the use of consumer products by future building users via mitigation; thus, VOC emissions are considered significant and unavoidable, as no feasible mitigation measure exists that would reduce this impact to less than significant levels. Additionally, approximately 87 percent of all operational-source emissions (by weight) would be generated by project mobile sources (traffic). Neither the project applicant nor the lead agency (City of Jurupa Valley) can substantively or materially reduce project mobile-source emissions beyond the recommended mitigation measures. Therefore, project operational-source VOCs, NO_X, and PM_{10} emissions exceedances of applicable SCAQMD regional thresholds would be considered significant and unavoidable.

6.2 GREENHOUSE GAS EMISSIONS

- **Impact GHG-1.** Development in accordance with the proposed project would generate GHG emissions in exceedance of SCAQMD's threshold for industrial uses. Implementation of project design features PDF-GHG-1 through PDF-GHG-8 as well as PDF-AQ-1 through PDF-AQ-2 would reduce GHG emissions to the extent feasible. Specifically, PDF-GHG-2 would require use of 2010 or newer trucks. Implementation of air quality Mitigation Measures AQ-1 through AQ-6 would also help to reduce GHG emissions. No feasible mitigation measures exist that would reduce these emissions to levels that are less than significant. Impact GHG-1 would remain significant and unavoidable.

- **Impact GHG-2.** The project would not conflict with or impede implementation of applicable plans, policies, and regulations adopted to reduce GHG emissions. While the project is consistent with applicable Scoping Plan and WRCOG Climate Action Plan goals and policies and incorporates project design features that would further minimize GHG emissions, it would exceed the numeric threshold and result in a cumulatively considerable impact with respect to GHG emissions (see Impact GHG-1 above). Impact GHG-2 is significant and unavoidable.

6.3 TRANSPORTATION AND TRAFFIC

- **Impact T-1: Existing Plus Project Scenario.** The proposed project is forecast to result in less than significant traffic impacts under the "Existing Plus Project" conditions at the study intersections and segments with improvements identified in PDF T-1 through PDF T-8 and Mitigation Measures T-1 through T-16. However, several of the intersection improvements are not fully funded and/or are under another agency's jurisdiction. Therefore, several of the study intersections are projected to operate at an unacceptable level of service (LOS E or worse) during the morning and evening peak hours, and Impact T-1 would remain significant and unavoidable on a project-specific and cumulative basis.

- **Impact T-1: Near-Term (2020) Project Scenario.** The proposed project is forecast to result in less than significant traffic impacts under the "Near Term Year 2020" conditions at the study intersections and segments with improvements identified in PDF T-1 through PDF T-8 and Mitigation Measures T-17 through T-35. However, several of the intersection improvements are not fully funded and/or are under another agency's jurisdiction. Therefore, several of the study intersections are projected to operate at an unacceptable level of service (LOS E or worse) during the morning and evening peak hours, and Impact T-1 would remain significant and unavoidable on a project-specific and cumulative basis.

- **Impact T-1: Horizon Year (2035) Project Scenario.** The proposed project is forecast to result in less than significant traffic impacts under the "Horizon Year 2035" conditions at the study intersections and segments with improvements identified in PDF T-1 through PDF T-8 and Mitigation Measures T-36 through T-50. However, several of the intersection improvements are not fully funded and/or are under another agency's jurisdiction. Therefore, several of the study intersections are projected to operate at an unacceptable level of service (LOS E or worse) during the morning and evening peak hours, and Impact T-1 would remain significant and unavoidable on a project-specific and cumulative basis.

- **Impact T-1.** Impacts to Riverside County and San Bernardino County CMP segments were analyzed in accordance with CMP requirements and LOS standards as identified in Impact T-1. As identified above, the proposed project would result in significant and unavoidable impacts to intersections and segments, including segments that are in the Riverside County and San Bernardino County CMP. For Caltrans impacts, widening the I-10 and the SR-60 in both directions with one additional travel lane would accommodate the projected Year 2035 traffic conditions. Additionally, future potential interchange reconfigurations may be beneficial in reducing LOS. However, these improvements are under the sole jurisdiction of Caltrans. Therefore, impacts to Caltrans' facilities are significant and unavoidable, and Impact T-2 would remain significant and unavoidable on a project-specific and cumulative basis.

6. Significant Unavoidable Adverse Impacts

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7. Alternatives to the Proposed Project

7.1 INTRODUCTION

7.1.1 Purpose and Scope

The California Environmental Quality Act (CEQA) requires that an environmental impact report include a discussion of reasonable project alternatives that would "feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines § 15126.6[a]). As required by CEQA, this chapter identifies and evaluates potential alternatives to the proposed project.

Section 15126.6 of the CEQA Guidelines explains the foundation and legal requirements for the alternative's analysis in an EIR. Key provisions are:

- "[T]he 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 would be more costly." (15126.6[b])
- "The specific alternative of 'no project' shall also be evaluated along with its impact." (15126.6[e][1])
- "The no project analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." (15126.6[e][2])
- "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project." (15126.6[f])
- "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)" (15126.6[f][1]).
- "Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR." (15126.6[f][2][A])

- "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative." (15126.6[f][3])

For each development alternative, the analysis will:

- Describe the alterative.
- Analyze the impact of the alternative as compared to the proposed project.
- Identify the impacts of the project that would be avoided or lessened by the alternative.
- Assess whether the alternative would meet most of the basic project objectives.
- Evaluate the comparative merits of the alternative and the project.

According to Section 15126.6(d) of the CEQA Guidelines, "[i]f an alternative would cause…significant effects in addition those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed."

7.1.2 Project Objectives

As described in Section 3.2, the following objectives have been established for the proposed project and will aid decision makers in their review of the project, the project alternatives, and associated environmental impacts.

1. Promote the remediation and reuse of contaminated brownfield sites within the City, with priority given to those near environmental justice populations.

2. Adopt a Specific Plan that allows for high-cube logistics warehouse uses, e-commerce centers, research and development uses, and retail uses that would encourage private capital investment sufficient to both remediate the entire project site in accordance with DTSC requirements and to develop the project .

3. Facilitate job growth and capitalize on predictable and marketable future development opportunities that provide the City with economic benefits through employment, tax revenues, and infrastructure improvements.

4. Locate industrial, warehousing, and service-commercial uses to areas readily accessible from major highways or rail traffic, and sufficiently separated and buffered to protect residential uses.

7.1.3 Significant Impacts of the Project

As discussed above, a primary consideration in defining project alternatives is their potential to reduce or eliminate significant impacts compared to the proposed project. Chapter 3, *Project Description*, details two project alternatives (Alternative 1, including 200,000 SF Business Park and no retail use; and Alternative 2, including 150,000 SF Business Park and 25,000 SF retail use) and also describes Access Alternatives (designated as 1A and 2A) for each of these alternatives. The Access Alternatives would eliminate the railroad spur crossing in the event that this right-of-way cannot be obtained. This section compares project alternatives impacts to the "worst case" Alternative (1 or 2) and access scenario (1A or 2A) for project-related impacts.

The impact analysis in Chapter 5 of this EIR concludes that implementation of the proposed project would result in the following significant impacts.

7.1.3.1 SIGNIFICANT UNAVOIDABLE IMPACTS

Air Quality

Impact AQ-1. Operation of the proposed project would conflict with or obstruct implementation of the applicable air quality plan.

Impact AQ-2. Construction activities associated with the proposed project could generate short-term emissions in exceedance of SCAQMD'S regional construction significance thresholds for VOC and NO_X. Operation activities associated with the proposed project could generate long-term emissions in exceedance of SCAQMD'S regional construction significance thresholds for VOC, NO_X, and PM_{10}.

Greenhouse Gas

Impact GHG-1. The proposed project would generate a net increase in GHG emissions that would have a significant impact on the environment. Moreover, more than 89 percent of all operational-source emissions (by weight) would be generated by project mobile sources (traffic). Neither the project applicant nor the lead agency (City of Jurupa Valley) can substantively or materially affect reductions in project mobile-source emissions beyond the regulatory requirements.

Impact GHG-2. While the project is consistent with applicable Scoping Plan goals and policies and incorporates project design features that would further minimize GHG emissions, it would exceed the numeric threshold and result in a cumulatively considerable impact with respect to GHG emissions

Transportation and Traffic

Impact T-1, Existing Plus Project Conditions, Opening-Year (2020) Conditions, and Horizon Year (2035) Conditions. The proposed project is forecast to result in less than significant traffic impacts under the "Existing Plus Project," the "Near Term (2020)," and the "Horizon Year 2035" conditions at some of the study intersections and segments with improvements and mitigation measures. However, several of the improvements are not fully funded and/or are under another agency's jurisdiction. Since there is no certainty that these improvements would be implemented, impacts would remain significant and unavoidable at some intersections as identified below.

An impact is considered significant if the project-related traffic causes an intersection to move from an acceptable level of service to an unacceptable level of service (LOS D to LOS E). A significant impact would also occur where an intersection is already operating at a deficient LOS E or worse, and the proposed project adds additional delay to the intersection. The proposed project would result in significant and unavoidable impacts to the following intersections:

Alternatives 1 and 2

- No.1 – Cedar Avenue/I-10 WB ramps, County of San Bernardino

- No. 2 – Cedar Avenue/I-10 EB ramps, County of San Bernardino
- No. 22 – Hall Avenue/ El Rivino Road, City of Jurupa Valley
- No. 33 – Market Street/SR60 EB ramps, Caltrans
- No. 5 – Cedar Avenue/Jurupa Avenue, County of San Bernardino
- No. 24 – Agua Mansa Road/El Rivino Road, County of San Bernardino
- No. 36 – Riverside Avenue/Slover Avenue, City of Rialto

Alternatives 1A and 2A

- Same as for Alternative 1 and 2 with the exception of Intersection No. 33 for which impacts would not be significant.

Significant and unavoidable impacts also occur at the following roadway segments:

Alternative 1

- Market Street between Hall Avenue and Rivera Street (City of Jurupa Valley and City of Riverside)
- Agua Mansa Road between Hall Street and El Rivino Road (City of Jurupa Valley and County of San Bernardino)

Alternative 2

- El Rivino between Cedar Avenue and Cactus Avenue (City of Jurupa Valley, City of Rialto, and County of San Bernardino)
- Market Street between Hall Avenue and Rivera Street (City of Jurupa Valley and City of Riverside)
- Agua Mansa Road between Hall Street and El Rivino Road (City of Jurupa Valley and County of San Bernardino)

Alternatives 1A and 2A

- El Rivino between Cedar Avenue and Cactus Avenue (City of Jurupa Valley, City of Rialto, and County of San Bernardino)
- Market Street between Hall Avenue and Rivera Street (City of Jurupa Valley and City of Riverside)
- Agua Mansa Road between Hall Street and El Rivino Road (City of Jurupa Valley and County of San Bernardino)

Impact T-1, CMP Facilities. The project would generate traffic volumes that would cumulatively contribute to traffic congestion that exceeds the service standards of the San Bernardino County congestion management agency, Riverside County congestion management agency, and Caltrans.

7.1.3.2 IMPACTS SIGNIFICANT UNTIL MITIGATED

The proposed project would result in the following significant impacts prior to implementation of mitigation measures. The recommended measures would mitigate these impacts to less than significant.

Biological Resources

Impact BIO-1. Project development could impact several sensitive animal species.

Impact BIO-2. Project development would impact up to 0.332 acre of riparian woodland.

Impact BIO-3. Development of the proposed project would impact up to 0.322 acre of potentially jurisdictional waters and wetlands.

Impact BIO-4. Development of the proposed project would impact vegetation that could be used by nesting birds.

Impact BIO-5. Project development could conflict with City of Jurupa Valley General Plan policies protecting riparian habitats, significant trees, and other vegetation.

Impact BIO-6. Project development could conflict with the provisions of the Western Riverside County Multiple-Species Habitat Conservation Plan.

Cultural Resources

Impact CR-1. Eligible historic resources would be impacted by development of the proposed project.

Impact CR-2. Potentially undiscovered archaeological resources could be impacted by project development.

Geology and Soils

Impact GEO-3. The site contains collapsible soils that may be exacerbated by development of the proposed project.

Impact GEO-4. Expansive soils onsite may cause geologic hazards to workers and visitors.

Impact GEO-6. Previously undiscovered paleontological resources may be accidentally encountered during project implementation.

Hazards and Hazardous Materials

Impact HAZ-1. The proposed project may create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Impact HAZ-2. The proposed project may create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Impact HAZ-4. The proposed project is located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment.

Tribal Cultural Resources

Impact TCR-1. The proposed project could cause an adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).

Impact TCR-2. The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency to be significant pursuant to criteria in Public Resources Code section 5024.1(c).

7.2 ALTERNATIVES CONSIDERED AND REJECTED

7.2.1 Alternative Development Areas

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (CEQA Guidelines Section 15126.6[f][2][A]). Key factors in evaluating the feasibility of potential offsite locations for EIR project alternatives include:

- If it is in the same jurisdiction.
- Whether development as proposed would require a General Plan Amendment.
- Whether the project applicant could reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). (CEQA Guidelines Section 15126.6[f][1])

The intent of the Mira Loma Warehouse and Distribution Center Overlay (MLO) in the northwest section of the City (see Figure 3-1, *Regional Location*) is to limit the location of logistics and similar supply-chain uses to this area. The primary industrial, warehousing use of the proposed project, therefore, would not require a General Plan Amendment if proposed within this boundary. The MLO consists primarily of large logistics warehouses with storage, loading, and shipping facilities and industrial/manufacturing properties. However, there is currently no vacant land available in the MLO large enough to accommodate the proposed project. The two largest vacant plots in the MLO are 60 acres and 50 acres. Neither site would accommodate a project approaching the scale of the proposed project or achieve the clean-up of the brownfield Site. Moreover, the 60-acre site, on the northwest corner of SR-60 and Etiwanda Avenue, has already been approved for the Space Center Industrial project.

A logical alternate location for the project within the City was not identified. The project applicant does not own or control any other property, and even if another site could be acquired, it would be unlikely to present

an opportunity to eliminate the significant and unavoidable impacts to air quality, greenhouse gas emissions, and transportation associated with the proposed project and to remediate a brownfield site. These operational impacts would occur at any selected alternative site in the City.

It was determined, therefore, that it is unlikely that there is an alternative project site that could meet the objectives of the proposed project and reduce significant impacts of the project as proposed. This alternative has therefore been rejected from further consideration.

7.2.2 Alternative Land Use

The following alternative land uses for the project site were reviewed for their potential to reduce or eliminate the significant impacts associated with the project as proposed while attaining most of the project's basic objectives:

- **Residential.** Currently (2019) there is a strong need and market demand for housing. It would likely be an economically viable land use alternative for the project site. Housing, however, could not be developed on the site pursuant to the current brownfield cleanup agreement with DTSC. Development of housing would also require a General Plan Amendment.

- **Agricultural**. None of the lands within the project site have been categorized by the Department of Conservation as important farmlands, and the site is characterized by various contaminants related to the former limestone mining and cement manufacturing uses. The site is unlikely to be a viable site for agricultural uses, and this use would also require a General Plan Amendment.

- **Retail.** Based on the City's 2017 General Plan and Economic Analysis (General Plan Appendix E[1]) there is no indication that the project site could support major retail use. The project site is within one of six designated opportunity areas (Northeast Area) but is listed for industrial uses. Note also that the General Plan designates 1,080 acres for commercial retail uses, of which 379 acres (35 percent) were shown as vacant.

7.3 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Table 7-1 describes the four alternatives that represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic objectives of the project, but which may avoid or substantially lessen any of the significant effects of the project. These alternatives are analyzed in detail in the following sections.

[1] Economic Development Strategy and Implementation Plan Summary, Kosmont Companies, December 18, 2014.

7. Alternatives to the Proposed Project

Table 7-1 Alternatives Description and Statistical Comparison

Alternative Description	Land Use			Environmental Reasons Considered
	Designation	Acres	Square Footage	
Proposed Project Project development includes decontamination and demolition of all on-site structures associated with the Riverside Cement Plant, followed by mass grading and site remediation. The Industrial Park would allow for uses such as manufacturing, research and development, e-commerce centers, high-cube, general warehousing, and distribution and cross-dock facilities. The Business Park would allow for industrial, service-commercial, and related uses, including warehousing/ distribution, research and development, assembly and light manufacturing, repair facilities, and supporting retail uses. The Business Park district includes an existing 23,000-square-foot research and development building (CalPortland area). The Specific Plan allows for an additional 41,000 square feet of Business Park use in the CalPortland area either through expansion of the existing building or new construction. A 70.9-acre Open Space District component would be located in the southern portion of the Specific Plan area.	Business Park/Office (BP)[1]	33.8	264,000	N/A
	Industrial (IP)	189.7	4,216,000	
	Rail ROW	8.4	—	
	Open Space District (OS)	70.9	—	
	Total	302.8	4,480,000	
No Project/No Development This alternative assumes that the existing 23,000-square-foot research and development building (CalPortland area) on the site would remain, and leases would be extended/renewed to continue office operations. The existing limestone quarry and cement manufacturing plant structures would remain, and the site would not be remediated.	Business Park/Office (BP)	33.8	23,000 SF	Required by CEQA
	Industrial (IP)	—	—	
	Rail ROW	8.4	—	
	Open Space District (OS)	—	—	
	Total	42.2	23,000	
Existing General Plan This alternative is based on a floor to area ratio (FAR) of 0.25 for offices and light industrial across the entire site (294.4 acers). No heavy industrial or open space uses are allowed under the existing general plan.	Business Park/Office (BP)	294.4	3,206,016	Potential to reduce significant impacts related to: • Air Quality • Greenhouse Gas Emissions
	Industrial (IP)	—	—	
	Rail ROW	8.4	—	
	Open Space District (OS)	—	—	
	Total	302.8	3,206,016	

Table 7-1 Alternatives Description and Statistical Comparison

Alternative Description	Land Use			Environmental Reasons Considered
	Designation	Acres	Square Footage	
Reduced Intensity Alternative The reduced intensity alternative is based on an FAR for the industrial park of 0.40 instead of a FAR of 0.52 associated with the proposed project. The square footage for the business park remains consistent with the development option referred to as "Alternative 1" throughout this DEIR. The expansion of the 23,000 SF research and development building to 64,000 SF is also included in this alternative. This alternative also includes the open space as with the proposed project. It is assumed that a Specific Plan would be adopted for this alternative.	Business Park/Office (BP)	33.8	264,000 SF	Potential to reduce significant impacts related to: • Air Quality • Greenhouse Gas Emissions • Transportation
	Industrial (IP)	189.7	3,305,300 SF	
	Rail ROW	8.4 acres	—	
	Open Space District (OS)	70.9 acres	—	
	Total	302.8	3,569,300	
Alternate Land Use Mix This alternative assumes an increase in square footage for the business park (500,000-square SF) and a reduction in the industrial park (warehousing) use (2,500,000 SF (FAR of 0.3)) in comparison to the proposed project. Overall building development would be reduced by approximately 1.48M SF. This alternative includes the open space as with the proposed project. It is assumed that a Specific Plan would be adopted for this alternative.	Business Park/Office (BP)	33.8	564,000 SF	Potential to reduce significant impacts related to: • Air Quality • Greenhouse Gas Emissions • Transportation
	Industrial (IP)	189.7	2,500,000 SF	
	Rail ROW	8.4 acres	—	
	Open Space District (OS)	70.9 acres	—	
	Total	302.8	3,064,000	

Notes:
BP: Business Park
IP: Industrial Park
ROW: Right-of-way
[1] Includes light industrial. Alternative 1 considered.

An EIR must identify an "environmentally superior" alternative, and where the No Project Alternative is identified as environmentally superior, the EIR is required to identify as environmentally superior alternative from among the others evaluated. Each alternative's environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior. The impacts found significant and unavoidable have been used in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project. Only the impacts involving air quality, greenhouse gas, and transportation were found to be significant and unavoidable. Section 7.7 identifies the Environmentally Superior Alternative.

The preferred land use alternative (proposed project) is analyzed in detail in Chapter 5 of this DEIR.

7.3.1 Alternatives Comparison

The following statistical analysis provides a summary of general buildout projections for the four project alternatives and the proposed project. Table 7-2 identifies City-wide information regarding population and

7. Alternatives to the Proposed Project

employment projections, and also provides the jobs-to-housing ratio for each of the alternatives. Furthermore, Table 7-2 includes the FAR for each alternative, allowable land use for the site, and maximum building height allowed.

Table 7-3 shows the morning and evening peak hour trips for each alternative. Trip generation is based upon rates obtained from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th edition (2017), and the City of Fontana's "Truck Trip Generation Study" (2003). Truck trips are converted to passenger car equivalent (PCE) using factors obtained from the San Bernardino County Transportation Authority.

Table 7-4 shows the projected vehicle miles traveled (VMT) for each alternative. The vehicle mix used in the traffic study was applied to the alternatives to estimate VMT. The study was based on 21 percent truck trips for the Business Park and 38 percent truck trips for the Industrial Park. The Air Quality Impact Report for the project (Appendix C 1a) assumes 40 miles per truck and 9.3 miles per passenger vehicle.

Table 7-2 Buildout Statistical Summary

	Proposed Project	No Project/No Development	Existing General Plan	Reduced Intensity Alternative	Alternative Land Use Plan
Employment					
Business Park/Office[1]	121	—	1,603	121	271
Industrial[2]	844	—	—	661	500
Total	**965**	**—**	**1,603**	**782**	**771**
Jobs-to-Housing Ratio[3]	1.10 by 2040	1.07 by 2040	1.13 by 2040	1.10 by 2040	1.10 by 2040
Allowable Land Use[4]	Industrial Park: Manufacturing, high-cube logistics warehouse uses, e-commerce centers, materials processing. Business Park: industrial, service-commercial, and related uses, including warehousing/ distribution, research and development, assembly and light manufacturing, repair facilities and supporting retail uses. Open Space:	Employee-intensive uses, including research and development, technology centers, corporate offices, clean industry, and supporting retail uses.	Employee-intensive uses, including research and development, technology centers, corporate offices, clean industry, and supporting retail uses.	Same as proposed project.	Same as proposed project.

Table 7-2 Buildout Statistical Summary

		Proposed Project	No Project/No Development	Existing General Plan	Reduced Intensity Alternative	Alternative Land Use Plan
Maximum Building Height[5]		Industrial Park: 100 ft Business Park: 50 ft Open Space: 35 ft	50 ft	50 ft	Industrial Park: 100 ft Business Park: 50 ft Open Space: 35 ft	Industrial Park: 100 ft Business Park: 50 ft Open Space: 35 ft
FAR[6]	Business Park/Office	0.35	0.02	0.25	0.18	0.38
	Industrial	0.52	—		0.40	0.30

Notes:
SF: square foot
FAR: Floor area ratio
[1] Generation factors were obtained from the Utility Report for the proposed project prepared by Langan. Industry standard numbers, reviewed by the Rubidoux Community Services District, were used. An employment generation rate of 1 employee to 2,000 SF was used for offices and light industrial. It should be noted that the 23,000 SF of existing research and development are not included in this analysis since they are not associated with the addition of employees.
[2] An employment generation rate of 1 employee to 5,000 SF was used for industrial/warehousing.
[3] Housing and employment is based on SCAG's 2040 projections for the City of Jurupa Valley. The table shows the resultant Jobs-to-Housing ratios with projects citywide.
[4] The current allowable land use for the site, under the General plan, is Business Park with Specific Plan Overlay. For the proposed project, reduced intensity alternative, and alternative land use mix, it is assumed that a general plan amendment is adopted to change the land use designation to Heavy Industrial (HI) with Specific Plan Overlay, Light Industrial (LI) with Specific Plan Overlay, and Open Space Recreational (OS-R) with Specific Plan Overlay.
[5] The maximum height allowed for the No Project and Existing General Plan alternatives are based on the current zoning for the site. The majority of the project site is zoned Manufacturing-Heavy (M-H). The northeast corner of the site is zoned Manufacturing-Service Commercial (M-SC). The maximum height allowed for the proposed project and the remainder of the alternatives is based on the development standards in the Aqua Mansa Specific Plan.
[6] FAR is calculated for the industrial park area (189.7 acres) and the business park area (33.8 acres) separately except for the Existing General Plan alternative. For this alternative, business park uses will be developed across the entire project site (294.4 acres), including the area designated as open space under the proposed project. The FAR for this alternative is calculated for the entire site area.

Table 7-3 Trip Generation Comparison

	Daily	Morning Peak Hour	Evening Peak Hour
Proposed Project (Alternative 1)	11,376	746	868
No Project/No Development	259	10	12
Existing General Plan	20,500	2,819	2,542
Reduced Intensity Alternative	9,356	633	719
Alternative Land Use Mix	9,465	798	839

Source: Ganddini 2019.

7. Alternatives to the Proposed Project

Table 7-4 VMT Comparison

	VMT Total	Passenger Vehicle VMT	Truck VMT	Difference %
Proposed Project	146,706	48,426	98,280	—
No Project/No Development	2,404	2,404	0	-98%
Existing General Plan	253,884	120,663	133,221	73%
Reduced Intensity Alternative	119,929	41,058	78,871	-18%
Alternative Land Use Mix	119,874	45,433	74,441	-18%

7.3.2 Environmental Impact Comparison

Table 7-5, *Project Alternatives: Environmental Impact Comparison,* assesses the relative impact for each project alternative in comparison to the proposed project. All of the environmental categories evaluated for the proposed project in this DEIR are compared. A determination is provided whether the impact is "less than" (LT), "greater than" (GT), or "similar to" (S) the respective environmental impact for the proposed project.

Table 7-5 Project Alternatives: Environmental Impact Comparison

Impact	No Project	Existing General Plan	Reduced Intensity Alternative	Alternate Land Use Mix
Aesthetics	Under the No Project alternative, no new development would occur on the project site. It is anticipated that the existing buildings and structures would remain, and improved maintenance and upgrades would potentially take place over time at the CalPortland area. Landscaping and surface parking would be expected to remain the same. In comparison, the proposed project would completely change the character of the site, introducing warehousing and offices, and substantially increase the massing/scale of development on the property. Although aesthetic impacts are inherently subjective, the proposed project would introduce new buildings, more landscaping, and open space. Therefore, it is concluded that the aesthetics impact for the No Project alternative (existing aging cement plant structures and the research and development office building) would be greater than for the proposed project. As with the proposed project, aesthetic impacts would be considered less than significant. **GT**	Aesthetic impacts associated with the Existing General Plan alternative would be greater than for the proposed project since it would result in the development of offices and light industrial uses across the entire site without the open space area. Although buildout intensity would be reduced within the area proposed for industrial park under the proposed Specific Plan, the elimination of the open space under the Existing General Plan alternative would increase aesthetic impacts in comparison to the proposed project. As with the proposed project, impacts would be less than significant. **GT**	Aesthetic impacts associated with the Reduced Intensity alternative would be similar to the proposed project. The primary difference would be that the industrial park building footprint would be reduced (from 4.2M SF under the proposed project to 3.3M SF). It is assumed that a Specific Plan with similar development standards (heights, setbacks, and design standards) would apply to this alternative. The business park development and open space area would be the same as the proposed project. Therefore, impacts would be less than significant and similar to the proposed project **S**	Under this alternative, the business park use would be intensified (more than doubling the square footage in comparison to the proposed project), and the industrial park (warehousing) would be substantially reduced. The intensity of development along Rubidoux Boulevard would increase from an 0.18 FAR to a 0.38 FAR. It is assumed that a Specific Plan with similar development standards (heights, setbacks, and design standards) would apply to this alternative. The open space area would be the same as the proposed project. The overall character would be different than the proposed project, but overall impacts would be similar and less than significant. **S**
Agriculture	Similar to the proposed project, the No Project alternative would have no impacts on agricultural resources. **S**	Similar to the proposed project, the existing general plan alternative would have no impacts on agricultural resources. **S**	Similar to the proposed project, the reduced intensity alternative would have no impacts on agricultural resources. **S**	Similar to the proposed project, the Alternate Land Use Mix would have no impacts on agricultural resources. **S**
Air Quality	This alternative would not generate an increase in emissions from construction or operational activities. Therefore, no impacts to air quality would occur under this alternative. Impacts associated with this alternative would be substantially reduced and would be less than significant. In comparison to the proposed project, this alternative would eliminate a significant, unavoidable impact. **LT**	This alternative would have similar short-term impacts to air quality during the construction phase. This alternative would generate an increase in emissions from operational activities and would generate substantially higher VMT than the project (73 percent higher VMT compared to Alternative 1). Therefore, this alternative would substantially increase impacts compared to the proposed project, and air quality impacts of this alternative would continue to be significant. **GT**	This alternative would have similar short-term impacts to air quality during the construction phase. This alternative would generate an increase in emissions from operational activities but would generate approximately 18 percent fewer truck trips than the proposed project and would result in an approximate 18 percent VMT reduction and associated criteria air pollutant emissions. Therefore, this alternative would reduce impacts compared to the proposed project, but air quality impacts would remain significant and unavoidable. **LT**	This alternative would have similar short-term, construction-related air quality impacts. This alternative would generate an increase in operation-related emissions but would generate fewer truck trips compared to the proposed project, resulting in an approximate 18 percent reduction in VMT and associated criteria air pollutants. Therefore, this alternative would reduce impacts compared to the proposed project, but air quality impacts would remain significant and unavoidable. **LT**
Biological Resources	Under the No Project alternative, the site would not be redeveloped, and potential impacts to biological resources (i.e., migratory bird nesting habitat in onsite ornamental trees) would be eliminated. No impact would occur under this alternative, and impacts would be reduced compared to the proposed project, which requires mitigation to reduce impacts to less than significant. **LT**	In comparison to the proposed project, impacts to biological resources associated with the Existing General Plan alternative would be greater than for the proposed project since it would result in the development of the entire site, including the approximate 70.9 acres of open space under the proposed project. Although it is not certain, it is anticipated that sensitive species habitats and riparian areas could be preserved so that significant impacts would be mitigated to less than significant. **GT**	This alternative would reduce industrial uses by approximately 0.9M SF (approximately 21 acres). Although this reduction would allow the preservation of additional native habitat, the site is not characterized by sensitive habitats, particularly the area proposed for industrial uses, which is highly disturbed. Overall, therefore, impacts would be expected to be similar to the proposed project and be reduced to less than significant upon compliance with the MSCHP and implementation of mitigation measures. **S**	This alternative would reduce building square footage by 1.4 M SF (approximately 32 acres) in comparison to the proposed project. It would intensify development within the Business Park area, but almost all of this area is already disturbed or ornamental vegetation. Overall, therefore, impacts would be expected to be similar to the proposed project, and as with the proposed project, would be reduced to less than significant upon compliance with the MSCHP and implementation of mitigation measures. **S**
Cultural Resources	Under this alternative, no demolition, grading, or redevelopment activities would occur on the project site. Accordingly, this alternative would not result in the potential to encounter archaeological resources during grading activities. Since no earthmoving activities would occur, there would be no potential to damage cultural resources, and impacts would be reduced compared to the proposed project. **LT**	Implementation of this alternative would cover a wider development area and would have an increased potential for discovery of cultural resources during grading and excavation activities. Thus, impacts would be greater than the proposed project. As with the proposed project, cultural resource impacts would be reduced to less than significant upon implementation of mitigation measures. **GT**	Implementation of this alternative would cover the same development area and would have the same potential for discovery of cultural resources during grading and excavation activities. Thus, impacts would be the same as the proposed project and be reduced to less than significant upon implementation of mitigation measures. **S**	Implementation of this alternative would cover the same development area and would have the same potential for discovery of cultural resources during grading and excavation activities. Thus, impacts would be the same as the proposed project and would be reduced to less than significant upon implementation of mitigation measures. **S**

Table 7-5 Project Alternatives: Environmental Impact Comparison

Impact	No Project	Existing General Plan	Reduced Intensity Alternative	Alternate Land Use Mix
Geology and Soils	No new construction activities, including demolition and grading, would occur under the No Project alternative. This alternative would not involve any grading or excavation that could cause unstable subsurface geologic conditions or erosion impacts. The No Project alternative would not introduce new employees to the project site that could be exposed to seismic ground shaking or other geologic hazards. Overall, therefore, geologic and soils impacts, would be reduced relative to the proposed project. Furthermore, under this alternative there is no potential to encounter paleontological resources during grading activities. Since no earthmoving activities would occur, there would be no potential to damage paleontological resources, and impacts would be reduced compared to the proposed project. **LT**	Under this alternative, like the proposed project, existing structures would be removed and replaced with buildings that would be required to comply with the most recent building and seismic codes and regulations. Geology and soils impacts of this alternative would be less than significant, similar to the proposed project. **S**	Under this alternative, like the proposed project, existing structures would be removed and replaced with buildings that would be required to comply with the most recent building and seismic codes and regulations. Geology and soils impacts of this alternative would be less than significant, similar to the proposed project. **S**	Under this alternative, like the proposed project, existing structures would be removed and replaced with buildings that would be required to comply with the most recent building and seismic codes and regulations. Geology and soils impacts of this alternative would be less than significant, similar to the proposed project. **S**
Greenhouse Gas Emissions	This alternative would not generate an increase in emissions from construction or operational activities. Therefore, no impacts to GHG emissions would occur under this alternative. Impacts associated with this alternative would be substantially reduced and would be less than significant. In comparison to the proposed project, this alternative would eliminate a significant, unavoidable impact. **LT**	This alternative would generate an increase in GHG emissions from operational activities and would result in substantially higher VMT compared to the proposed project (73 percent higher VMT compared to Alternative 1). Therefore, this alternative would increase impacts compared to the proposed project, and GHG impacts of this alternative would continue to be significant and unavoidable. **GT**	This alternative would increase GHG emissions in comparison to existing conditions but would generate approximately 18 percent fewer truck trips compared to the proposed project and would reduce VMT by approximately 18 percent. Therefore, this alternative would reduce impacts compared to the proposed project, but GHG impacts of this alternative would continue to be significant and unavoidable. **LT**	This alternative would increase GHG emissions in comparison to existing conditions but would generate substantially fewer truck trips, resulting in an approximately 18 percent decrease in VMT and associated GHG emissions. Therefore, this alternative would reduce impacts compared to the proposed project, but GHG impacts of this alternative would continue to be significant and unavoidable. **LT**
Hazards and Hazardous Materials	No demolition or grading would occur under the No Project alternative. Potential hazards from the mitigation, reuse, and disposal of impacted soils and materials would not occur. Under the No Project alternative, however, the site would not be remediated under the Brownfield program. The site would not require the oversight by the Department of Toxic Substances Control (DTSC), and no further soil sampling activities would be required. Since the site would not be cleaned up and existing hazards would remain, this alternative would result in greater impacts to hazards than the proposed project. **GT**	As with the proposed project, for the most part, the transport, use, and storage of hazardous materials would be mitigated by comprehensive regulations. Since the 70.9 acres proposed for open space under the proposed project would be developed, more grading activities would be required with the Existing General Plan alternative. Potential hazards from the mitigation, reuse, and disposal of impacted soils and materials would be increased compared to the proposed project. For the Existing General Plan alternative, DTSC oversight would most likely still be obtained for the development, including soil management plan, waste management plan, and dust control activities. Hazards and hazardous material impacts would be slightly greater under this alternative. **GT**	As with the proposed project, the transport, use, and storage of hazardous materials would be mitigated by comprehensive regulations. Although the overall building square footage would be reduced, the area to be remediated, to be graded, and the volume of earth to be moved will not change in comparison to the proposed project. Potential hazards from the mitigation, reuse, and disposal of impacted soils and materials also will not change compared to the proposed project. For the Reduced Intensity alternative, DTSC oversight would still be obtained for the development, including soil management plan, waste management plan, and dust control activities. Overall hazards and hazardous materials impacts would be similar to the proposed project. **S**	As with the proposed project, , the transport, use, and storage of hazardous materials would be mitigated by comprehensive regulations. Although the overall building square footage would be reduced, the area to be remediated, to be graded, and the volume of earth to be moved will not change in comparison to the proposed project. Potential hazards from the mitigation, reuse, and disposal of impacted soils and materials also will not change compared to the proposed project. For the Alternate Land Use mix, DTSC oversight would still be obtained for the development, including soil management plan, waste management plan, and dust control activities. Overall hazards and hazardous materials impacts would be similar to the proposed project. **S**
Hydrology and Water Quality	Existing water quality conditions, groundwater supplies, drainage patterns, and runoff amounts would not change under the No Project alternative. This alternative would not introduce new sources of water pollutants to the project area. However, this alternative would not include improvements associated with new low-impact development, source control, site design, and treatment control best management practices (BMPs) to minimize runoff and water pollution. These BMPs are required measures that would occur under the proposed project and have a beneficial impact on stormwater quality. Overall, hydrology and water quality impacts would be slightly greater under this alternative but, as with the proposed project, would be less than significant. **GT**	As with the proposed project, this alternative would comply with the NPDES, which regulates discharges into waters of the United States and mandates MS4 permits (regulating municipal storm sewer systems) and Storm Water Pollution Prevention Plans (SWPPPs) requiring implementation of BMPs for potential surface water and water quality impacts related to project construction. Hydrology impacts, therefore, would be similar to the proposed project. **S**	The Reduced Intensity alternative is a reduced version of the proposed project. As with the proposed project, this alternative would comply with the NPDES, which regulates discharges into waters of the United States and mandates MS4 permits (regulating municipal storm sewer systems) and Storm Water Pollution Prevention Plans (SWPPPs) requiring implementation of BMPs for potential surface water and water quality impacts related to project construction. Hydrology impacts, therefore, would be similar to the proposed project. **S**	Similar to the Reduced Intensity alternative, this alternative is a reduced version of the proposed project. As with the proposed project, this alternative would comply with the NPDES, which regulates discharges into waters of the United States and mandates MS4 permits (regulating municipal storm sewer systems) and Storm Water Pollution Prevention Plans (SWPPPs) requiring implementation of BMPs for potential surface water and water quality impacts related to project construction. Hydrology impacts, therefore, would be similar to the proposed project. **S**

Table 7-5 Project Alternatives: Environmental Impact Comparison

Impact	No Project	Existing General Plan	Reduced Intensity Alternative	Alternate Land Use Mix
Land Use and Planning	Under the No Project alternative, the existing 23,000 SF of office uses would remain. This use is consistent with the Business Park designation for the project site. Leaving the site in its existing site would not as effectively achieve the goals of the goals and policies of the City's General Plan and the Southern California Association of Governments' (SCAG's) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). For the RTP/SCS, it would not maximize accessibility of people and good in the region or maximize productivity of the transportation system. For the City's General Plan, it would not effectively accommodate industrial and business park development or concentrate these uses near major transportation facilities. Although it would not hamper achieving many of the General Plan's environmental resources–related policies, it also would not provide some of the benefits of improved infrastructure, including water quality improvements. Overall, impacts would be greater than for the proposed project but, as with the proposed project, would result in less than significant impacts. **GT**	This alternative would be consistent with the land use designation for the project site, but may not be as effective in achieving many of the General Plan policies as the proposed project. It would not provide for the open space area, and therefore would not be as effective in encouraging a land use balance,. And finally, it would be less effective in achieving conservation goals since this alternative would maximize business park development within the 70.9 acres designated for open space under the proposed project. Since, this alternative would, however, be consistent with the General Plan designations and policies, the land use and planning impact is considered similar to the proposed project, and like the proposed project would result in less than significant impacts. **S**	This alternative would include the same land uses as the proposed project but would reduce the industrial park use by approximately one million square feet. It would include the Open Space. As with the proposed project it would require a General Plan Amendment, and it is assumed that a Specific Plan would be adopted for this alternative. Overall, land use impacts would be similar and less than significant. **S**	This alternative would increase Business Park uses and reduce Industrial Park uses relative to the proposed project. It would include the Open Space area. As with the proposed project, it would require a General Plan Amendment, and it is assumed that a Specific Plan would be adopted for this alternative. Overall, land use impacts would be similar to the proposed project and less than significant. **S**
Mineral Resources	The No Project alternative would not result in redevelopment of the project site, and potential impacts to mineral resources would be eliminated. No impact would occur under this alternative, and impacts would be reduced compared to the proposed project. It should be noted that impacts to mineral resources under the proposed project are less than significant. **LT**	Implementation of this alternative would cover the same development area and would have the same potential impacts to mineral resources. Thus, impacts would be the same as the proposed project and would be less than significant. **S**	Implementation of this alternative would cover the same development area and would have the same potential impacts to mineral resources. Thus, impacts would be the same as the proposed project and would be less than significant. **S**	Implementation of this alternative would cover the same development area and would have the same potential impacts to mineral resources. Thus, impacts would be the same as the proposed project and would be less than significant. **S**
Noise	Under the No Project alternative, existing commercial office uses on the project site would continue indefinitely. Because no redevelopment would occur, no construction-related noise or vibration would occur. Therefore, construction-related noise impacts would be less than the proposed project. Operation of the No Project alternative would not introduce new stationary or mobile sources of noise to the project site, such as recreational noise, and operational traffic for this alternative would be less than the proposed project. Therefore, the No Project alternative would reduce noise impacts in comparison to the proposed project. However, as discussed in Section 5.10 of this DEIR, noise impacts of the proposed project would be less than significant. **LT**	Reduction in building development intensity could slightly reduce the length of project-related construction noise impacts but would not affect peak construction noise volumes. Due to similar peak construction noise volumes and generally similar length of construction activities, construction-related noise impacts would be the same as the proposed project and less than significant. The increase in vehicle trips would increase the operational traffic-related noise impacts. However, no significant operational-related noise impacts would arise. Noise impacts of this alternative would increase compared to the proposed project and would remain less than significant. **GT**	Reduction in building development intensity could slightly reduce the duration of project-related construction noise impacts but would not affect peak construction noise volumes. Due to similar peak construction noise volumes and generally similar length of construction activities, construction-related noise impacts would be the same as the proposed project and less than significant. The reduction in vehicle trips would slightly reduce the operational traffic–related noise impacts. However, no significant operational noise impacts were identified for the proposed project. Noise impacts of this alternative would be reduced compared to the proposed project and would remain less than significant. **LT**	Reduction in building development intensity could slightly reduce the duration of project-related construction noise impacts but would not affect peak construction noise volumes. Due to similar peak construction noise volumes and generally similar length of construction activities, construction-related noise impacts would be the same as the proposed project and less than significant. The reduction in vehicle trips would slightly reduce the operational traffic–related noise impacts. However, no significant operational-related noise impacts were identified for the proposed project. Noise impacts of this alternative would be reduced compared to the proposed project and would remain less than significant. **LT**
Population and Housing	The No Project alternative would not introduce new residents to the project site, and therefore would not directly impact community population. Since this alternative would not provide new jobs, however, it would not help improve the area's jobs-housing balance. Since this is not considered an environmental impact, however, population and housing impacts would be considered similar to the proposed project and less than significant impact. **S**	As with the proposed project, this alternative would not displace residents or relocate housing. It may indirectly affect the need for new housing, but the project employment due to the project is within regional projections. As with the proposed project, this alternative would improve the jobs/housing balance in the City of Jurupa Valley. This is not considered an environmental impact, however, so impacts are considered similar to the project **S**	As with the proposed project, this alternative would not displace residents or relocate housing. It may indirectly affect the need for new housing, but the project employment due to the project is within regional projections. As with the proposed project, this alternative would improve the jobs/housing balance in the City of Jurupa Valley. This is not considered an environmental impact, however, so impacts are considered similar to the project. **S**	As with the proposed project, this alternative would not displace residents or relocate housing. It may indirectly affect the need for new housing, but the project employment due to the project is within regional projections. As with the proposed project, this alternative would improve the jobs/housing balance in the City of Jurupa Valley. This is not considered an environmental impact, however, so impacts are considered similar to the project. **S**

Table 7-5 Project Alternatives: Environmental Impact Comparison

Impact	No Project	Existing General Plan	Reduced Intensity Alternative	Alternate Land Use Mix
Public Services	Under the No Project alternative, the public service demand would not change. The existing development does not generate school and library service demand, and demand for other public services is typically lower for commercial uses than residential uses. The No Project alternative demand for fire and police services would be less than for the proposed project. Public service impacts would be less than for the proposed project. Impacts for the proposed project, however, are less than significant. **LT**	Like the proposed project, this alternative would comply with the California Fire Code, and implementation of existing regulations and standard conditions would ensure that impacts related to fire service are not substantially different from those of the proposed project. Because this alternative would accommodate approximately 638 more employees than the proposed project, this alternative could increase demand for fire and police services compared to the proposed project. It would not, however, generate public service demand related to the Open Space area included in the proposed project. Overall, public service demand would likely be slightly greater than for the proposed project, but less than significant. **GT**	Like the proposed project, this alternative would comply with the California Fire Code, and implementation of existing regulations and standard conditions would ensure that impacts related to fire service are not substantially different from those of the proposed project. This alternative would generate approximately 183 fewer employees (an 18% reduction) than the proposed project, decreasing demand for fire and police services compared to the proposed project. However, as with the proposed project, public service impacts would be less than significant. **LT**	Like the proposed project, this alternative would comply with the California Fire Code, and implementation of existing regulations and standard conditions would ensure that impacts related to fire service are not substantially different from those of the proposed project. Because this alternative would generate approximately 194 fewer employees (a 20% reduction) than the proposed project, this alternative would decrease demand for fire and police services compared to the proposed project. However, as with the proposed project, public service impacts would be less than significant. **LT**
Recreation	Under this alternative, there would be no increase in demand for recreational facilities or services, since no residential uses would be developed. However, this alternative would not provide the 70.9-acre open space and in-lieu fees that would be provided by the proposed project. Although the No Project alternative would not generate new demand for parks, it would not provide in-lieu fees. In comparison to the proposed project, therefore, the No Project alternative would be considered to have a slightly greater impact on recreation. Recreation impacts for both the No Project alternative and proposed project are less than significant. **GT**	Similar to the proposed project, this alternative would not increase the demand for recreational facilities or services, since no residential uses would be developed. However, this alternative would not pay in-lieu fees. Therefore, the impact of this alternative to recreational services would be greater than that of the project. **GT**	Similar to the proposed project, this alternative would not increase the demand for recreational facilities or services, since no residential uses would be developed. This alternative would also pay in-lieu fees. Therefore, the impact of this alternative to recreational services would be similar to the proposed project. **S**	Similar to the proposed project, this alternative would not increase the demand for recreational facilities or services, since no residential uses would be developed. This alternative would also provide the open space area and pay in-lieu fees. Therefore, the impact of this alternative to recreational services would be similar to the proposed project. **S**
Transportation and Traffic	Under this alternative, existing land uses would remain, and development associated with the proposed project would not occur. No additional trips would be generated, and this alternative would eliminate the significant unavoidable transportation impact of the project. **LT**	Land uses allowed under the Existing General Plan would generate substantially more trips than the proposed project. Compared to the proposed project Alternative 1, this alternative would generate 2,073 additional PCE morning peak hour trips and 1,674 additional PCE evening peak hour trips than the proposed project. Consequently, this alternative would substantially increase transportation impacts associated with the project, and impacts would remain significant and unavoidable. **GT**	This alternative would reduce transportation impacts of the proposed project. This alternative would result in 113 fewer PCE morning peak hour trips (15 percent less) and 149 fewer PCE evening peak hour trips (17 percent less) than Alternative 1. While this alternative would reduce transportation impacts of the proposed project, this alternative would not eliminate the project's significant and unavoidable impacts, including impacts to Caltrans facilities. **LT**	This alternative would slightly reduce transportation impacts of the proposed project during the evening peak hour but would slightly increase impacts during the morning peak hour. This alternative would result in 29 fewer PCE evening peak hour trips (3 percent less) but would result in 52 additional PCE morning peak hour trips (7 percent more) than Alternative 1. Overall, this alternative would have similar impacts compared to the proposed project and would not eliminate the project's significant and unavoidable impacts, including impacts to Caltrans facilities. **S**
Tribal Cultural Resources	Under this alternative no ground disturbance would occur. There would be no potential for tribal cultural resource impacts, and these impacts would be reduce compared to the proposed project. However, tribal cultural resources are not a significant and unavoidable impact of the proposed project. **LT**	Implementation of this alternative would cover a wider development area and would have an increased potential for discovery of tribal cultural resources during grading and excavation activities. Thus, impacts would be greater than the proposed project and be reduced to less than significant upon implementation of mitigation measures. **GT**	Similar to the proposed project, this alternative would replace existing structures with new buildings and result in ground disturbances due to grading. Therefore, potential tribal cultural resources impacts would be similar to the proposed project and less than significant after mitigation. **S**	Similar to the proposed project, this alternative would replace existing structures with new buildings and result in ground disturbances due to grading. Therefore, potential tribal cultural resources impacts would be similar to the proposed project and less than significant after mitigation. **S**
Utilities and Service Systems	Due to the increase in land use intensity under the proposed project, upgrades to existing utilities and service systems would be required, such as upgrading water, wastewater, and storm drainpipes and fixtures to tie into off-site connections. This alternative would also eliminate the ongoing increased need for services and resources (including water supply and treatment, wastewater treatment, natural gas, and electricity) in comparison to the proposed project. Therefore, the No Project alternative would reduce impacts to utility services compared to the proposed project. Impacts would be less than significant as with the proposed project. **LT**	Because this alternative would accommodate approximately 638 more employees than the proposed project, this alternative would increase demand for utility and service system. Furthermore, office and light industrial uses typically have a higher demand for water and generate more wastewater than industrial uses. However, as with the proposed project, utility service impacts would be less than significant. **GT**	Because this alternative would accommodate approximately 183 fewer employees and approximately 0.9M less building square footage than the proposed project, this alternative would decrease demand for utility and service system. As with the proposed project, utility service impacts would be less than significant. **LT**	Because this alternative would accommodate approximately 194 fewer employees and approximately 1.4M less building square footage than the proposed project, this alternative would decrease demand for utility and service system. As with the proposed project, utility service impacts would be less than significant. **LT**

7.3.3 Conclusion

7.3.3.1 ABILITY TO REDUCE ENVIRONMENTAL IMPACTS

Table 7-6 summarizes the environmental impacts of each alternative compared to the proposed project.

Table 7-6 Summary of Proposed Project and Alternatives Impacts

Topic	Proposed Project	No Project Alternative	Existing General Plan	Reduced Intensity	Alternate Land Use Mix
Aesthetics	LTS	+	+	=	=
Agricultural Resources	LTS	=	=	=	=
Air Quality	S/U	-	+	-	-
Biological Resources	LTS/M	-	+	=	=
Cultural Resources	LTS/M	-	+	=	=
Geology and Soils	LTS/M	-	=	=	=
Greenhouse Gas Emissions	S/U	-	+	-	-
Hazards and Hazardous Materials	LTS/M	+	+	=	=
Hydrology and Water Quality	LTS/M	+	=	=	=
Land Use and Planning	LTS	+	=	=	=
Mineral Resources	LTS	-	=	=	=
Noise	LTS	-	+	-	-
Population and Housing	LTS	=	=	=	=
Public Services	LTS	-	+	-	-
Recreation	LTS	+	+	=	=
Transportation and Traffic	S/U	-	+	-	=
Tribal Cultural Resources	LTS/M	-	+	=	=
Utilities and Service Systems	LTS	-	+	-	-

Notes: LTS = Less than Significant; LTS/M = Less than Significant with Mitigation Incorporated; S/U = Significant and Unavoidable
(-) The alternative would result in less of an impact than the proposed project.
(+) The alternative would result in greater impacts than the proposed project.
(=) The alternative would result in the same/similar impacts as the proposed project.

No Project Alternative. This alternative would result in similar impacts to 2 impact categories, reduced impacts to 11 environmental impacts, and increased impacts to 5 categories. Impacts would be similar for agricultural resources and population and housing. This alternative would reduce impacts for air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, mineral resources, noise, public services, transportation and traffic, tribal cultural resources, and utilities and service systems. Impacts to

aesthetics, hazards and hazardous materials, hydrology and water quality, land use and planning, and recreation would increase. Impacts to air quality, greenhouse gas emissions, and transportation and traffic would be reduced from significant and unavoidable to less than significant. Overall, impacts under this alternative would be decreased in comparison to the proposed project.

Existing General Plan Alternative. This alternative would result in similar impacts to 6 impact categories and increased impacts to 12 categories. It would not reduce any impacts compared to the proposed project. Impacts would be similar for agricultural resources, geology and soils, hydrology and water quality, land use and planning, mineral resources, and population and housing. This alternative would increase impacts to aesthetics, air quality, biological resources, cultural resources, greenhouse gas emissions, hazards and hazardous materials, noise, public services, recreation, transportation and traffic, tribal cultural resources, and utilities and service systems. As with the proposed project, impacts to air quality, greenhouse gas emissions, and transportation and traffic would remain significant and unavoidable. Overall, impacts under this alternative would be increased in comparison to the proposed project.

Reduced Intensity Alternative. This alternative would reduce impacts to 6 environmental impacts and result in similar impacts to 12 categories. It would not increase any impacts. It would reduce impacts to air quality, greenhouse gas emissions, noise (operational), public services, transportation and traffic, and utilities and service systems. Impacts would be very similar for aesthetics, agricultural resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, recreation, and tribal cultural resources. As with the proposed project, impacts to air quality, greenhouse gas emissions, and traffic would remain significant and unavoidable. Overall, impacts under this alternative would be reduced in comparison to the proposed project.

Alternate Land Use Mix Alternative. This alternative would reduce impacts to 5 environmental impacts and have similar impacts to 13 categories. It would not increase any impacts. It would reduce impacts to air quality, greenhouse gas emissions, noise (operational), public services, and utilities and service systems. Impacts would be very similar for aesthetics, agricultural resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, recreation, transportation and traffic, and tribal cultural resources. As with the proposed project, impacts to air quality, greenhouse gas emissions, and traffic would remain significant and unavoidable. Overall, impacts under this alternative would be reduced in comparison to the proposed project.

7.3.3.2 ABILITY TO ACHIEVE PROJECT OBJECTIVES

Table 7-7 summarizes each alternative's ability to achieve the project objectives.

Table 7-7 Ability of Each Alternative to Meet the Project Objectives

Objective	Proposed Project	No Project Alternative	Existing General Plan	Reduced Intensity	Alternate Land Use Mix
1. Promote the remediation and reuse of contaminated brownfield sites within the City, with priority given to those near environmental justice populations.	Yes	No	Yes	Yes	Yes
2. Adopt a Specific Plan that allows for high-cube logistics warehouse uses, e-commerce centers, research and development uses, and retail uses that would encourage private capital investment sufficient to both remediate the entire project site in accordance with DTSC requirements and to develop the Project.	Yes	No	No	Maybe	Maybe
3. Facilitate job growth and capitalize on predictable and marketable future development opportunities that provide the City with economic benefits through employment, tax revenues, and infrastructure improvements.	Yes	No	No	Maybe	MaybeYes
4. Locate industrial, warehousing, and service-commercial uses to areas readily accessible from major highways or rail traffic, and sufficiently separated and buffered to protect residential uses.	Yes	No	No	Yes	Yes

The No Project alternative, as shown in Table 7-7, does not meet any of the proposed projects objectives.

The Existing General Plan alternative meets only one of the project objectives, promoting remediation and reuse of contaminated brownfield sites. The remaining three objectives would not be met: adoption of a specific plan that allows for high-cube logistics warehouse uses and e-commerce centers that would encourage private capital investment in the City; facilitating job growth and capitalizing on predictable and marketable future development opportunities; and locating warehousing in an area that is readily accessible from major highways or rail traffic, and sufficiently separated and buffered to protect residential uses. While this alternative could generate more jobs than the proposed project, there is a limited market and capital availability for this use, particularly for a site with environmental complexity and scale.

The Reduced Intensity alternative would represent a similar project as the proposed project, but with a substantial reduction in allowable industrial use. This alternative would achieve Objectives No.'s 1 and 4. It would promote site remediation and reuse, and would locate new industrial warehousing and service-commercial uses in areas easily accessible to major highways or rail, and sufficiently buffered from residential areas. It is not certain, however, whether this alternative could achieve Objectives No.'s 2 and 3. The extent to which a reduced use could attain these objectives is dependent upon the economic viability of this alternative. With a reduction in almost one million square feet of warehousing uses, this alternative may not be able to

absorb the extensive site remediation costs. If this alternative is not economically viable, it would not provide the anticipated job growth, or provide projected economic and infrastructure benefits to the City.

The Alternate Land Use Mix is would more than double business park use (from approximately 264,000 SF to 564,000 SF), and would reduce the allowable industrial use (warehousing) by approximately 40% (from approximately 4.2 million SF to 2.5 million SF). As with the Reduced Intensity alternative, the ability for the alternative to achieve project objectives is dependent upon its economic viability. It is anticipated that this alternative would achieve Objectives No.'s 1 and 4. It would promote site remediation and reuse, and would locate new industrial warehousing and service-commercial uses in areas easily accessible to major highways or rail, and sufficiently buffered from residential areas. It is unknown whether this alternative could achieve Objectives No.'s 2 and 3. It is not known whether the site could support double the business park uses, and if so, how long it would take to absorb that level of development of service and retail uses. Moreover, with a substantial reduction in industrial use, it may not be possible for this alternative to fund the extensive site remediation. Given the uncertainty of this alternative's economic viability, it cannot be assumed that this alternative would facilitate job growth and economic opportunities for the City. Even if viable, it would not achieve this objective at the same level as the proposed project.

7.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the "environmentally superior alternative"; in cases where the "No Project" alternative is environmentally superior to the proposed project, the environmentally superior development alternative must be identified. In this case, the No Project alternative would not be considered the environmentally superior alternative. The Reduced Intensity alternative is identified as "environmentally superior" to the proposed project, but due to the brownfield nature of the site and the fact that the entire site must be remediated, this alternative presents other challenges, such as whether remediation would be economically feasible given the reduction in square footage. In addition, the reduction in size results in 20 percent fewer jobs than would be created by the project.

A shown in Table 7-6, the Reduced Intensity alternative reduces the most impacts compared to the proposed project. Impact reduction for the Alternate Land Use Mix alternative is similar to the Reduced Density alternative; however, since the morning peak hour vehicle trips are increased compared to the proposed project, it was determined not to result in less transportation impact than the proposed project. Although impacts are reduced, none of the development alternatives eliminate any of the significant, unavoidable impacts of the proposed project.

8. Impacts Found Not to Be Significant

California Public Resources Code Section 21003 (f) states: "…it is the policy of the state that…[a]ll persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment." This policy is reflected in the State California Environmental Quality Act (CEQA) Guidelines (Guidelines) Section 15126.2(a), which states that "[a]n EIR [Environmental Impact Report] shall identify and focus on the significant environmental impacts of the proposed project" and Section 15143, which states that "[t]he EIR shall focus on the significant effects on the environment."

This chapter includes a discussion of potential Agricultural Resources, a topic not included in Chapter 5, *Environmental Analysis*.

8.1 AGRICULTURE AND FORESTRY RESOURCES

Would the project:

Impact AG-1: The proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

No Impact. CEQA considers impacts to three categories of important farmland: Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. According to the California Department of Conservation (DOC) Important Farmland Finder, there are no important farmlands in the Specific Plan area (DOC 2017). There are also no existing agricultural uses in the Specific Plan area. The northern portion of the project site along El Rivino Boulevard is designated Farmland of Local Importance by the DOC; however, the current and proposed zoning districts for the project site do not have any areas designated for agriculture. Therefore, development in accordance with the proposed project and any zoning district changes proposed under the Agua Mansa Commerce Park Specific Plan would have no impact on important farmlands nor convert any farmland to nonagricultural use.

Impact AG-2: The proposed project would not conflict with existing zoning for agricultural use, with a designated Agricultural Opportunity Area, or with a Williamson Act contract.

No Impact. See Impact AG-1, above.

The California Department of Conservation Division of Land Resource Protection maintains updated maps showing lands bearing Williamson Act contracts. According to the State of California Williamson Act Contract

Land map (dated 2016) there are no lands within all of Jurupa Valley under Williamson Act contracts (DOC 2016). Additionally, the Specific Plan area is not zoned for agricultural use (Jurupa Valley 2011). Therefore, development in accordance with the proposed project and any zoning district changes proposed under the proposed project would not conflict with existing agricultural zoning or impact any Williamson Act lands.

Impact AG-3: The proposed project would not 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)).

No Impact. Most of the project site is occupied by the closed cement plant and quarry and the current and proposed zoning for the project site do not include any zoning for forest land, timberland, or timberland production. Thus, no impacts would occur.

Impact AG-4: The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use.

No Impact. See response to Section AG-3, above.

Impact AG-5: The proposed project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

No Impact. See responses to Sections AG-1 through AG-3, above.

8.2 REFERENCES

California Department of Conservation (DOC). 2016. Riverside County Williamson Act FY 2015/2016 Sheet 1 of 3. ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Riverside_w_15_16_WA.pdf.

———. 2017. California Important Farmland Finder. http://maps.conservation.ca.gov/ciff/ciff.html.

9. Other CEQA Considerations

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project (including planning, acquisition, development, and operation) be considered when evaluating the project's impact on the environment. Section 15126 also sets forth general content requirements for environmental impact reports (EIRs). This section identifies (1) significant irreversible environmental changes that would result from implementing the proposed project; (2) growth-inducing impacts of the proposed project; and (3) potential energy impacts of the proposed project.

9.1 SIGNIFICANT IRREVERSIBLE CHANGES DUE TO THE PROPOSED PROJECT

Section 15126.2(c) of the CEQA Guidelines requires that an environmental impact report (EIR) describe any significant irreversible environmental changes that would be caused by the proposed project should it be implemented.

> Uses of nonrenewable resources during the initial and continued phases of the 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 highways improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The following are the significant irreversible changes that would be caused by the proposed project, should it be implemented:

- Construction activities associated with the proposed project would entail the commitment of nonrenewable and/or slowly renewable energy resources; human resources; and natural resources such as lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, water, and fossil fuels. Operational activities would also require the use of natural gas and electricity, petroleum-based fuels, fossil fuels, and water. The commitment of resources required for the construction and operation of the project would limit the availability of such resources for future generations or for other uses during the life of the project.

- An increased commitment of social services and public maintenance services (e.g., police, fire, sewer, and water services) would also be required. The energy and social service commitments would be long-term obligations in view of the low likelihood of returning the land to its existing condition once it has been developed.

- Employment growth related to project implementation would increase vehicle trips over the long term. Emissions associated with such vehicle trips, particularly diesel truck trips, would continue to contribute to the South Coast Air Basin's nonattainment designations for ozone, particulate matter (PM_{10} and $PM_{2.5}$), and lead (Los Angeles County only) under the California and National Ambient Air Quality Standards (AAQS), and nonattainment for nitrogen dioxide (NO_2) under the California AAQS.

- Future development in accordance with the proposed project is a long-term and likely irreversible commitment of vacant parcels of land and redevelopment of existing developed land (i.e., Riverside Cement Plant facility) in the City of Jurupa Valley.

Given the low likelihood that the land would revert to lower intensity uses or to its current form, the proposed project would generally commit future generations to these environmental changes. However, the Specific Plan area is already developed; therefore, the use of existing infrastructure is possible with some upgrades, improvements, and connections, and environmental impacts can be minimized. The commitment of resources to the proposed project is not unusual or inconsistent with projects of this type and scope. However, once these commitments are made, it is improbable that the Specific Plan area would revert back to its current condition. Thus, the proposed project would result in significant irreversible changes to the environment.

9.2 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also required is an assessment of other projects that would foster other activities which could affect the environment, individually or cumulatively. To address this issue, potential growth-inducing effects will be examined through analysis of the following questions:

- Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?

- Would this project result in the need to expand one or more public services to maintain desired levels of service?

- Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

- Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Please note that growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment. This issue is presented to provide additional information on ways in which this project could contribute to significant changes in the environment, beyond the direct consequences of developing the land use concept examined in the preceding sections of this EIR.

Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?

Buildout of the Specific would not involve construction or extension of major infrastructure. Project construction would involve installation of utility connections to existing infrastructure facilities next to the site.

Construction/Extension of Major Infrastructure Facilities

The project site is already improved with infrastructure facilities associated with the former Riverside Cement Plant facility, including internal roadways, dry utilities (e.g., natural gas, electric, telephone, and cable), and water and wastewater connections. Therefore, development of the proposed project would not remove obstacles to growth through the construction or extension of major infrastructure facilities. Most improvements related to the project would consist of adding connections within the site to connect to existing infrastructure facilities adjacent to the project site.

Changes in Existing Regulations

The Jurupa Valley General Plan Land Use Element currently designates the entire project site as Business Park-Specific Plan Overlay, and the Jurupa Valley Zoning Ordinance zones the site as Manufacturing-Heavy and Manufacturing-Service Commercial. Approval of the project would not remove any existing regulatory obstacle to growth, but would redefine the nature of future growth in the area. The Agua Mansa Commerce Park Specific Plan would require a general plan amendment and zone change to allow the proposed industrial, business park, and open space uses, including warehousing and distribution uses.

The current and proposed land use designations and zoning for the project site have varying allowable densities and permitted uses, but growth would be allowed under both the current and proposed land use designations and zoning. Therefore, the proposed project would not change existing regulations pertaining to land development and would not remove obstacles to growth.

Would this project result in the need to expand one or more public services to maintain desired levels of service?

As described in Chapter 5.13, *Public Services*, public service agencies were consulted during preparation of this DEIR, including the Riverside County Fire Department and Riverside County Sheriff's Department. None of the service providers indicated that buildout of the Specific Plan would necessitate the immediate expansion of their services and facilities in order to maintain adequate and desired levels of service. Because no housing is proposed as part of the Specific Plan, no new residents would be added to the project area as a result of project buildout. Therefore, there would be no direct impacts to school and library services in the area. Overall, no future expansion of public services would be required to maintain existing levels of service.

9. Other CEQA Considerations

Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

Implementation of the Specific Plan would create varying levels of temporary construction employment opportunities as the project area builds out. This would be an indirect economic effect of this project that would not significantly affect the environment. Implementation of the proposed Specific Plan would generate short-term design, engineering, and construction jobs during project construction. Construction-related jobs would not result in a significant population increase because they would likely be filled by workers in the region. Construction would occur intermittently over the four project phases. Construction would not result in a significant increase in population because the construction phases would be temporary and buildings would be developed as the market demands.

The proposed Specific Plan would result in the creation of up to 988 new long-term jobs (see Section 5.12, *Population and Housing*). As the number of employees in the Specific Plan area grows, these employees would seek shopping, entertainment, auto maintenance, and other economic opportunities in the surrounding area. This could encourage the creation of new businesses and/or the expansion of existing businesses to address these needs. Actual growth would depend on future market demand, site constraints, and property owners' willingness to take advantage of new development regulations. However, new neighborhood-serving commercial uses developed to serve the shopping needs of future employees would likely generate additional employment opportunities. Therefore, implementation of the Specific Plan would have both direct and indirect economic effects that could significantly affect the environment. The impacts from neighborhood commercial uses would be analyzed and any appropriate mitigation imposed on a project-by-project basis.

Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

The Agua Mansa Commerce Park Specific Plan would require the approval of discretionary actions; however, the project would not set a precedent for future projects with similar characteristics. The project would require the following approvals and adoptions from the Jurupa Valley City Council.

- **General Plan Amendments**

  1. Change the land use designation from "Business Park" with Specific Plan Overlay (BP-SPO) to the following land use designations:
     - Heavy Industrial (HI) with Specific Plan Overlay to be applied within the Industrial Park District of Agua Mansa Commerce Park Specific Plan.
     - Light Industrial (LI) with Specific Plan Overlay to be applied within the Business Park with Retail Overlay of Agua Mansa Commerce Park Specific Plan.
     - Open Space – Recreation (OS-R) with Specific Plan Overlay to be applied within the Open Space District of the Agua Mansa Commerce Park Specific Plan.
  2. Create a "Rubidoux Warehouse and Distribution Center Overlay" in the General Plan.

3. Establish "Rubidoux Warehouse and Distribution Center Overlay" on the Industrial Park District of the Agua Mansa Commerce Park Specific Plan.

- **Change of Zone:** Rezone from Manufacturing-Heavy and Manufacturing-Service Commercial to Specific Plan.
- **Specific Plan:** Adopt the Agua Mansa Commerce Park Specific Plan, which supersedes the existing Agua Mansa Specific Plan No. 210 on the project site.
- **Site Development Permit:** Establish the speculative buildings for the future uses.
- **Development Agreement**

The approval of these actions changes the existing restrictions on growth set by the Jurupa Valley General Plan and Zoning Code. The proposed project would not change the existing protocol for project approval and would not set a precedent that would make it more likely for other projects to gain approval of similar applications.

Moreover, no changes to any of the City's building safety standards (i.e., building, grading, plumbing, mechanical, electrical, fire codes) are proposed or required to implement the proposed project. Therefore, the proposed project would not involve a precedent-setting action that would encourage and/or facilitate other activities that could significantly affect the environment.

9.3 ENERGY IMPACTS OF THE PROPOSED PROJECT

Section 21100(b)(3) of the California Environmental Quality Act (CEQA) requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing any inefficient, wasteful, and unnecessary consumption of energy. Appendix G of the CEQA Guidelines poses the following questions:

- Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

9.3.1 Regulatory Background

9.3.1.1 FEDERAL

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (Public Law 110-140) provided the nation with greater energy independence and security by increasing the production of clean renewable fuels; improving vehicle fuel economy; and increasing the efficiency of products, buildings, and vehicles. It also improved the energy performance of the federal government. The Act increased the Corporate Average Fuel Economy Standards, the Renewable Fuel Standard, appliance energy efficiency standards, and building energy efficiency standards

and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration (USEPA 2019).

9.3.1.2 STATE

Renewables Portfolio Standard

The California Renewables Portfolio Standard (RPS) was established in 2002 under SB 1078 and was amended in 2006, 2011 and 2018. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. The California Public Utilities Commission is required to provide quarterly progress reports on progress toward RPS goals. This has accelerated the development of renewable energy projects throughout the State. Based on the 3rd quarter 2016 report, the three largest retail energy utilities provided an average of 27.6 percent of its supplies from renewable energy sources. Since 2003, 15,565 megawatts (MW) of renewable energy projects have started operations (CPUC 2016). SB 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures. Senate Bill 100 (de Leon) passed in 2018 puts California on the path to 100 percent fossil-fuel free electricity by the year 2045 (CEC 2017a).

State Alternative Fuels Plan

Assembly Bill 1007 requires the California Energy Commission (CEC) to prepare a plan to increase the use of alternative fuels in California. The State Alternative Fuels Plan was prepared by the CEC with the California Air Resources Board (CARB) and in consultation with other federal, state, and local agencies to reduce petroleum consumption, increase use of alternative fuels (e.g., ethanol, natural gas, liquefied petroleum gas, electricity, and hydrogen), reduce greenhouse gas (GHG) emissions, and increase in-state production of biofuels. The State Alternative Fuels Plan recommends a strategy that combines private capital investment, financial incentives, and advanced technology that will increase the use of alternative fuels, result in significant improvements in the energy efficiency of vehicles, and reduce trips and vehicle miles traveled through changes in travel habits and land management policies. The Alternative Fuels and Vehicle Technologies Funding Program legislation (AB 118, Statutes of 2007) proactively implements this plan (CEC 2007).

Appliance Efficiency Regulations

California's Appliance Efficiency Regulations (California Code of Regulations [CCR] Title 20, Parts 1600–1608) contain energy performance, energy design, water performance, and water design standards for appliances that are sold or offered for sale in California (including refrigerators, ice makers, vending machines, freezers, water heaters, fans, boilers, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings). These standards are updated regularly to allow consideration of new energy efficiency technologies and methods (CEC 2017b).

Title 24, Part 6, Energy Efficiency Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2016 (24 CCR Part 6). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the CEC adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards, which were adopted on May 9, 2018, go into effect starting January 1, 2020.

The 2016 Standards improve upon the previous 2013 Standards for new construction of and additions and alterations to residential and nonresidential buildings (CBSC 2015). Under the 2016 Standards, residential and nonresidential buildings are generally 28 and 5 percent more energy efficient than the 2013 Standards, respectively (CEC 2015a). Although the 2016 standards do not achieve zero net energy, they get very close to the state's goal and take important steps toward changing residential building practices in California.

The 2019 standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements (CEC 2018a). Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards, and single-family homes will be 7 percent more energy efficient (CEC 2018b).

Title 24, Part 11, Green Building Standards

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. It includes mandatory requirements for new residential and nonresidential buildings throughout California. CALGreen is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the governor. The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011, and were last updated in 2016. The 2016 Standards became effective on January 1, 2017. On October 3, 2018, the CEC adopted the voluntary standards of the 2019 CALGreen, which become effective January 1, 2020.

Overall, the code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impacts during and after construction. CALGreen contains requirements for construction site selection; storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency (CBSC 2019).

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the Corporate Average Fuel Economy standards under *Federal*, above). In January 2012, CARB approved the Pavley Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions (CARB 2017).

9.3.1.3 LOCAL

City of Jurupa Valley General Plan Policies

As part of the City of Jurupa Valley's General Plan, the Conservation and Open Space Element includes the following goals:

COS 5 **Renewable Energy Resources.** Increasing use of sustainable energy sources such as solar and wind energy and reducing reliance on nonsustainable energy sources to the extent possible with available technology and resources. This goal includes thirteen policies that relate to best available practices, energy-efficiency, and wind energy, solar energy, and biomass conservation.

COS 6 **Non-Renewable Resources.** Reducing consumption of non-renewable energy sources where possible and ensuring efficient use, development, and conservation of sustainable, non-polluting energy sources. This goal includes six policies that relate to the efficient use of non-renewable resources, fuel efficient vehicles, and the advancement of renewable energy sources.

The General Plan's Housing Element includes Goal HE 5, which aims to reduce residential energy and water use. The goal includes the following three policies:

HE 5.1 **New Construction.** Encourage the development of dwellings with energy-efficient designs, utilizing passive and active solar features and energy-saving features that exceed minimum requirements in state law.

HE 5.2 **Sustainable Design.** Residential developments should promote sustainability in their design, placement, and use.

HE 5.3 **Site and Neighborhood Design.** Residential site, subdivision, and neighborhood designs should consider sustainability

Furthermore, the General Plan's Air Quality Element includes Goal AQ 5, which aims to promote energy efficiency and conservation. The goal includes the following two policies:

AQ 5.1 **Reduce Solid Waste.** Utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.

AQ 5.2 **Energy Conservation.** Encourage advanced energy conservation techniques and the incorporation of energy efficient design elements for private and public developments, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling, and offer incentives, as appropriate.

The General Plan also includes the following policies:

AQ 7.6 **City Transportation Fleet.** Manage the City's transportation fleet to achieve energy savings.

CSSF 2.3 **Facility Design.** Work with service agencies to ensure that new public facilities are well designed, energy efficient and compatible with adjacent land uses.

HE 1.8 **Innovative Housing.** Encourage innovative housing, site plan design, and construction techniques to promote new affordable housing, improve energy efficiency, and reduce housing costs.

LUE 11.6 **Energy Efficiency.** Require development projects to use energy efficient design features in their site planning, building design and orientation, and landscape design that meet or exceed state energy standards.

9.3.2 Short-Term Construction Impacts

Construction of the proposed project would require the use of construction equipment for grading, hauling, and building activities. Electricity use during construction would vary during different phases of construction—the majority of construction equipment during demolition and grading would be gas or diesel powered, and the later construction phases would require electricity-powered equipment, such as for interior construction and architectural coatings. Construction also includes the vehicles of construction workers traveling to and from the project site and haul trucks for the export of materials from site clearing and demolition and the export and import of soil for grading. The project site is already served by onsite electrical infrastructure by Southern California Edison (SCE) and natural gas infrastructure by Southern California Gas Company (SCGC). As discussed in Chapter 5.17, *Utilities and Service Systems*, when current usage ceases upon demolition of the Riverside Cement Plant facility buildings and structures, adequate infrastructure capacity is available to accommodate the electricity and natural gas demand for construction activities and would not require additional or expanded infrastructure.

The construction contractors are also anticipated to minimize idling of construction equipment during construction and reduce construction and demolition waste by recycling. These required practices would limit wasteful and unnecessary electrical energy consumption. Furthermore, there are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient

than at comparable construction sites in other parts of the state. Therefore, the proposed short-term construction activities would not result in inefficient, wasteful, or unnecessary fuel consumption.

9.3.3 Transportation Impacts

9.3.3.1 SHORT-TERM CONSTRUCTION IMPACTS

Transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Transportation energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would be temporary and would fluctuate according to the phase of construction. Construction trips would not result in unnecessary use of energy since the project site is centrally located and is served by numerous regional freeway systems that provides the most direct and shortest routes from various areas of the region.

Impacts related to transportation energy use during construction would be temporary and would not require expanded energy supplies or the construction of new infrastructure. Overall, it is expected that construction fuel associated with land use developments accommodated under the proposed project would not be any more inefficient, wasteful, or unnecessary than similar development projects. Therefore, impacts would be less than significant with respect to transportation energy.

9.3.3.2 LONG-TERM OPERATIONAL IMPACTS

The proposed project would consume transportation energy during operations from the use of motor vehicles. Estimates of transportation energy use are based on the overall vehicle miles traveled (VMT) and related transportation energy use. Given that the existing Riverside Cement Plant facility is closed and not operational, the existing annual VMT is zero. Similarly, under existing conditions, the transportation energy demand is estimated to be zero gallons per year for gasoline and diesel fuel.

Project-related VMT would come from employee and visitor vehicle trips, delivery and supply trucks, and trips by maintenance and repair crews. Alternative 1 would increase VMT by 50,906,982 annually. Alternative 2 would increase VMT by 55,304,860 annually (see Appendix N, *Transportation Energy Use Calculations*). Table 9-1, *Project Operation-Related Vehicle Fuel/Energy Usage*, shows the proposed project's annual use of energy based on VMT. As shown in this table, Alternative 1 would consume 4,737,105 gallons of fuel per year (gasoline, diesel, and compressed natural gas) and 57,858 kilowatt-hours (kWh) of electricity per year. Alternative 2 would consume 4,652,883 gallons per year and 83,132 kWh per year.

Table 9-1 Project Operation-Related Vehicle Fuel/Energy Usage

Alternative	Gas		Diesel		CNG		Energy[1]	
	VMT	Gallons	VMT	Gallons	VMT	Gallons	VMT	kWh
Alternative 1	18,990,217	880,812	31,690,671	3,833,094	52,944	23,199	173,150	57,858
Alternative 2	25,819,273	1,703,379	29,187,258	3,557,796	49,543	21,708	248,787	83,123

Source: CalEEMod 2016.3.2; EMFAC2017.
Notes CNG: compressed natural gas; VMT: vehicle miles traveled; kWh: kilowatt-hour
1 Electricity use from electric vehicles is based on the average electricity consumption available from the U.S. Department of Transportation (USDOT 2017).

Although the project would increase annual fuel consumption associated with more trips, average corporate fuel economy would increase as a result of state and federal laws, including the Pavley Advanced Clean Cars program, and vehicle turnover, which improve the overall fuel economy of California's vehicle fleets. In addition, in compliance with CALGreen, the proposed project would include bicycle racks and storage for employee use.

The City of Jurupa Valley and its surrounding areas are generally urbanized with available gasoline fuel facilities and infrastructure. Consequently, the proposed project would not result in a substantial demand for energy that would require expanded supplies or the construction of other infrastructure or expansion of existing facilities. Additionally, fuel consumption associated with vehicle trips generated by the proposed project would not be considered inefficient, wasteful, or unnecessary. Therefore, impacts would be less than significant with respect to operation-related fuel usage.

9.3.4 Other Operational Energy Demand Impacts

As detailed in Chapter 5.17, *Utilities and Service Systems*, the project site is developed with the Riverside Cement Plant facility and is served by SCE for electricity services and SCGC for natural gas services.

Operation of the existing facility consumes electricity for various purposes, including, but not limited to heating, cooling, and ventilation of buildings, water heating, operation of electrical systems, security and control center functions, lighting, and use of onsite equipment and appliances. Based on the air quality modeling, Alternative 1 of the proposed project would have an average annual electricity demand of 24,609,120 kWh per year and an average natural gas demand of 32,192,320 thousand British thermal units (kBTU) per year. For Alternative 2, the average annual electricity demand is 12,599,810 kWh per year and the average natural gas demand is 11,189,740 kBTU per year.[1]

Total mid-electricity[2] consumption in SCE's service area is forecast to increase by approximately 12,723 gigawatt-hours between 2015 and 2027 (CEC 2016). SCE forecasts that it will have sufficient electricity supplies

[1] It should be noted that the square footage used for Alternative 2 in the air quality model is slightly higher that the square footage stated in the Specific Plan. The air quality model is based on 170,000 square feet of light industrial use and 25,000 square feet of commercial retail.

[2] CEC forecasts include three scenarios: a high energy demand case, a low energy demand case, and a mid-energy demand case. The high energy demand case incorporates relatively high economic/demographic growth, relatively low electricity and natural gas rates,

to meet demands in its service area, and the electricity demand due to the project is within the forecast increase in SCE's electricity demands. Project development would not require SCE to obtain new or expanded electricity supplies, and impacts would be less than significant.

SCGC's residual supplies were forecast to remain constant at 3,775 million cubic feet per day (MMCF/day) from 2020 through 2035. Total natural gas consumption in SCGC's service area is forecast to decline slightly—from 2,591 MMCF/day in 2019 to 2,313 MMCF/day in 2035 (CGEU 2018). SCGC forecasts that it will have sufficient natural gas supplies to meet project gas demands, and project development would not require SCGC to obtain new or expanded gas supplies. Impacts would be less than significant.

Furthermore, the new structures would be designed in accordance with the 2016 Building and Energy Efficiency Standards (24 CCR Part 6) and the 2019 California Green Building Code (24 CCR Part 11) and would not result in inefficient, wasteful, or unnecessary electricity and natural gas consumption. Therefore, the proposed project would not result in a significant impact related to operational energy demand or result in inefficient, wasteful, or unnecessary fuel consumption.

9.3.5 Renewable Energy

The project site is in SCE's service area, which spans much of southern California from Orange and Riverside counties in the south to Santa Barbara County in the west to Mono County in the north (CEC 2015b). Sources of electricity sold by SCE in 2017, the latest year for which data are available, were:

- 32 percent renewable, consisting mostly of solar and wind
- 8 percent large hydroelectric
- 20 percent natural gas
- 6 percent nuclear
- 34 percent unspecified sources—that is, not traceable to specific sources (SCE 2018)[3]

The net increase in power demand associated with the proposed project is anticipated to be within the service capabilities of SCE and would not impede SCE's ability to implement California's renewable energy goals. Therefore, the proposed project would not obstruct a state or local plan for renewable energy.

9.3.6 References

California Air Resources Board. 2017, January 11 (reviewed). Clean Car Standards - Pavley, Assembly Bill 1493. https://ww3.arb.ca.gov/cc/ccms/ccms.htm.

and relatively low efficiency program and self-generation impacts. The low energy demand case includes lower economic/demographic growth, higher assumed rates, and higher efficiency program and self-generation impacts. The mid case uses input assumptions at levels between the high and low cases.

[3] The electricity sources listed above reflect changes after the 2013 closure of the San Onofre Nuclear Generating Station, which is owned by SCE.

California Building Standards Commission (CBSC). 2015, June. 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6). https://ww2.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf.

———. 2019. 2019 California Code of Regulations Title 24, Part 11. https://www.ladbs.org/docs/default-source/publications/code-amendments/2013-california-green-building-standards-code.pdf?sfvrsn=5.

California Energy Commission (CEC). 2007, December. State Alternative Fuels Plan. https://ww2.energy.ca.gov/2007publications/CEC-600-2007-011/CEC-600-2007-011-CMF.PDF.

———. 2015a. 2016 Building Energy Efficiency Standards, Adoption Hearing Presentation. http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/ June 10.

———. 2015b, February 24. California Energy Utility Service Areas. http://www.energy.ca.gov/maps/serviceareas/Electric_Service_Areas_Detail.pdf.

———. 2016, December 5. California Energy Demand Updated Forecast, 2017-2027. https://efiling.energy.ca.gov/getdocument.aspx?tn=214635.

———. 2017a, January. California Energy Commission Renewables Portfolio Standard Eligibility Commission Guidebook, Ninth Edition (revised). https://efiling.energy.ca.gov/getdocument.aspx?tn=217317.

———. 2017b, January. 2016 Appliance Efficiency Regulations. https://ww2.energy.ca.gov/2017publications/CEC-400-2017-002/CEC-400-2017-002.pdf.

———. 2018a. News Release: Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation. http://www.energy.ca.gov/releases/2018_releases/2018-05-09_building_standards_adopted_nr.html.

———. 2018b. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf.

California Gas and Electric Utilities (CGEU). 2018. 2018 California Gas Report. https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf.

California Public Utilities Commission (CPUC). 2016. Renewables Portfolio Standard Quarterly Report: 4th Quarter 2016. https://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/Utilities_and_Industries/Energy/Reports_and_White_Papers/Q4_2016_RPS_Report_to_the_Legislature_FINAL.pdf.

Southern California Edison (SCE). 2018, July. Power Content Label: 2017. http://www.energy.ca.gov/pcl/labels/2016_labels/Southern_California_Edison-Default.pdf. https://www1.sce.com/wps/wcm/connect/5a573c93-08ba-4221-b8ff-ff69d041f934/2017_PCL_SCE.pdf?MOD=AJPERES.

Urban Crossroads. 2019, January 28. Agua Mansa Commerce Park Specific Plan Air Quality Impact Analysis.

9. Other CEQA Considerations

US Department of Transportation (USDOT). 2017. Feasibility and Implications of Electric Vehicle (EV) Deployment and Infrastructure Development. https://www.fhwa.dot.gov/environment/sustainability/energy/publications/ev_deployment/page08.cfm.

United States Environmental Protection Agency (USEPA). 2019, May 6 (updated). Summary of the Energy Independence and Security Act Public Law 110-140 (2007). https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act.

10. Organizations and Persons Consulted

City of Jurupa Valley

Thomas G. Merrell, AICP, Planning Director

Annette Tam, Senior Planner

Ernest Perea, CEQA Administrator

Department of Toxic Substances Control

Scarlett Xihong Zhai, PE, Project Manager

Jurupa Area Recreation and Park District

Colby Diuguid, General Manager

Riverside County Department of Waste Resources

Jose L. Merlan, Urban/Regional Planner III

Riverside County Fire Department / CAL FIRE

Dexter Galang, Fire Facilities Planner

Riverside County Regional Park and Open-Space District

Patrick McDonough, Senior Planner

Rubidoux Community Services District

Steven W. Appel, PE, Assistant General Manager/District Engineer

10. Organizations and Persons Consulted

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11. Qualifications of Persons Preparing EIR

PLACEWORKS

JoAnn Hadfield
Principal, Environmental Services

- BS, University of Utah, Urban Planning
- Coursework Completion, Engineering, California State University, San Diego
- Engineer-in-Training Certificate

Denise Clendening, PhD
Associate Principal, Site Assessment Services

- PhD, Soil Physics, University of California, Riverside
- MS, Soil Science, University of California, Riverside
- BS, Geology, University of California, Riverside

Nicole Vermilion
Associate Principal, Air Quality & GHG

- Master of Urban and Regional Planning, University of California, Irvine
- BA, Environmental Studies, and BS, Ecology and Evolutionary Biology, University of California, Santa Cruz

Joshua Carman
Senior Associate, Noise, Vibration & Acoustics

- BA, Environmental Studies, University of California, Santa Cruz

Fernando Sotelo, PE, PTP
Senior Associate, Transportation

- California Traffic Engineer No. 2770
- Professional Transportation Planner
- MS, Civil Engineering, University of Southern California
- BS, Naval Engineering, University of Sao Paulo, Brazil

11. Qualifications of Persons Preparing EIR

John Vang, JD
Senior Associate

- Master of Urban Planning, Design & Development, Cleveland State University
- Juris Doctor, Cleveland-Marshall College of Law, Cleveland State University
- BA, Anthropology, University of California, Los Angeles

Michael Milroy
Associate

- MS, Interdisciplinary Studies/Neuroscience, California State University, Long Beach
- BS, Biological Science, California State University, Long Beach

Dina El Chammas Gass, EIT
Project Engineer

- MS, Environmental Engineering, American University of Beirut
- BS, Civil Engineering, American University of Beirut

Izzy Garcia
Project Planner, Noise, Vibration & Acoustics

- BS, Acoustics, Columbia College

12. Bibliography

AirNav. 2018 (accessed). http://www.airnav.com/airports/us/ca?type=H&use=R.

Appel, Steven W. (assistant general manager/district engineer). 2017, September 20. Service Provider Questionnaire Response. Rubidoux Community Services District.

California Air Resources Board (CARB). 2008, October. Climate Change Proposed Scoping Plan: A Framework for Change.

———. 2010, August. Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375. Staff Report.

———. 2017, January 11 (reviewed). Clean Car Standards - Pavley, Assembly Bill 1493. https://ww3.arb.ca.gov/cc/ccms/ccms.htm.

———. 2018, February. Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets. https://www.arb.ca.gov/cc/sb375/sb375_target_update_final_staff_report_feb2018.pdf.

California Department of Conservation (DOC). 2017. Mines Online. http://maps.conservation.ca.gov/mol/index.html.

California Department of Finance (DOF). 2017, May. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2017 with 2010 Census Benchmark. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.

California Department of Resources Recycling and Recovery (CalRecycle). 2015. Jurisdiction Disposal by Facility: Jurupa Valley. https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility.

———. 2015. Per Capita Disposal Rates Trends: Jurupa Valley. http://www.calrecycle.ca.gov/LGCentral/Reports/Viewer.aspx?P=JurisdictionID%3d628%26ReportName%3dDPGraphPopEmpNumbers%26ShowParameters%3dfalse%26AllowNullParameters%3dFalse.

———. 2017. Facility/Site Summary Details: Badlands Sanitary Landfill (33-AA-0006). http://www.calrecycle.ca.gov/SWFacilities/Directory/33-AA-0006/Detail/.

———. 2017. Facility/Site Summary Details: El Sobrante Landfill (33-AA-0217). http://www.calrecycle.ca.gov/SWFacilities/Directory/33-AA-0217/Detail/.

12. Bibliography

———. 2017. Estimated Solid Waste Generation Rates. https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates.

California Department of Toxic Substances Control (DTSC). 2018, February 23. Preliminary Environmental Assessment Report, Agua Mansa Commerce Park, Jurupa Valley, California. Memorandum.

California Department of Transportation (Caltrans). 2011, September. Scenic Highway System. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/.

California Energy Commission (CEC). 2007, December. State Alternative Fuels Plan. https://ww2.energy.ca.gov/2007publications/CEC-600-2007-011/CEC-600-2007-011-CMF.PDF.

———. 2015. 2016 Building Energy Efficiency Standards, Adoption Hearing Presentation. http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/ June 10.

———. 2015, February 24. California Energy Utility Service Areas. http://www.energy.ca.gov/maps/serviceareas/Electric_Service_Areas_Detail.pdf.

———. 2016, December 5. California Energy Demand Updated Forecast, 2017-2027. https://efiling.energy.ca.gov/getdocument.aspx?tn=214635.

———. 2017, January. California Energy Commission Renewables Portfolio Standard Eligibility Commission Guidebook, Ninth Edition (revised). https://efiling.energy.ca.gov/getdocument.aspx?tn=217317.

———. 2017, January. 2016 Appliance Efficiency Regulations. https://ww2.energy.ca.gov/2017publications/CEC-400-2017-002/CEC-400-2017-002.pdf.

———. 2018. News Release: Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation. http://www.energy.ca.gov/releases/2018_releases/2018-05-09_building_standards_adopted_nr.html.

———. 2018. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf.

California Gas and Electric Utilities (CGEU). 2018. 2018 California Gas Report. https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf.

California Geologic Survey (CGS). 2008. Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the San Bernardino Production-Consumption Region: San Bernardino and Riverside Counties, California. Special Report 206. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_206/SR_206_Text.pdf.

California Governor's Office of Emergency Services (CalOES). 2017, April 7. Governor Brown Lifts Drought Emergency, Retains Prohibition on Wasteful Practices. http://www.oesnews.com/governor-brown-lifts-drought-emergency-retains-prohibition-on-wasteful-practices/.

12. Bibliography

California Legislative Information (CLI). 2016, September 24. Senate Bill No. 1262: Chapter 594. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB1262.

California Public Utilities Commission (CPUC). 2016. Renewables Portfolio Standard Quarterly Report: 4th Quarter 2016. https://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/Utilities_and_Industries/Energy/Reports_and_White_Papers/Q4_2016_RPS_Report_to_the_Legislature_FINAL.pdf.

California State Water Resources Control Board. 2019. Chromium-6 Drinking Water MCL. https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chromium6.html.

Diuguid, Colby (general manager). 2017, September 15. Service Provider Questionnaire Response. Jurupa Area Recreation and Park District.

Dudek. 2005, February. Riverside LAFCO Water & Wastewater Municipal Service Review. https://lafco.org/wp-content/uploads/documents/archives/2.WesternRiverside.MSR.Final.pdf.

Employment Development Department (EDD). 2018, March 22. Monthly Labor Force Data for Cities and Census Designated Places (CDP). http://www.labormarketinfo.edd.ca.gov/file/lfmonth/allsubs.xls.

Galang, Dexter (fire facilities planner). 2017, September 14. Service Provider Questionnaire Response. Riverside County Fire Department Strategic Planning Division.

Ganddini. 2018, October 9. Agua Mansa Commerce Park Traffic Impact Analysis.

Hedge, Daniel (captain). 2018, March 14. Questionnaire Response. Riverside County Sheriff's Department.

Jurupa Valley, City of. 2017, May. Local Hazard Mitigation Plan. http://www.jurupavalley.org/Portals/0/Documents/Departments/City%20Manager/Emergency%20Preparedness/JV%202017%20Local%20Hazard%20Mitigation%20Plan%20(LHMP).pdf?ver=2017-09-20-223120-300.

———. 2017, September. City of Jurupa Valley General Plan. http://www.jurupavalley.org/Departments/Development-Services/Planning/General-Plan.

KPMG. 2016, March. Criminal Justice System Review: County of Riverside. http://www.riversidesheriff.org/pdf/BOS_Item_16-03_KPMG-PublicSafetyReview.pdf.

Langan Engineering and Environmental Services. 2017, May 19. Hydrology and Water Quality Report for Agua Mansa Commerce Park, Jurupa Valley, California.

———. 2017, August 18. Utility Report for Agua Mansa Commerce Park, Jurupa Valley, California.

———. 2017, November 3. Revised Remedial Investigation Report.

———. 2017, November 6. Revised Executive Summary of the Remedial Investigation Report, Riverside Cement Company City of Jurupa Valley. Langan Project No. 721011301.

12. Bibliography

———. 2018, April. Preliminary Water Quality Management Plan for Agua Mansa Commerce Park, Jurupa Valley, Riverside County, California.

———. 2018, July 10 (revised). Site Assessment Work Plan Agua Mansa Commerce Park Jurupa Valley, Riverside County California.

———. 2018, August 31. Summary of Findings Report Agua Mansa Commerce Park Jurupa Valley, Riverside County California.

———. 2018, November 26. Work Plan: Environmental Assessment Southern California Edison Substation Aqua Mansa Commerce Park.

———. 2018, May 24. Updated Phase I Environmental Site Assessment for Rubidoux / Agua Mansa Open Space.

———. 2019, January 7. Site Assessment Work Plan Agua Mansa Recreational Park/Open Space.

———. 2019, April. Draft Summary of Findings for Park/Open Space.

McDonough, Patrick (senior planner). 2017, September 12. Service Provider Questionnaire Response. Riverside County Regional Park and Open-Space District.

Merlan, Jose L. (urban/regional planner). 2017, September 18. Service Provider Questionnaire Response. Riverside County Department of Waste Resources.

MIG. 2017, December 14. Phase I Cultural Resources Assessment of the Proposed Agua Mansa Commerce Park, City of Jurupa Valley, County of Riverside, California.

Riverside, City of. 2012, October. Riverside Basin Groundwater Management Plan. https://water.ca.gov/LegacyFiles/groundwater/docs/GWMP/SC-17_CityOfRiverside_GWMP_2012.pdf.

———. 2015. Riverside Water Quality Control Plant. https://riversideca.gov/publicworks/sewer/wqcp.asp.

Riverside County. 2003, June 17. Final Western Riverside County Multiple Species Habitat Conservation Plan. http://wrc-rca.org/about-rca/multiple-species-habitat-conservation-plan/.

———. 2015, December. Riverside County 2015 General Plan. http://planning.rctlma.org/Portals/0/genplan/general_Plan_2017/elements/OCT17/Ch03_Land_Use_July2017.pdf?ver=2017-10-06-093429-517.

———. 2017, November. Adopted Budget Fiscal Year 2017/18. https://countyofriverside.us/Portals/0/Government//Budget%20Information/17-18/FY17-18%20Adopted%20Budget.pdf.

12. Bibliography

Riverside County Department of Waste Resources (RCDWR). 2017. Countywide Integrated Waste Management Plan. http://www.rcwaste.org/business/planning/ciwmp.

Riverside County Fire Department (RCFD). 2016. Riverside County Fire Department/CAL FIRE 2016 Annual Report. http://www.rvcfire.org/OURDEPARTMENT/PIOEducation/Documents/2016%20AR.PDF.

Riverside County Planning Department (Riverside County). 2019. Riverside County eRED Program. https://planning.rctlma.org/Home/RiversideCountyeREDProgram.aspx.

Riverside County Transportation Commission (RCTC). 2011, December 14. 2011 Riverside County Congestion Management Program. http://www.rctcdev.info/uploads/media_items/congestionmanagementprogram.original.pdf.

Riverside Local Agency Information Commission (LAFCO). 2014, December. City of Jurupa Valley Municipal Service Review. https://lafco.org/wp-content/uploads/ documents/archives/Jurupa_Valley_MSR_-_Final.pdf.

Rubidoux Community Services District (RCSD). 2016, July. Urban Water Management Plan. https://www.rcsd.org/files/1c50eaec3/RCSD-FINAL-DRAFT-2015-UWMP-%2807-20 -2016%29.pdf.

Southern California Association of Governments (SCAG). 2016, April 7. Final 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life. http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx.

———. 2016. "Current Context: Demographics and Growth Forecast." Appendix in 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf.

Southern California Edison (SCE). 2018, July. Power Content Label: 2017. http://www.energy.ca.gov/pcl/labels/2016_labels/Southern_California_Edison-Default.pdf. https://www1.sce.com/wps/wcm/connect/5a573c93-08ba-4221-b8ff-ff69d041f934/2017_PCL_SCE.pdf?MOD=AJPERES.

Tam, Annette (senior planner). 2017, October 3. Correspondence to JoAnn Hadfield, principal, PlaceWorks. City of Jurupa Valley.

———. 2018, May 18. Personal correspondence. City of Jurupa Valley.

Urban Crossroads. 2018, November 6. Agua Mansa Commerce Park Specific Plan, Diesel Mobile Source Health Risk Assessment, City of Jurupa Valley.

———. 2019, January 28 (revised). Agua Mansa Commerce Park Specific Plan, Air Quality Impact Analysis, City of Jurupa Valley.

12. Bibliography

———. 2019, January. Aqua Mansa Commerce Park Specific Plan Supplemental Air Quality Assessment.

US Army Corps of Engineers (Army Corps). 2019, July 22. Approved Jurisdictional Determination.

———. 2019, July 18. Determination of Need for Department of the Army Permit.

US Census Bureau (Census). 2000. Riverside County: Profile of General Demographic Characteristics: 2000. Census 2000 Summary File 1 (SF 1) 100-Percent Data.

———. 2010. Riverside County: Profile of General Demographic Characteristics: 2010. Census 2010 Summary File 1 (SF 1) 100-Percent Data.

US Department of Transportation (USDOT). 2017. Feasibility and Implications of Electric Vehicle (EV) Deployment and Infrastructure Development. https://www.fhwa.dot.gov/environment/sustainability/energy/publications/ev_deployment/page08.cfm.

US Environmental Protection Agency, Office of Solid Waste (USEPA). 1998. Draft Risk Assessment for Cement Kiln Dust Used as an Agricultural Soil Amendment. Prepared by Center for Environmental Analysis. US EPA Archive Document. https://archive.epa.gov/epawaste/nonhaz/industrial/special/web/pdf/ckdp0103.pdf.

———. 2012, September 26. Water Permitting 101. http://www.epa.gov/npdes/pubs/101pape.pdf.

———. 2016, December 14. Urban Runoff: Low Impact Development. https://www.epa.gov/nps/urban-runoff-low-impact-development.

———.2019, May 6 (updated). Summary of the Energy Independence and Security Act Public Law 110-140 (2007). https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act.

Weltz, Jerry. 2003. Jobs-Housing Balance. Planning Advisory Service Report Number 516. American Planning Association.

Western Riverside County Regional Conservation Authority (RCA). 2018, July 1. Western Riverside County Multiple Species Habitat Conservation Plan Local Development Mitigation Fee Schedule for Fiscal Year 2019. http://www.wrc-rca.org/wp-content/uploads/FY2019_MSHCP_FEES.pdf.

Western San Bernardino Watermaster (Western). August, 2017. Annual Report of the Western San Bernardino Watermaster. https://www.wmwd.com/DocumentCenter/View/3910/WSB-Annual-Report-2017.

Willdan Associates and Williams-Kuebelbeck & Associates (Willdan & Williams). 1986, July. Agua Mansa Industrial Corridor Specific Plan. http://www.sbcounty.gov/Uploads/lus/SpecificPlans/AMSP.pdf.