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VALLEY CORRIDOR SPECIFIC PLAN

for County of San Bernardino

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PLACEWORKS

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Abbreviations and Acronyms

ABBREVIATIONS AND ACRONYMS

AAQS	ambient air quality standards
AB	Assembly Bill
ADT	average daily traffic
afy	acre-feet per year
ALUCP	airport land use compatibility plan
AQMP	air quality management plan
BAU	business as usual
BMP	best management practices
BNSF	Burlington-Northern Santa Fe Railroad
CAA	Clean Air Act
CAFE	corporate average fuel economy
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
CESA	California Endangered Species Act
CFC	California Fire Code
cfs	cubic feet per second
CGS	California Geologic Survey
CJUSD	Colton Joint Unified School District
CMP	congestion management program
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2e	carbon dioxide equivalent

Abbreviations and Acronyms

CRHR	California Register of Historical Resources
CSA	county service area
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DEIR	draft environmental impact report
DOF	Department of Finance
DPM	diesel particulate matter
DSF	Delhi sands flower-loving fly
DTSC	Department of Toxic Substances Control
EDU	equivalent dwelling unit
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	greenhouse gases
gpd	gallons per day
GWh	gigawatt hours
GWP	global warming potential
HCD	Housing and Community Development Department (CA)
HCM	Highway Capacity Manual
HQTA	high quality transit area
HRA	health risk assessment
HRI	California Historic Resources Inventory
IPCC	Intergovernmental Panel on Climate Change
kBTU	thousand British thermal units
kWh	kilowatt hour
LCFS	low-carbon fuel standard
LID	low impact development
LOS	level of service

Abbreviations and Acronyms

MATES	Multiple Air Toxics Exposure Study
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MMCF	million cubic feet
MMWC	Marygold Mutual Water Company
MMT	million metric tons
mpg	miles per gallon
MPO	metropolitan planning organization
MS4	municipal separate storm sewer system
MT	metric ton
NAHC	Native American Heritage Commission
NCHRP	National Cooperative Highway Research Program
NO_X	nitrogen oxides
NOP	notice of preparation
NPDES	National Pollution Discharge Elimination System
O_3	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
PCB	polychlorinated biphenyls
PM	particulate matter
ppd	pounds per day
PPV	peak particle velocity
PRC	Public Resources Code
RCP	reinforced concrete pipe
RCRA	Resource Conservation and Recovery Act
RHNA	regional housing needs assessment
RMS	root mean square
RPS	renewable portfolio standard
RTP/SCS	regional transportation plan / sustainable communities strategy
RWQCB	Regional Water Quality Control Board
SANBAG	San Bernardino Associated Governments
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill

Abbreviations and Acronyms

SBCFCD	San Bernardino County Flood Control District
SBCFD	San Bernardino County Fire Department
SBTAM	San Bernardino County Traffic Analysis Model
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SIP	state implementation plan
SoCAB	South Coast Air Basin
SO_X	sulfur oxides
SRA	source receptor area
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCR	tribal cultural resource
TGD	Technical Guidance Document
TTCP	traditional tribal cultural places
UFP	ultrafine particles
UPRR	Union Pacific Railroad
USFWS	United States Fish and Wildlife Service
UST	underground storage tank
UWMP	urban water management plan
V/C	volume-to-capacity ratio
VdB	velocity decibels
VMT	vehicle miles traveled
VOC	volatile organic compound
WVWD	West Valley Water District'
ZNE	zero net energy

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 Valley Corridor 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 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 County of San Bernardino's CEQA procedures. The County, 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 County 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 (air quality, biological resources, cultural resources, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, transportation and traffic, 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 EIR Format

Chapter 1. Executive Summary: Summarizes the background and description of the proposed project, the format of this EIR, 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 EIR, 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 EIR.

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 and a Reduced Intensity Alternative.

Chapter 8. Impacts Found Not to Be Significant: Briefly describes the potential impacts of the project that were determined not to be significant by the EIR scoping process and were therefore not discussed in detail in this EIR.

Chapter 9. Significant Irreversible Changes Due to the Proposed Project: Describes the significant irreversible environmental changes associated with the project.

Chapter 10. Growth-Inducing Impacts of the Project: Describes the ways in which the proposed project would cause increases in employment or population that could result in new physical or environmental impacts.

Chapter 11. Organizations and Persons Consulted: Lists the people and organizations that were contacted during the preparation of this EIR.

Chapter 12. Qualifications of Persons Preparing EIR: Lists the people who prepared this EIR for the proposed project.

Chapter 13. Bibliography: The technical reports and other sources used to prepare this EIR.

Appendices: The appendices for this document (in PDF format on a CD attached to the front cover) comprise these supporting documents:

- Appendix A: Notice of Preparation/NOP Comments
- Appendix B: Air Quality and GHG Emissions Modeling Data
- Appendix C: Habitat Assessment
- Appendix D: Cultural and Paleontological Resources Technical Report
- Appendix E: Phase 0 Site Assessment
- Appendix F: Noise Modeling Data
- Appendix G: Traffic Impact Analysis
- Appendix H: Domestic Water Availability Assessment Study and Report
- Appendix I: Public Services Correspondence

1.2.2 Type and Purpose of This DEIR

This DEIR fulfills the requirements for a Program EIR. Although the legally required contents of a Program EIR are the same as for a Project EIR, Program EIRs are typically more conceptual than Project EIRs, with a more general discussion of impacts, alternatives, and mitigation measures. According to Section 15168 of the CEQA Guidelines, a Program EIR may be prepared on a series of actions that can be characterized as one large project. Use of a Program EIR gives the lead agency an opportunity to consider broad policy alternatives and programwide mitigation measures and has greater flexibility to address project-specific and cumulative environmental impacts on a comprehensive scale.

Agencies prepare Program EIRs for programs or a series of related actions that are linked geographically; logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program; or individual activities carried out under the same authority and having generally similar environmental effects that can be mitigated in similar ways.

Once a Program EIR has been prepared, subsequent activities within the program must be evaluated to determine whether additional CEQA documentation is necessary. However, if the Program EIR addresses the program's effects as specifically and comprehensively as possible, many subsequent activities may be within the Program EIR's scope, and additional environmental documents may not be required (Guidelines § 15168[c]). When a lead agency relies on a Program EIR for a subsequent activity, it must incorporate feasible mitigation measures and alternatives from the Program EIR into the subsequent activities (Guidelines § 15168[c][3]). If a subsequent activity would have effects outside the scope of the Program EIR, the lead agency must prepare a new initial study leading to a negative declaration, mitigated negative declaration, or EIR. Even in this case, the Program EIR still serves a valuable purpose as the first-tier environmental analysis. The CEQA Guidelines encourage the use of Program EIRs, citing five advantages:

- Provides a more exhaustive consideration of impacts and alternatives than would be practical in an individual EIR.
- Focuses on cumulative impacts that might be slighted in a case-by-case analysis.
- Avoids continual reconsideration of recurring policy issues.
- Considers broad policy alternatives and programmatic mitigation measures at an early stage when the agency has greater flexibility to deal with them.
- Reduces paperwork by encouraging the reuse of data (through tiering). (Guidelines § 15168[h])

1.2.3 Future Environmental Review

Pursuant to Section 15168 of the CEQA Guidelines, a later activity under the Specific Plan development program must be examined in the light of the Specific Plan Program EIR to determine whether additional environmental documentation must be prepared. Each later activity must undergo an initial study and analysis by the County to determine if the activity is within the scope of the Specific Plan Program EIR. Because these later activities are not new projects, as defined by CEQA, compliance for each impact category is narrowed to a determination of whether the activity would result in: (1) no substantial change from the previous analysis; (2) a more severe impact; or (3) a new significant impact. Based on the results of the initial study, the County will determine which of the following actions is applicable to the later activity:

- The later activity is a component of and consistent with the Specific Plan and has been previously analyzed as a part of the Specific Plan Program EIR and findings certified pursuant to the CEQA Guidelines. No additional CEQA documentation is required. (CEQA Guidelines § 15168)

- The later activity is a component of the Specific Plan and has been previously analyzed as a part of the Specific Plan Program EIR and findings certified pursuant to the State CEQA Guidelines; however, minor technical changes or additions are needed to make the previous documentation adequate to cover the project. An addendum to the Specific Plan Program EIR is required. (CEQA Guidelines § 15164)

- The later activity is either not a component of the Specific Plan or has not been previously analyzed as part of the Specific Plan Program EIR, in which case an initial study and additional environmental review under CEQA will be required unless the later activity is exempt under CEQA.

EIR Tiering. This approach is consistent with the tiering provision in California Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183 for "Projects Consistent with a Community Plan, General Plan or Zoning." This tiering opportunity is only available for plans (e.g., specific plan) for which an EIR has been prepared. The type of CEQA review needed for each project will be determined by the County staff during their review of the project or development proposed.

Streamlined Environmental Review. In addition to a more limited review process, infill and transit-oriented infill projects may qualify for streamlined environmental review. CEQA Guidelines Section 15183.3 allows eligible urban infill projects to streamline the environmental review process by limiting the topics subject to review at the project level. CEQA Guidelines Section 15332 establishes a categorical exemption for small (less than five acres) infill development projects, provided the project would not result in any significant traffic, noise, air quality, or water quality impacts.

Because the Specific Plan area north of Valley Boulevard is in a high quality transit area—as defined by the 2016–2040 Southern California Association of Governments Regional Transportation Plan / Sustainable Communities Strategy (SCAG RTP/SCS), additional streamlining may be available under California Public Resources Code, Sections 21155 to 21155.4. Figure 3-5, *Pedestrian, Bicycle, and Transit System*, in Chapter 3 of this Specific Plan illustrates the geographic extent of the high quality transit area in relationship to the Specific Plan boundaries. The previously referenced sections of the state code identify streamlined environmental review for transit priority projects consistent with this Specific Plan. A transit priority project is:

- Consistent with the SCAG RTP/SCS.

- Consists of at least 50 percent residential use (and a floor-area-ratio of at least 0.75 if it contains 26–50 percent nonresidential uses).

- Built at a density of at least 20 dwelling units per acre.

- Is within a high quality transit area (within one-half mile of major transit stop or high quality transit corridor) as defined by the RTP/SCS.

1.3 PROJECT LOCATION

The Valley Corridor Specific Plan area is in the unincorporated community of Bloomington in San Bernardino County, California. Bloomington is in the San Bernardino Valley and is surrounded by the City of Rialto to the northeast and east, the City of Jurupa Valley to the south, and the City of Fontana to the west and northwest.

The Valley Corridor Specific Plan area consists of 355 acres that is oriented to a 1.25-mile corridor of Valley Boulevard between Bloomington's western boundary with Fontana (Alder Avenue) and eastern boundary with Rialto (Spruce Avenue). The project area includes properties fronting Valley Boulevard but also extends north to Marygold Avenue and south to Interstate 10 (I-10). Regional access to the site is provided by I-10, Valley Boulevard, and Cedar Avenue. The Union Pacific Railroad traverses Bloomington just outside the project area, south of and parallel to I-10.

1.4 PROJECT SUMMARY

The County of San Bernardino Land Use Services Department, as lead agency and project applicant, is processing the Valley Boulevard Specific Plan to provide the foundation for a more vibrant community corridor that offers employment and retail opportunities surrounded by a more walkable, safe, and attractive environment. The plan introduces land use changes to approximately 294 acres of parceled land within the boundary and a little over 60 acres of right-of-way.

The proposed Specific Plan identifies ways to encourage opportunities for healthier living, including pedestrian-oriented activity centers that highlight Bloomington's cultural, historical, and community assets. The plan also emphasizes the creation of employment spaces that foster small business development and promote a range of office and light industrial businesses, planting the seeds of business and job opportunities to promote overall growth in community capital.

The Specific Plan would maintain and improve existing private and community assets with land use changes to support additional assets. Land use changes under the Valley Corridor Specific Plan would involve replacing current conventional zoning districts with six Specific Plan land use districts: Mixed Use, Bloomington Enterprise, Commercial, Low & Medium Residential, Medium & High Residential, and Open Space (see "Land Use Districts" in Section 3.3.2, *Description of the Project*). Each district has its own development standards and strategies to individually and collectively contribute to the overarching planning principles (see Section 3.2, *Statement of Objectives*).

Specific Plan Buildout

Buildout of the proposed Specific Plan could ultimately support a total of 1,093 residential dwelling units, 4,073 residents, 1,882,428 square feet of nonresidential buildings space, and 1,890 jobs in the plan area. This would represent an additional 568 dwelling units, 1,857 new residents, 907,319 square feet of additional nonresidential building space, and approximately 1,413 new jobs in the plan area compared to existing conditions. Table 1-1 outlines the proposed zoning districts and summarizes maximum buildout projections.

Table 1-1 Land Use Districts and Potential Buildout for the Valley Corridor Specific Plan

Valley Corridor Plan Land Use Districts	Acres	Residential		Nonresidential	
		Units	Population	Square Feet	Jobs
VC/Mixed Use	35.4	404	1,252	79,756	134
VC/Bloomington Enterprise	114.3	–	–	1,244,067	995
VC/Commercial	51.4	–	–	492,138	754
VC/Low & Medium Residential	80.1	435	1,931	66,466	7
VC/Medium & High Residential	13.0	254	889	–	–
VC/Open Space	See notes	–	–	–	–
Right-of-Way	60.4	–	–	–	–
Total	355	1,093	4,073	1,882,428	1,890
Existing Land Uses	–	525	2,216	975,109	477
Difference Compared to Existing Land Uses	–	568	1,857	907,319	1,413

Notes: Numbers subject to rounding.
Future projections also include the potential for 250 hotel rooms in the VC/Commercial District west and east of Cedar Avenue. Existing conditions include a 30-room hotel, currently in the Bloomington Enterprise District.
Existing commercial self-storage businesses are assumed to remain in multiple areas of the corridor and are reflected in the figures for both residential and nonresidential districts.
Valley Corridor Open Space (VC/OS) is a floating designation and will be applied to parcels as parkland and plaza space are built.

Mobility

One of the major priorities of the Specific Plan is to decrease the reliance on private cars and accommodate walking, biking, and public transit. Pedestrian, bicycle, and transit circulation improvements are described in Section 3.3.2, *Description of the Project*.

1.5 SUMMARY OF PROJECT ALTERNATIVES

Three alternatives have been determined to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic objectives of the project but may avoid or substantially lessen any of the significant effects of the project.

- No Project/Current Zoning Alternative
- Business Park Focus Alternative
- Concentrated Specific Plan Area Alternative

An EIR must identify an "environmentally superior" alternative, and where the No Project Alternative is identified as environmentally superior, the EIR is then 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. However, only the impacts found significant and unavoidable are used to make the final determination of whether an alternative is environmentally superior or inferior to the proposed project. Impacts involving air quality, greenhouse gas emissions, noise, and traffic were found to be significant and unavoidable. Section 7.7 identifies the environmentally superior alternative. The preferred land use alternative (i.e., the proposed project) is analyzed in detail in Chapter 5 of this DEIR.

1.5.1 No-Project/Current Zoning Alternative

The No Project/Current Zoning Alternative assumes that the Valley Corridor Specific Plan would not be adopted, and the County of San Bernardino Development Code and General Plan (including the Bloomington Community Plan) would remain in effect. Pursuant to CEQA Guidelines Section 15126.6(e)(3)(A), when a project is the revision of an existing regulatory plan, the "no project" alternative assumes continuation of the existing plan, policy, or operation into the future. Therefore, this alternative assumes that new development and redevelopment would continue in the project area consistent with the adopted land use designations. Buildout of the No Project/Current Zoning Alternative would result in 439 residential units and 1,877,825 square feet of nonresidential land uses. Compared to the proposed project, buildout of the existing zoning would result in a reduction of 654 residential units and an increase of 4,603 square feet of nonresidential uses. Note that this alternative results in a reduction of residential units compared to existing conditions (approximately 86 fewer units than at the time of this analysis).

1.5.2 Business Park Focus Alternative

The Business Park Focus Alternative was selected to reduce transportation-related impacts but still create economic opportunities and attract investments in the community. This alternative assumes less Valley Corridor/Mixed Use and Valley Corridor/Commercial than in the proposed Specific Plan; it assumes that approximately 175 acres would be Valley Corridor/Business Enterprise instead of only 114 acres. Buildout would allow for 737 residential units and 1,987,856 square feet of nonresidential uses, primarily in the Valley Corridor/Business Enterprise district (1,802,154 square feet). Compared to the proposed project, buildout of this alternative would result in a reduction of 356 residential units and an addition of 105,428 nonresidential square feet.

1.5.3 Concentrated Specific Plan Area Alternative

The Concentrated Specific Plan Area Alternative was selected to reduce environmental impacts of the proposed project by reducing the intensity of development as well as the development footprint. This alternative limits the extent of the proposed Specific Plan to parcels primarily along Valley Boulevard between Alder Avenue and Cedar Place, keeping the existing zoning for parcels east of Cedar Place and those along Grove Place and Marygold Avenue. This alternative development area has the potential to generate 820 residential units and 1,741,167 square feet of nonresidential buildings. Compared to the proposed project, buildout of the Concentrated Specific Plan Area Alternative would result in a reduction of 273 residential units, 1,092 residents, and 141,261 nonresidential square feet.

1.6 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR describe 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 regarding:

1. Whether this DEIR adequately describes the environmental impacts of the project.

2. Whether the benefits of the project override those 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

Prior to the preparation of the DEIR, the County circulated a Notice of Preparation (NOP) and held an EIR scoping meeting on July 15, 2015, at the Ayala Park Community Center to determine the concerns of interested parties regarding environmental analysis of the proposed Specific Plan. Table 1-2 summarizes issues identified by respondents to the NOP and attendees of the scoping meeting. The table also provides references to the sections of the DEIR in which these issues are evaluated. No other areas of controversy are known to the lead agency.

Correspondence received in response to the NOP and a summary of comments recorded at the scoping meeting are included in Appendix B.

Table 1-2 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
Scoping Meeting			
Ayala Park Community Center (July 15, 2015)	Air Quality; Cultural Resources; Public Services; Transportation and Traffic	• Expressed concern that relocation of Ayala Park would adversely affect historical monuments within the park. • Expressed disappointment that the NOP and scoping meeting were not more widely publicized. • Questioned potential impact of new residents on enrollment and capacity of existing schools. • Expressed concern regarding establishment of new businesses near Ruth Grimes Elementary School. • Asked that the EIR analyze widening of the Cedar Avenue bridge and other planned road improvements when estimating future traffic impacts. • Asserted that law enforcement services provided by the County Sherriff (response times in particular) are already deficient due to the department's large service area.	Sections 5.2, *Air Quality*; *5.4, Cultural Resources*; 5.11, *Public Services;* and 5.13, *Transportation and Traffic*.

1. Executive Summary

Table 1-2 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
		• Indicated that Valley Boulevard's existing medians and lighting are not adequate to serve existing businesses and traffic movement along the corridor. • Expressed concern that warehousing and industrial uses, both within and outside the project area, could result in air quality-related health impacts.	
Agencies and Organizations			
South Coast Air Quality Management District	Air Quality analysis	Requirements for air quality impacts analysis and mitigation measures.	Section 5.2, *Air Quality*
California Department of Transportation (Caltrans) District 8	Document distribution request	Requested a copy of the EIR and five copies of the project traffic impact study (TIS; two hard copies and three CDs).	Caltrans District 8 is included on the distribution list for the DEIR; the requested copies of the TIS will be sent with the DEIR. Section 5.13, *Transportation and Traffic*
City of Fontana	Document distribution request; impacts analysis	• Requested a copy of the draft Specific Plan. • Requested that the DEIR analyze the following impacts potentially affecting Fontana: Traffic, air quality, greenhouse gases, visual, noise, utilities/public services, and any other relevant impacts.	Chapter 5, *Environmental Analysis*

California Department of Fish and Wildlife	Biological Resources	• The description of existing conditions should include:
		  • Habitat types, using a floristic, alliance, and/or association-based mapping and assessment.
		  • General biological inventory of fish, amphibian, reptile, bird, and mammal species present or potentially present in each habitat type identified.
		  • A complete recent inventory of rare, threatened, and endangered species onsite and in offsite areas that could be affected by the project.
		• Impacts analysis should include:
		  • Analysis of potential impacts from lighting, noise, human activity, and wildlife-human interactions.
		  • Discussion of potential indirect impacts including resources in areas next to the project site.
		  • Cumulative impacts analysis.
		• Mitigation measures
		  • Fully protected species and sensitive plant communities should be avoided and protected.
			Section 5.3, *Biological Resources*

Table 1-2 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
		• Mitigation measures should emphasize avoidance and reduction of impacts. Habitat restoration/enhancement, either onsite or offsite, would be required for unavoidable impacts. Requirements for habitat restoration plans are specified. Seeds for restoration measures should be collected from on or near the site. • Mitigation measures to minimize impacts to birds protected by federal and state laws include: project timing; monitoring of project-generated noise; sound walls; and buffers. • A qualified biologist should be retained to move low-mobility sensitive species out of harm's way that would otherwise be injured or killed by project activities. • CDFW generally does not support translocation/transplantation as mitigation, as such efforts are experimental and often unsuccessful. • Sets forth requirements regarding several sections of the California Fish and Game Code (California Endangered Species Act; Lake and Streambed Alteration Program).	
Southern California Association of Governments (SCAG)	Intergovernmental review and regionally significant projects	• States SCAG's status as authorized regional agency for intergovernmental review and regional transportation planning agency. • Requests CEQA documents. • Summarizes goals and strategies from the 2012 RTP/SCS and the 2012 Adopted Growth Forecast.	Chapter 4, *Environmental Setting*. SCAG is included on the distribution list for the DEIR; Sections 5.5, *GHG Emissions* and 5.8, *Land Use and Planning*.
Southern California Automotive Museum	Cultural resources	• Concern for cultural resources related to automotive history, including service stations, restaurants, and motels.	Section 5.4, *Cultural Resources*
Bloomington Preservation Foundation	Cultural resources	• Concern for cultural resources, especially on Highway 99 (Valley Boulevard), such as small motels and other small-town buildings. • Requests that CEQA guidelines be followed (by researching buildings and local history) respecting removing any buildings in Bloomington. • Recommendations for the Specific Plan.	Section 5.4, *Cultural Resources*
Individuals			
Rosanne Rodriguez	Cultural resources	• Concerned that cultural resources and historic value of community be preserved.	Section 5.4, *Cultural Resources*

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

Table 1-3 summarizes the conclusions of the environmental analysis 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 imposing 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			
Impact 5.1-1: Future development that would be accommodated by the Valley Corridor Specific Plan would not result in a substantial adverse effect on a scenic vista resource or substantially damage scenic resources within a state scenic highway.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.1-2: Future development that would be accommodated by the Valley Corridor Specific Plan would alter but not substantially degrade the visual character of the project area and its surroundings.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.1-3: Future development that would be accommodated by the Valley Corridor Specific Plan would generate additional light and glare within the project area and its surroundings, which could adversely affect day or nighttime views in the area.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.2 AIR QUALITY			
Impact 5.2-1: Buildout of the project would generate slightly more growth than the existing general plan; therefore, the project would be inconsistent with SCAQMD's air quality management plans.	Potentially Significant	AQ-1 Applicants for new development projects within the Valley Corridor Specific Plan area shall require the construction contractor to use equipment that meets the United Stated Environmental Protection Agency (EPA)-Certified emissions standards. All off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 4 emission standards. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 4 diesel emissions control strategy for a similarly sized engine, as defined by the California Air Resources Board's (CARB) regulations.	Significant and Unavoidable

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
		Prior to construction, the project engineer shall ensure that all demolition and grading plans clearly show the requirement for EPA Tier 4 or higher emissions standards for construction equipment over 50 horsepower. During construction, the construction contractor shall maintain a list of all operating equipment in use on the construction site for verification by the County of San Bernardino. The construction equipment list shall state the makes, models, and numbers of construction equipment onsite. Equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations. Construction contractors shall also ensure that all nonessential idling of construction equipment is restricted to five minutes or less in compliance with California Air Resources Board's Rule 2449. AQ-2 Applicants for new development projects within the Valley Corridor Specific Plan area shall require the construction contractor to prepare a dust control plan and implement the following measures during ground-disturbing activities in addition to the existing requirements for fugitive dust control under South Coast Air Quality Management District (SCAQMD) Rule 403 to further reduce PM10 and PM2.5 emissions. The County of San Bernardino shall verify compliance that these measures have been implemented during normal construction site inspections. • Following all grading activities, the construction contractor shall reestablish ground cover on the construction site through seeding and watering. • During all construction activities, the construction contractor shall sweep streets with SCAQMD Rule 1186–compliant, PM10-efficient vacuum units on a daily basis if silt is carried over to adjacent public thoroughfares or occurs as a result of hauling. • During all construction activities, the construction contractor shall maintain a minimum 24-inch freeboard on trucks hauling dirt, sand, soil, or other loose materials and tarp materials with a fabric cover or other cover that achieves the same amount of protection.	

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 all construction activities, the construction contractor shall water exposed ground surfaces and disturbed areas a minimum of every three hours on the construction site and a minimum of three times per day. • During all construction activities, the construction contractor shall limit onsite vehicle speeds on unpaved roads to no more than 15 miles per hour. AQ-3 Applicants for new development projects within the Valley Corridor Specific Plan area shall require the construction contractor to use coatings and solvents with a volatile organic compound (VOC) content lower than required under South Coast Air Quality Management District Rule 1113 (i.e., super compliant paints). The construction contractor shall also use precoated/natural-colored building materials, where feasible. Use of low-VOC paints and spray method shall be included as a note on architectural building plans and verified by the County of San Bernardino during construction. AQ-4 Prior to issuance of a building permit for new development projects within the Valley Corridor Specific Plan area, the property owner/developer shall show on the building plans that all major appliances (dishwashers, refrigerators, clothes washers, and dryers) to be provided/installed are Energy Star appliances. Installation of Energy Star appliances shall be verified by the County prior to issuance of a certificate of occupancy. AQ-5 Prior to issuance of building permits for residential development projects within the Valley Corridor Specific Plan area, the property owner/developer shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of San Bernardino prior to issuance of a certificate of occupancy. • For multifamily dwellings, electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the CALGreen Code. • Bicycle parking shall be provided as specified in Section A4.106.9 (Residential Voluntary Measures) of the CALGreen Code.	

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-6 Prior to issuance of building permits for non-residential development projects within the Valley Corridor Specific Plan area, the property owner/developer shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of San Bernardino prior to issuance of a certificate of occupancy. • For buildings with more than ten tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3 (Nonresidential Voluntary Measures) of the CALGreen Code. • Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code. • Facilities shall be installed to support future electric vehicle charging at each non-residential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code.	
Impact 5.2-2: Construction activities associated with the project would generate a substantial increase in short-term criteria air pollutant emissions that exceeds the threshold criteria and would cumulatively contribute to the nonattainment designations of the SoCAB.	Potentially Significant	Mitigation Measures AQ-1 through AQ-3 apply.	Significant and Unavoidable
Impact 5.2-3: Long-term operation of the project would generate a substantial increase in criteria air pollutant emissions that exceed the threshold criteria and would cumulatively contribute to the nonattainment designations of the SoCAB.	Potentially Significant	Mitigation Measures AQ-4 through AQ-6 apply.	Significant and Unavoidable

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
Impact 5.2-4: Construction activities related to buildout of the proposed project could expose sensitive receptors to substantial pollutant concentrations.	**Potentially Significant**	Mitigation measures applied for Impact 5.2-2 (AQ-1 through AQ-3) would also reduce the proposed project's localized construction-related criteria air pollutant emissions to the extent feasible.	**Significant and Unavoidable**
Impact 5.2-5: Buildout of the project could result in new source sources of criteria air pollutant emissions and/or toxic air contaminants proximate to existing or planned sensitive receptors.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.2-6: Light industrial land uses associated with the project could create objectionable odors.	**Potentially Significant**	AQ-7 If it is determined during project-level environmental review that a light industrial project has the potential to emit nuisance odors beyond the property line, an odor management plan may be required, subject to County's regulations. Facilities in the Bloomington Enterprise district that have the potential to generate nuisance odors include but are not limited to: • Paint Booths • Industrial Bakery • Light Manufacturing, • Research and Development • Welding • Urban farming If an odor management plan is determined to be required through CEQA review, the County of San Bernardino shall require the project applicant to submit the plan prior to approval to ensure compliance with the South Coast Air Quality Management District's Rule 402, for nuisance odors. If applicable, the Odor Management Plan shall identify the Best Available Control Technologies for Toxics (T BACTs) that will be utilized to reduce potential odors to acceptable levels, including appropriate enforcement mechanisms. T BACTs may include, but are not limited to, scrubbers (e.g., air pollution control devices) at the industrial facility. T BACTs identified in the odor management plan shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.	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
Cumulative Impacts	Potentially Significant	Mitigation Measures AQ-1 through AQ-7 apply.	Significant and Unavoidable
5.3 BIOLOGICAL RESOURCES			
Impact 5.3-1: Development of the proposed project could impact sensitive plant and animal species.	Potentially Significant	BIO-1 Prior to the issuance of any grading permit for development on a vacant site, the project applicant shall prepare a biological resources assessment. The biological resources assessment shall be prepared by a qualified biological consultant and include a characterization of biological resources onsite and a habitat assessment for the Delhi sands flower-loving fly and burrowing owl. If there is potential for direct impacts to special-status species with implementation of development or construction activities, the project-specific biological resources assessment report shall include mitigation measures requiring pre-construction surveys for special-status species and construction monitoring to ensure avoidance, relocation, or safe escape of special-status species from the construction activities, as appropriate. Surveying and mitigation for burrowing owl shall comply with California Department of Fish and Wildlife Staff Report on Burrowing Owl Mitigation, dated March 7, 2012. Surveying and mitigation for the Delhi sands flower-loving fly shall comply with US Fish and Wildlife Guidelines for conducting presence/absence surveys for the Delhi sands flower-loving fly (2004).	Less Than Significant
Impact 5.3-2: Development of the proposed project would not result in the loss of sensitive natural communities, riparian habitats, or jurisdictional waters.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.3-3: Project buildout would not affect wildlife movement.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.3-4: Buildout of the proposed Specific Plan would require compliance with San Bernardino County Development Code Section 88.01.050 requiring a permit for removal of native trees or row-planted palm trees. The project area is not in the plan area of a habitat	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
conservation plan or natural community conservation plan, and Specific Plan buildout would not conflict with any such plan.			
Cumulative Impact	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.4 CULTURAL RESOURCES			
Impact 5.4-1: Implementation of the Specific Plan has the potential to impact historical and historical archaeological resources.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.4-2: Implementation of the Specific Plan has the potential to damage prehistoric archaeological resources.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.4-3: Project ground-disturbing activities could damage paleontological resources. Project development would not destroy a unique geological feature.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.4-4: Grading activities could potentially disturb human remains.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.4-5: Implementation of the proposed Specific Plan could impact tribal cultural resources.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.5 GREENHOUSE GAS EMISSIONS			
Impact 5.5-1: Buildout of the Valley Corridor Specific Plan would generate a substantial increase in GHG emissions compared to existing conditions and would have a significant impact on the environment.	Potentially Significant	Mitigation Measures AQ-4 through AQ-6 apply.	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
Impact 5.5-2: Future development projects in the Valley Corridor Specific Plan that exceed 3,000 MTCO2e would be required to implement additional GHG reduction measures to ensure consistency with the County of San Bernardino's GHG Reduction Plan.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Cumulative Impacts	Potentially Significant	Mitigation Measures AQ-4 through AQ-6 apply.	Significant and Unavoidable
5.6 HAZARDS AND HAZARDOUS MATERIALS			
Impact 5.6-1: Project construction and operations in accordance with the Specific Plan would involve the transport, use, and/or disposal of hazardous materials.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.6-2: The Specific Plan area is on a list of hazardous materials sites.	Potentially Significant	HAZ-1 Prior to the issuance of grading permits for new development within the Valley Corridor, the project applicant shall submit a Phase I Environmental Site Assessment (ESA) to identify environmental conditions and determine whether contamination is present. The Phase I ESA shall be prepared by a Registered Professional Engineer and in accordance with the American Society for Testing and Materials (ASTM) Standard E 1527.13, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process." If recognized environmental conditions related to soils are identified in the Phase I ESA, the project applicant shall perform soil sampling as a part of a Phase II ESA. If contamination is found at significant levels, the project applicant shall remediate all contaminated soils in accordance with state and local agency requirements (DTSC, RWQCB, San Bernardino County Fire Department, etc.). All contaminated soils and/or material encountered shall be disposed of at a regulated site and in accordance with applicable laws and regulations prior to the completion of grading. Prior to the issuance of building permits, a report documenting the completion, results, and any follow-up remediation on the recommendations, if any, shall be provided to the Building Official and the San Bernardino County Planning Section evidencing that all site remediation activities have been completed.	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
Impact 5.6-3: The Specific Plan area is outside of safety zones surrounding Rialto Municipal Airport. Specific Plan buildout would not cause hazards to people living or working onsite.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.6-4: Project development would not affect the implementation of an emergency responder or evacuation plan.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.6-5: The project site is not in a designated fire hazard zone and would not expose structures and/or residences to wildfire danger.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.7 HYDROLOGY AND WATER QUALITY			
Impact 5.7-1: Development pursuant to the proposed Specific Plan would increase the amount of impervious surfaces on the site and would increase surface water flows into drainage systems in the watershed requiring system upgrades.	Potentially Significant	HYD-1 Prior to project approval for future development projects in the Valley Corridor Specific Plan, applicants shall submit site-specific hydrology and hydraulic studies to the Public Works Department for review and approval. If existing facilities including the Caltrans Channel are not adequate to handle runoff generated by the proposed development, then the applicant shall construct storm drain improvements. If necessary storm drain upgrades cannot be implemented prior to issuance of occupancy permits, the applicant shall provide onsite detention facilities, or other methods to ensure that post-construction runoff does not exceed pre-development quantities.	Less Than Significant
Impact 5.7-2: Development pursuant to the proposed Specific Plan would increase the amount of impervious surfaces on the site and would therefore impact opportunities for groundwater recharge.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.7-3: The project area is outside of 100-year flood hazard areas.	Less Than Significant	No mitigation measures are required.	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
Impact 5.7-4: During the construction phase of the proposed project, there is a potential for short-term unquantifiable increases in pollutant concentrations from the site. After project development, the quality of storm runoff (sediment, nutrients, metals, pesticides, pathogens, and hydrocarbons) may be altered.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.7-5: The project site is not in the inundation area of any dam.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.7-6: The site would not be subject to inundation by seiche, tsunami, or mudflow.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.8 LAND USE AND PLANNING			
Impact 5.8-1: Implementation of the proposed Specific Plan would not divide an established community.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.8-2: Implementation of the proposed Specific Plan would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.8-3: Implementation of the Valley Corridor Specific Plan would not conflict with an adopted habitat conservation plan.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Cumulative Impacts	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
5.9 NOISE				
Impact 5.9-1: Implementation of the Specific Plan would involve construction activities that would result in temporary noise increases in the vicinity of the project area.	Potentially Significant	N-1	Prior to issuance of demolition, grading and/or building permits, a note shall be provided on plans indicating that, ongoing during grading, demolition, and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related noise: • Construction activity is limited to the daytime hours between 7 AM to 7 PM on Monday through Friday and 9 AM to 6PM on Saturday, as prescribed in SBCDC Section 83.01.080. Construction is prohibited on Sundays. • All internal combustion engines on construction equipment and trucks are fitted with properly maintained mufflers no less effective than those supplied by the original manufacturer. • Stationary equipment such as generators, air compressors shall be located as far as feasible from nearby noise-sensitive uses. • Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors. • Construction traffic shall be limited—to the extent feasible—to approved haul routes established by the County Planning Department	Significant and Unavoidable
Impact 5.9-2: Buildout of the individual land uses and projects for implementation of the Specific Plan may expose sensitive uses to strong levels of groundborne vibration.	Potentially Significant	N-2	Prior to issuance of a building permit for any project requiring pile driving or blasting during construction, the property owner/developer shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant/engineer. The maximum levels shall not exceed 0.2 inch/second, which is the level that can cause architectural damage for typical residential construction. If maximum levels would exceed this threshold, alternative uses such static rollers, nonexplosive blasting, and drilling piles as opposed to pile driving shall be used.	Less Than Significant
		N-3	During the project-level CEQA process for each individual development under the Specific Plan, a noise and vibration analysis shall be conducted to assess and mitigate potential noise and vibration impacts related to the operations of	

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
			that individual development. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant/ engineer and shall follow the then-applicable CEQA guidelines, practices, and precedents.	
Impact 5.9-3: Buildout of the Specific Plan would cause a substantial noise increase related to traffic on local roadways.	Potentially Significant	N-4	Prior to issuance of building permits for future residential units in the Specific Plan area that are adjacent to Locust Avenue (between Valley Boulevard and Marygold Avenue), the applicant(s)/developer(s) shall submit an acoustical study to the County of San Bernardino that demonstrates that the proposed residential building design would provide an interior noise level of 45 dBA CNEL or less and include a means of mechanical ventilation (for occupancy with windows closed), as required by the California Building Code.	Significant and Unavoidable
Impact 5.9-4: Noise-sensitive uses would not be exposed to elevated noise levels from stationary sources.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.9-5: The proximity of the project area to an airport or airstrip would not result in exposure of future resident and/or workers to airport-related noise.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Cumulative Impacts	Potentially Significant	Mitigation Measures N-1 through N-4 apply.		Significant and Unavoidable
5.10 POPULATION AND HOUSING				
Impact 5.10-1: Implementation of the Valley Corridor Specific Plan would directly and indirectly induce population growth in Bloomington.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.10-2: Implementation of the Valley Corridor Specific Plan would not displace people or housing.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Cumulative Impacts	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
5.11 PUBLIC SERVICES			
FIRE PROTECTION AND EMERGENCY SERVICES			
Impact 5.11-1: Implementation of the Specific Plan would introduce new residents, workers, and structures into the San Bernardino County Fire Department's service boundaries, increasing the demands for fire protection facilities and personnel.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation measures are required.	Less Than Significant
POLICE PROTECTION			
Impact 5.11-2: The proposed project would introduce new residents, workers, and structures into the San Bernardino County Sheriff's Department service boundaries, increasing the demands for police protection facilities.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation measures are required.	Less Than Significant
SCHOOL SERVICES			
Impact 5.11-3: Implementation of the Specific Plan would generate new students who would impact the school enrollment capacities of area schools.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation measures are required.	Less Than Significant
LIBRARY SERVICES			
Impact 5.11-4: Implementation of the Specific Plan would generate additional population, increasing the service demands on the local libraries.	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
Cumulative Impacts	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.12 RECREATION			
Impact 5.12-1: The proposed project would generate 1,857 additional residents that would increase the use of existing park and recreational facilities.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.12-2: Project implementation would generate a need for new and expanded recreational facilities.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.13 TRANSPORTATION/TRAFFIC			
Impact 5.13-1: Project-related trip generation would impact levels of service on the area's existing roadway system.	Potentially Significant	T-1 Prior to issuance of occupancy permits for development projects that would be accommodated by the Valley Corridor Specific Plan, project applicants shall construct or pay fair share contributions to the County of San Bernardino (pursuant to the County of San Bernardino Traffic Impact Study Guidelines), toward the construction of the traffic improvements listed below. The fair-share payment for each project shall be calculated as the net increase in trip generation due to that project proportional to the entire net increase in trip generation due to Specific Plan buildout. Existing Plus Project Conditions • Alder and Marygold Avenue: Install traffic signal. • Sierra Avenue and San Bernardino Avenue: Install one right-turn lane with overlap phase on the eastbound approach. • Sierra Avenue with Valley Boulevard: Install one right-turn lane with overlap phase on the southbound approach. • Cedar and I-10 Westbound Ramps: Install second left-turn lane and a third through lane on the northbound approach.	Significant and Unavoidable

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 and I-10 Eastbound Ramps: Install second left-turn lane and a third through lane on the southbound approach. Cumulative Impacts (2035 Plus Project Conditions) • Locust Avenue and Marygold Avenue: Convert one right-turn lane to a shared through and right-turn lane on the northbound approach. • Cedar Avenue and Valley Boulevard: Install a third through lane on the northbound approach. • Cedar Avenue and Slover Avenue: Install a second left-turn lane on the eastbound approach. • Sierra Avenue and San Bernardino Avenue (City of Fontana): - Installation of one right-turn lane with overlap phase on the northbound approach - Installation of one right-turn lane on the southbound approach - Installation of one right-turn land on the eastbound approach • Sierra Avenue and Valley Boulevard (City of Fontana): - Installation of a third through lane on the northbound approach - Installation of a third through lane on the eastbound approach • Sierra Avenue and Slover Avenue (City of Fontana): - Installation of a fourth through lane and a right-turn lane with overlap phase on the northbound approach - Installation of one right-turn lane with overlap phase on the southbound approach • Alder Avenue and Valley Boulevard (County/City of Fontana): - Installation of two left-turn lanes; a second through lane; and one right-turn lane with overlap phase on the northbound approach - Installation of one left-turn lane; a second through lane; and one right-turn lane with overlap phase on the southbound approach - Installation of a second left-turn lane and one right-turn lane with	

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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
		overlap phase on the eastbound approach - Installation of a second left-turn lane on the westbound approach • Cedar Avenue and I-10 Westbound Ramps: - Add a second left-turn lane and a third through lane on northbound approach. - Add one right-turn lane with overlap phase on the southbound approach. - Modify shared left-turn, through, and right-turn lane to shared left-turn and right-turn lane (restrict through movement) on the westbound approach. • Cedar Avenue and I-10 Eastbound Ramps: - Add a second left-turn lane and a third through lane on southbound approach.	
Impact 5.13-2: The proposed Specific Plan would be subject to the County of San Bernardino Regional Transportation Development Mitigation Plan Fee Schedule. Specific Plan buildout would not conflict with the San Bernardino County Congestion Management Program.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.13-3: Specific Plan implementation would not cause substantial hazards through an increase in air traffic levels or a change in the location of air traffic patterns.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.13-4: Project circulation improvements have been designed to adequately address potentially hazardous conditions (sharp curves, etc.), potential conflicting uses, and emergency access.	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
Impact 5.13-5: The proposed project complies with adopted policies, plans, and programs for alternative transportation.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Cumulative Impacts	Potentially Significant	Mitigation Measure T-1 applies.	Significant and Unavoidable
5.14 UTILITIES AND SERVICE SYSTEMS			
WASTEWATER TREATMENT AND COLLECTION			
Impact 5.14-1: Wastewater treatment upgrades would be required to service project-generated wastewater; the existing sewer system is deficient and does not have adequate capacity to serve the build out of the Specific Plan.	Potentially Significant	USS-1 Prior to project approval, the project applicant shall submit water and sewer studies and identify the sizing and location of backbone facilities necessary to serve the proposed project, in accordance with San Bernardino County Development Code and City of Rialto standards. To address sewer infrastructure, the applicant shall demonstrate that it is either: 1) within the remaining 139 EDUs of sewer capacity, 2) entered into an extraterritorial agreement with Rialto that provides adequate capacity, or 3) that it has designed the project to treat wastewater on site, such as septic, batch treatment or other onsite treatment. Waste system upgrades required to deliver adequate water supplies to the site shall be constructed prior to issuance of occupancy permits. The water and sewer plans shall be submitted to the San Bernardino County Land Use Services Planning Division, San Bernardino County Special Districts, and City of Rialto Public Works Department, in collaboration with the applicable water district, for review and approval. The design of facilities that serve the project shall be sufficient to meet the projected service demands.	Less Than Significant
Cumulative Impacts	Potentially Significant	Mitigation Measure USS-1 applies.	Less Than Significant
WATER SUPPLY AND DISTRIBUTION SYSTEMS			
Impact 5.14-2: There is adequate water supply to meet project demands, however, delivery systems are not adequate to serve build out of the Specific Plan.	Potentially Significant	Mitigation Measure USS-1 applies.	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
Cumulative Impacts	Potentially Significant	Mitigation Measure USS-1 applies.	Less Than Significant
SOLID WASTE			
Impact 5.14-3: Existing and/or proposed facilities would be able to accommodate project-generated solid waste and comply with related solid waste regulations.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation measures are required.	Less Than Significant
OTHER UTILITIES			
Impact 5.14-4: Existing and planned electricity and natural gas supplies would be able to accommodate project-generated utility demands.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation measures are required.	Less Than Significant

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 environmental impact report (EIR) 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 EIR 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 County of San Bernardino (County) has the principal responsibility for adoption of the Valley Corridor Specific Plan. For this reason, the County 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 Valley Corridor Specific Plan to allow the County to make an informed decision regarding approval of the project. Specific discretionary actions to be reviewed by the County are described in Section 3.4, *Intended Uses of the EIR*.

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 implementation of the proposed Specific Plan. 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 County determined that an EIR would be required for this project and issued a Notice of Preparation (NOP) on June 24, 2015 (see Appendix A). Comments received during the public review period, from June 29, 2015, to July 28, 2015, are in Appendix B.

2.3 SCOPE OF THIS DEIR

The scope of the DEIR was determined based the County's expertise, comments received in response to the NOP, and comments received at the scoping meeting held on July 15, 2015, at Ayala Park Community Center in Bloomington. Pursuant to Sections 15126.2 and 15126.4 of the CEQA Guidelines, the DEIR identifies any potentially significant adverse impacts and incorporates mitigation that would reduce or eliminate these impacts to levels of insignificance.

The information in Chapter 3, *Project Description*, establishes the basis for analyzing future, project-related environmental impacts. However, further environmental review by the County may be required as more detailed information and plans are submitted on a project-by-project basis.

2.3.1 Impacts Considered Less Than Significant

During preparation of the Notice of Preparation, the County determined that the proposed Specific Plan does not have the potential to result in environmental impact to three environmental impact categories. These categories are not discussed in detail in this DEIR:

- Agriculture and Forestry Resources
- Geology and Soils
- Mineral Resources

Chapter 8 of this DEIR, *Impacts Found Not to Be Significant*, substantiates why impacts related to these topics would be less than significant.

2.3.2 Potentially Significant Adverse Impacts

The County determined that 14 environmental impact categories have potentially significant impacts if the proposed project is implemented.

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials

- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

2.3.3 Unavoidable Significant Adverse Impacts

This DEIR identifies 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 County 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 categories that were found in the DEIR to be significant and unavoidable are:

- Air Quality
- Greenhouse Gas Emissions
- Noise
- Transportation and Traffic

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 County of San Bernardino Land Use Services Department.

- *County of San Bernardino 2006 General Plan Program Final Environmental Impact Report and Appendices (SCH # 2005101038)*, prepared by URS Corporation, February 2007.

- *County of San Bernardino 2007 General Plan*, prepared by URS Corporation, March 13, 2007 (Amended April 24, 2014).

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 County address shown on the title page of this

document. Upon completion of the 45-day review period, the County 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 San Bernardino County Board of Supervisors 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 County.

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

- County of San Bernardino Land Use Services Department, Planning Division, 385 North Arrowhead Avenue, San Bernardino, CA 92415; between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday

- Bloomington Branch Library, 993 West Valley Boulevard, Suite 102, Bloomington, CA 92316; Library Hours: Monday to Wednesday 11:00 a.m. to 7:00 p.m., Thursday 10 a.m. to 6:00 p.m., Saturday 9:00 a.m. to 5:00 p.m. This branch is closed Friday and Sunday.

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. The Mitigation Monitoring Program for the proposed Specific Plan will be completed as part of the Final EIR, prior to consideration of the project by the San Bernardino County Board of Supervisors.

3. Project Description

3.1 PROJECT LOCATION

The Valley Corridor Specific Plan area is in the unincorporated community of Bloomington in San Bernardino County, California. As shown in Figures 3-1, *Regional Location*, and 3-2, *Local Vicinity*, Bloomington is in the San Bernardino Valley and is surrounded by the City of Rialto to the northeast and east, the City of Jurupa Valley to the south, and the City of Fontana to the west and northwest.

The Valley Corridor Specific Plan area consists of 355 acres that is oriented to a 1.25-mile corridor of Valley Boulevard between Bloomington's western boundary with Fontana (Alder Avenue) and eastern boundary with Rialto (Spruce Avenue). The project area includes properties fronting Valley Boulevard but also extends north to Marygold Avenue and south to Interstate 10 (I-10). Regional access to the site is provided by I-10, Valley Boulevard, and Cedar Avenue. The Union Pacific Railroad traverses Bloomington just outside the project area, south and parallel to I-10. An aerial photograph of the project area is shown in Figure 3-3.

3.2 STATEMENT OF OBJECTIVES

Objectives identified for the Valley Corridor Specific Plan will aid decision makers in their review of the project and associated environmental impacts. The following objectives were established during a two-year outreach process that included a community fair, town hall, stakeholder interviews, and individual input from numerous local residents and business owners.

1. **Maintenance.** Pursue strategies that focus first and foremost on maintaining and improving existing private and community assets.

2. **Investments and partnerships.** Leverage recent county investments in infrastructure and community facilities to attract investment and stimulate new partnerships.

3. **Infrastructure.** Establish a comprehensive infrastructure program that outlines future system needs and identifies the resources necessary to finance and implement the program.

4. **Economic opportunity**. Generate new job opportunities for entrepreneurs and established businesses in a wide variety of industries.

5. **Activity centers.** Develop pedestrian-friendly activity centers that offer shared places for community members to socialize, support, and learn from one another.

6. **Mobility.** Create safe spaces for pedestrians, cyclists, transit, and motor vehicles along Valley Boulevard and between surrounding neighborhoods while maintaining Valley Boulevard as a four-lane facility.

7. **Housing options.** Provide new opportunities and mix of housing types to meet various lifestyle choices and economic segments.

8. **Health and wellness.** Enhance the health and wellness of the community's minds, bodies, and economy through the creative design and regulation of public and private spaces.

9. **Open space.** Relocate Ayala Park to functionally complement the new community library, better serve existing and new neighborhoods, and provide increased opportunities for physical activity through interconnected open space and exercise nodes or paths.

10. **Historic heart of the community.** Encourage the revitalization of the core area encompassing the historic Bloomington town site.

11. **Aesthetics.** Improve the image, wayfinding, and sustainable design of Bloomington and the corridor along Valley Boulevard and Interstate 10.

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])

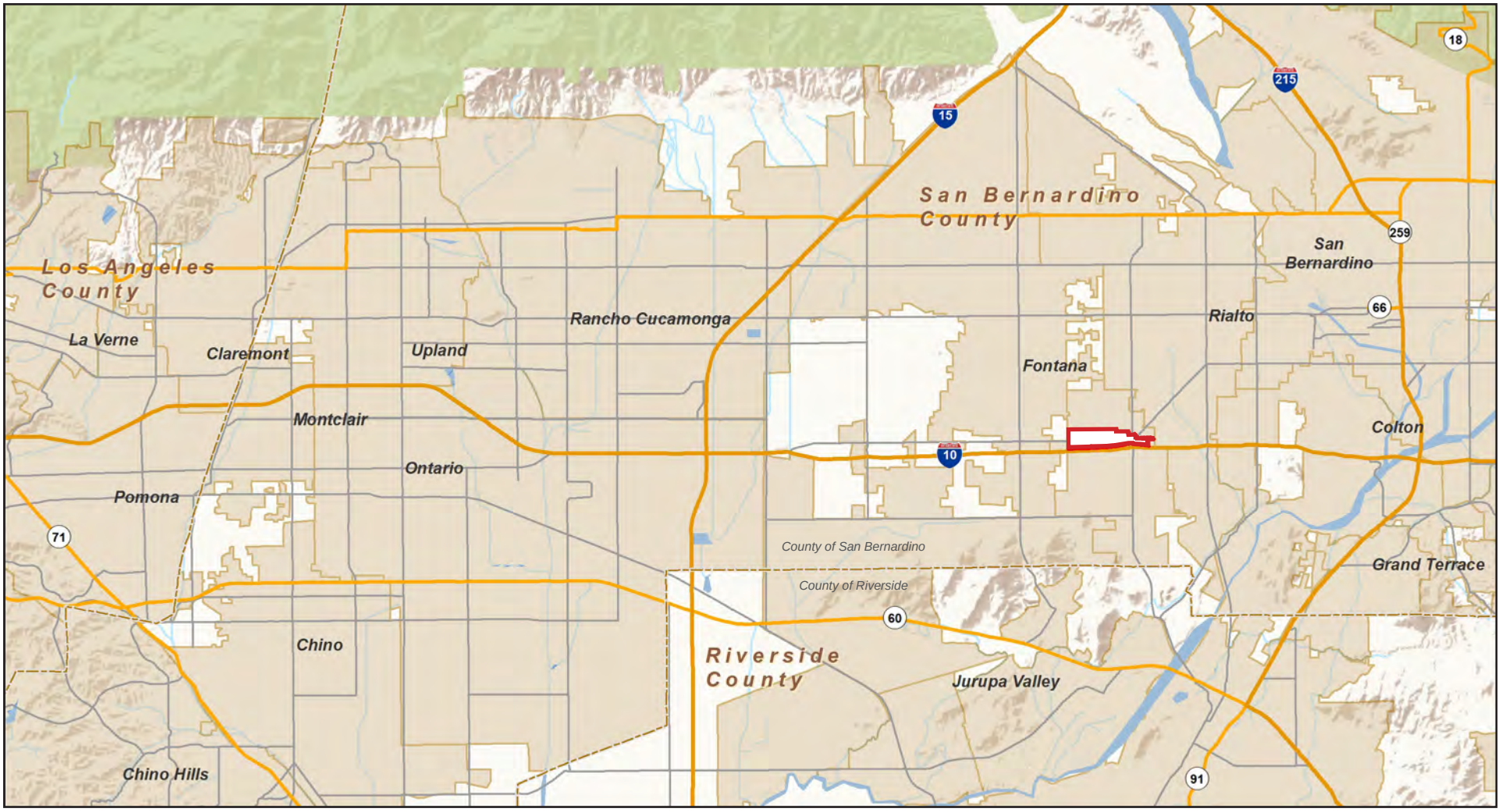
3.3.1 Project Background and Overview

Bloomington takes pride in its roots as a rural, agricultural community, and in some instances, the community has taken considerable measures to hold onto that identity. Today, however, Bloomington is experiencing urbanization. To help meet the growing needs of the region, Bloomington is gradually positioning itself to undergo an inevitable transition.

The goal of the proposed Specific Plan is to enable Bloomington to continue to preserve and protect its unique character, while attracting development that generates economic vitality for the community. The current swing in economic recovery presents a great opportunity to transform Valley Boulevard, Bloomington's primary commercial corridor, to a more vibrant and livable space and a great environment for business.

The proposed Specific Plan has a strong health-and-wellness component that establishes a three-part strategy for active mobility, interconnected open spaces, and a network of food-oriented initiatives that encourage active lifestyles, entrepreneurship, and access to nutrition. Goals address improving and integrating community connectivity, mobility, nutrition, and economic priorities into a cohesive system that substantially contributes to rebalancing the Bloomington central district.

Figure 3-1 - Regional Location
3. Project Description



Valley Boulevard Specific Plan

0 3
Scale (Miles)

Base Map Source: ESRI, 2015

3. Project Description

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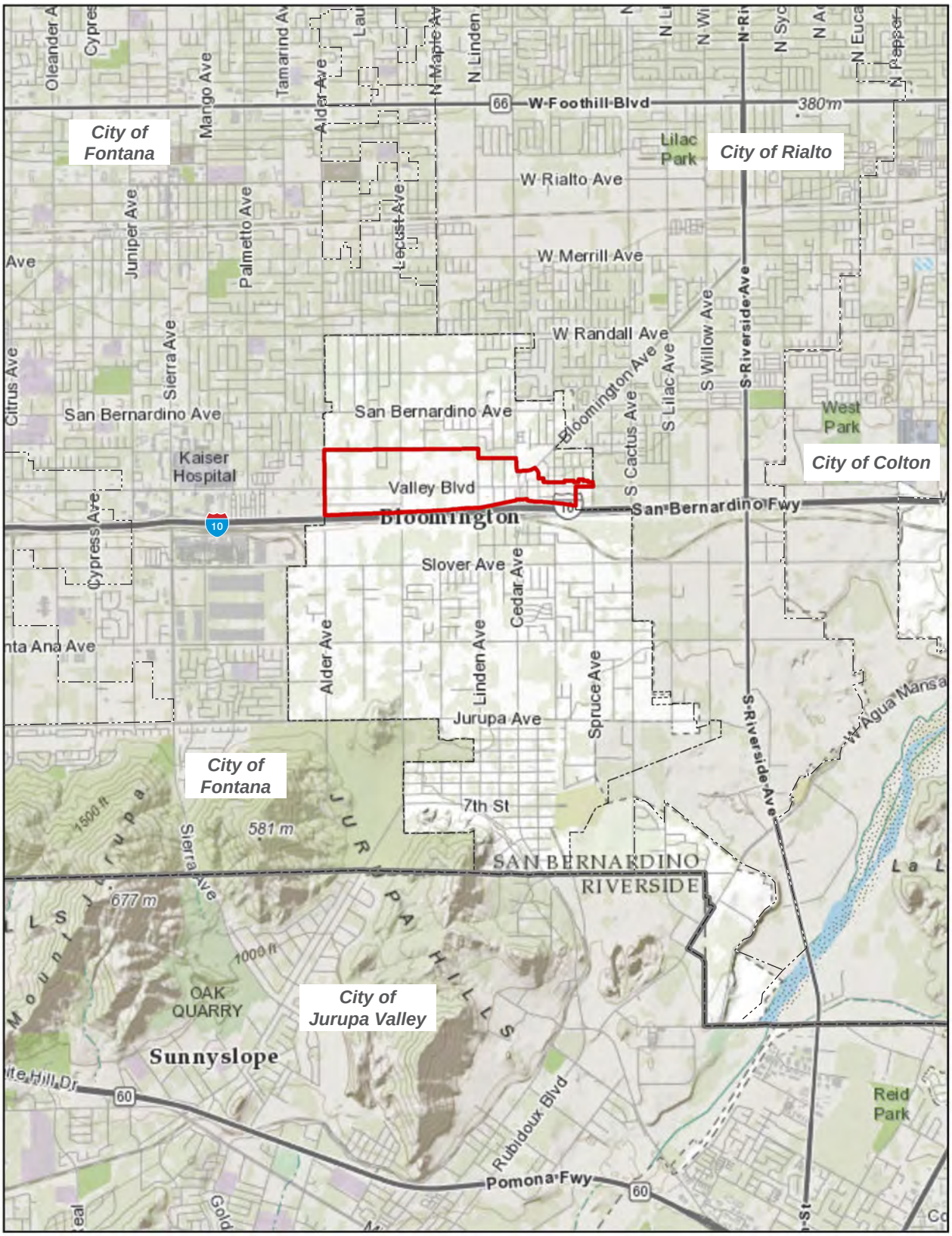
Figure 3-2 - Local Vicinity
3. Project Description



Base Map Source: ESRI, 2015

3. Project Description

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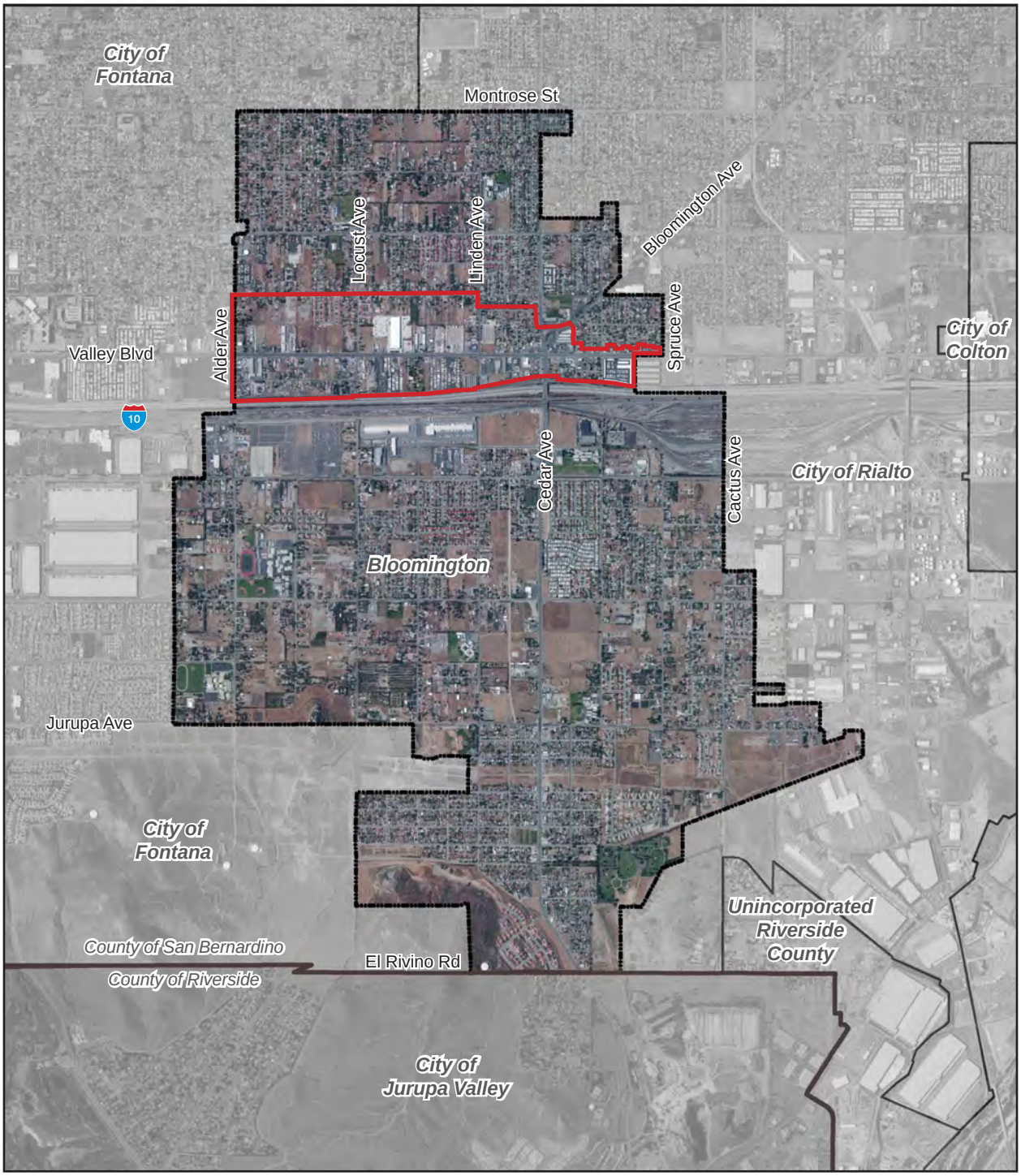
Figure 3-3 - Aerial Photograph
3. Project Description



Base Map Source: Google Earth, 2015

3. Project Description

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Furthermore, recent and current projects such as the Affordable Bloomington Mixed Use Development (which includes a community library), the extension of sewer and water lines along Valley Boulevard, Valley Boulevard median improvements, Cedar Avenue overcrossing widening, and Cedar Avenue median project serve as catalysts for additional investment along Valley Boulevard to reinvigorate the community.

Implementation of the proposed Specific Plan would not only provide a land use and policy framework to guide development, but also the regulatory mechanisms that will allow new projects to be processed in a timely manner and reflect quality development. In an area where past development efforts have been frustrated by infrastructure issues, the Specific Plan would provide a comprehensive infrastructure program that outlines future system needs and identifies the resources necessary to finance and implement the program.

3.3.2 Description of the Project

The County of San Bernardino Land Use Services Department, as lead agency and project applicant, is processing the Valley Boulevard Specific Plan, including a general plan amendment and zone change, to provide the foundation for a more vibrant community corridor that offers employment and retail opportunities surrounded by a more walkable, safe, and attractive environment. The plan introduces land use changes to approximately 294 acres of parcelized land within the boundary and a little over 60 acres of right-of-way.

The proposed Specific Plan identifies ways to encourage opportunities for healthier living, including pedestrian-oriented activity centers that highlight Bloomington's cultural, historical, and community assets. The plan also emphasizes the creation of employment spaces that foster small business development and promote a range of office and light industrial businesses, planting the seeds of business and job opportunities to promote overall growth in community capital.

The Specific Plan would maintain and improve existing private and community assets with land use changes to support additional assets. Land use changes under the Valley Corridor Specific Plan would involve replacing current conventional zoning districts with six Specific Plan land use districts: Mixed Use, Bloomington Enterprise, Commercial, Low & Medium Residential, Medium & High Residential, and Open Space. Each district has its own development standards and strategies to individually and collectively contribute to the overarching planning principles (see Section 3.2, *Statement of Objectives*, above).

3.3.2.1 VALLEY CORRIDOR SPECIFIC PLAN

Land Use Districts

The five proposed land use districts are described below and shown in Figure 3-4, *Proposed Land Use Districts and Zoning Designations*.

Valley Corridor/Mixed Use (VC/MU). The Mixed Use District will focus on providing a mix of commercial and residential uses to enable local residents to live, play, work, and shop in a connected community. This district will leverage new investment in the recent mixed-use housing community, the new

library, and adjoining vacant parcels to provide a range of lifestyle and employment options. The Mixed Use District will also encourage the creation of complementary recreation and community meeting space, including the possible introduction of community gardens and agriculture.

This district will permit higher density detached and attached residential uses—between 10 and 40 units per acre—as well as commercial and office uses. Projects could consist entirely of residential or nonresidential development and could also be integrated into mixed-use buildings.

Valley Corridor/Bloomington Enterprise District (VC/BE). The Bloomington Enterprise District will promote a wide range of office and light industrial businesses with development standards that accommodate entrepreneurs and business startups as well as medium-scale and more established operations and business complexes. Staggered development-intensity standards will encourage the assemblage of parcels up to five acres in size that may attract greater investment while ensuring that startup businesses remain feasible on smaller parcels.

This district will also permit ancillary commercial uses such as retail, dining, and hotel businesses that may serve the business community and the surrounding neighborhoods. The district will not permit large warehousing, which will be considered inconsistent with surrounding neighborhoods and local goals for community development.

Valley Corridor/Commercial (VC/C). The Commercial District will provide shopping and employment opportunities centered on the intersection of Valley Boulevard and Cedar Avenue. West of Cedar Avenue, the Commercial District will feature an interconnected sequence of plazas, paseos, walkable streets, and distinct building designs to create a pedestrian-friendly town center or *mercado* area that celebrates Bloomington's history while reinforcing a sense of community for today's residents and businesses.

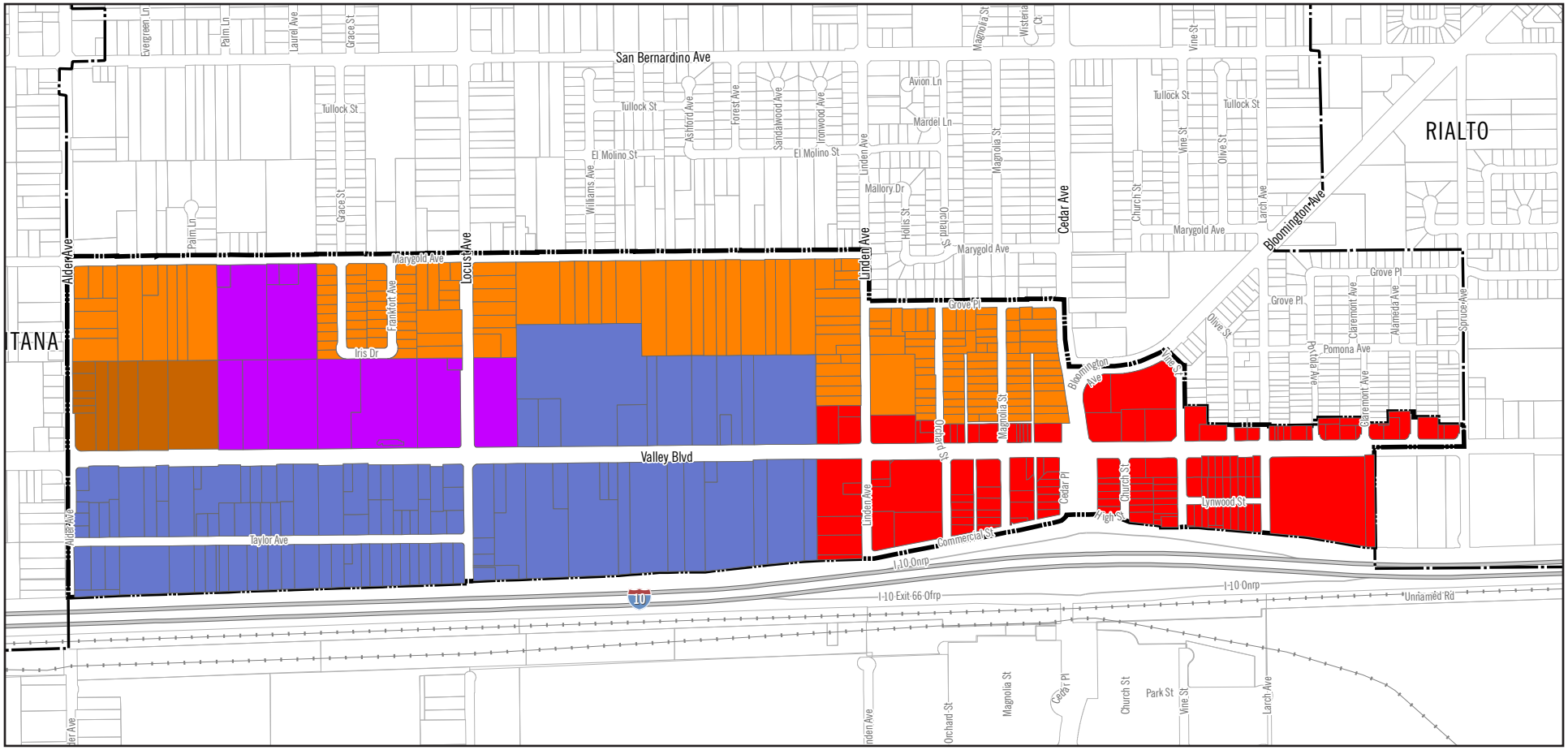
The Commercial District will allow for a wide range of retail uses, including restaurants, hotels, entertainment, general merchandise stores, personal service businesses, and professional and medical offices. The district will also continue to allow for the auto-oriented commercial areas east of Cedar Avenue to capitalize on vehicular traffic along the major roadways and Interstate 10.

Valley Corridor/Low & Medium Residential (VC/LMR). The Low & Medium Density Residential District will accommodate conventional single-family detached homes as well as other types of single-family detached and attached housing at densities up to 10 units per net acre.

Other types of single-family detached and attached homes can be configured in ways such as small-lot, 2 pack, zero-lot line, cottage, alley-loaded, gardencourt, and motorcourt designs. This district will also serve as a transition between the wide range of uses and development intensities along Valley Boulevard and the surrounding neighborhoods to the north.

Valley Corridor/Medium & High Residential (VC/MHR). The Medium & High Density Residential District will accommodate a wide variety of housing types, densities, and designs that provide living opportunities for a broad range of income levels and lifestyles. Potential housing types include those listed above as well as multifamily housing at densities between 10 and 24 units per net acre.

Figure 3-4 - Proposed Land Use Districts and Zoning Designations



Land Use Districts

- VC/LMR, Valley Corridor Low/Medium Residential
- VC/MHR, Valley Corridor Medium/High Residential
- VC/COM, Valley Corridor Commercial
- VC/MU, Valley Corridor Mixed Use
- VC/BE, Valley Corridor Bloomington Enterprise
- VC/OS, Valley Corridor Open Space*

- Valley Corridor Specific Plan Boundary
- Bloomington Community Boundary

NOTE:
*Valley Corridor Open Space (VC/OS) is a floating designation and will be applied to parcels as parkland and plaza space is built.

0 700
Scale (Feet)

Base Map Source: ESRI, 2015

3. Project Description

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Valley Corridor/Open Space. The Open Space district identifies areas reserved for parks, plazas, and other open spaces. Allowable structures in this district are limited to those necessary to support the specific open space and recreation purposes, such as community garden structures, sport-court enclosures, multipurpose buildings, and trails. Additional open space will be required as new development occurs and will be located within or close to the Specific Plan area. The Open Space designation is floating and will be applied to parcels as parkland and plaza space are built.

Specific Plan Buildout

Buildout of the proposed Specific Plan could ultimately support a total of 1,093 residential dwelling units, 4,073 residents, 1,882,428 square feet of nonresidential buildings space, and 1,890 jobs in the plan area. This would represent an additional 568 dwelling units, 1,857 new residents, 907,319 square feet of additional nonresidential building space, and approximately 1,413 new jobs in the plan area compared to existing conditions. Table 3-1 outlines the proposed zoning districts and summarizes maximum buildout projections.

Table 3-1 Land Use Districts and Potential Buildout for the Valley Corridor Specific Plan

Valley Corridor Plan Land Use Districts	Acres	Residential		Nonresidential	
		Units	Population	Square Feet	Jobs
VC/Mixed Use	35.4	404	1,252	79,756	134
VC/Bloomington Enterprise	114.3	–	–	1,244,067	995
VC/Commercial	51.4	–	–	492,138	754
VC/Low & Medium Residential	80.1	435	1,931	66,466	7
VC/Medium & High Residential	13.0	254	889	–	–
VC/Open Space	See notes	–	–	–	–
Right-of-Way	60.4	–	–	–	–
Total	355	1,093	4,073	1,882,428	1,890
Existing Land Uses	–	525	2,216	975,109	477
Difference Compared to Existing Land Uses	–	568	1,857	907,319	1,413

Notes: Numbers subject to rounding.
Future projections also include the potential for 250 hotel rooms in the VC/Commercial District west and east of Cedar Avenue. Existing conditions include a 30-room hotel, currently in the Bloomington Enterprise District.
Existing commercial self-storage businesses are assumed to remain in multiple areas of the corridor, and are reflected in the figures for both residential and nonresidential districts.
Valley Corridor Open Space (VC/OS) is a floating designation and will be applied to parcels as parkland and plaza space are built.

Mobility

One of the major priorities of the Specific Plan is to decrease the reliance on private cars and accommodate walking, biking, and public transit. Figure 3-5, Pedestrian, Bicycle, and Transit System illustrates the current and proposed circulation in and around the Specific Plan area.

Pedestrian Sidewalks

The Specific Plan would complete the sidewalk system along Valley Boulevard. As future development occurs, property owners will be required to improve the public right-of-way along their frontage consistent with the street section shown in Figure 3-6, which includes 10 to 14 feet of paved sidewalk area and street trees.

Bikeways

The Specific Plan would add a Class II bike lane on each side of Valley Boulevard to enhance the safety of both bicyclists and pedestrians, while expanding access to transit. Many bicyclists currently prefer to ride on the sidewalk, and the new bike lanes would enable bicyclists to travel more safely on the road—thereby reducing potential conflicts between bicyclists and pedestrians, utility poles, and other obstacles on the sidewalk. The bike lane will also serve as a more formal, striped buffer between pedestrians and the cars and trucks traveling along Valley Boulevard, thus increasing real and perceived safety. The bike lane will also expand the potential service radius of Omnitrans bus service.

This Specific Plan also includes partial implementation of SANBAG's Class II bike lanes for Cedar Avenue and Bloomington Avenue to increase access to shops, services, and other neighborhoods. Extending a bicycle facility from Valley Boulevard up Cedar Avenue and northeast along Bloomington Avenue would provide direct access to an Omnitrans bus stop at San Bernardino Avenue and Bloomington Avenue (see Route 19 in Transit System, below). Such an extension along Bloomington Avenue would also connect the Specific Plan to the Pacific Electric Bike Trail, a 21-mile public trail two miles to the north that provides a continuous walking, jogging, and bicycle facility between the City of Claremont in Los Angeles County and the City of Rialto in San Bernardino County.

The Cedar Avenue overcrossing design explicitly includes adequate shoulder space (between 6 and 10 feet) to accommodate a Class II bike lane on the overcrossing.

Finally, the Specific Plan includes the addition of three Class III bike routes connecting Valley Boulevard with San Bernardino Avenue via Alder, Locust, and Linden Avenues. These bike routes provide the north–south connections needed to create a complete system of bikeways that is efficient, safe, and well signed—three key characteristics that lead to greater use and higher rates of bicycle ridership.

Transit System

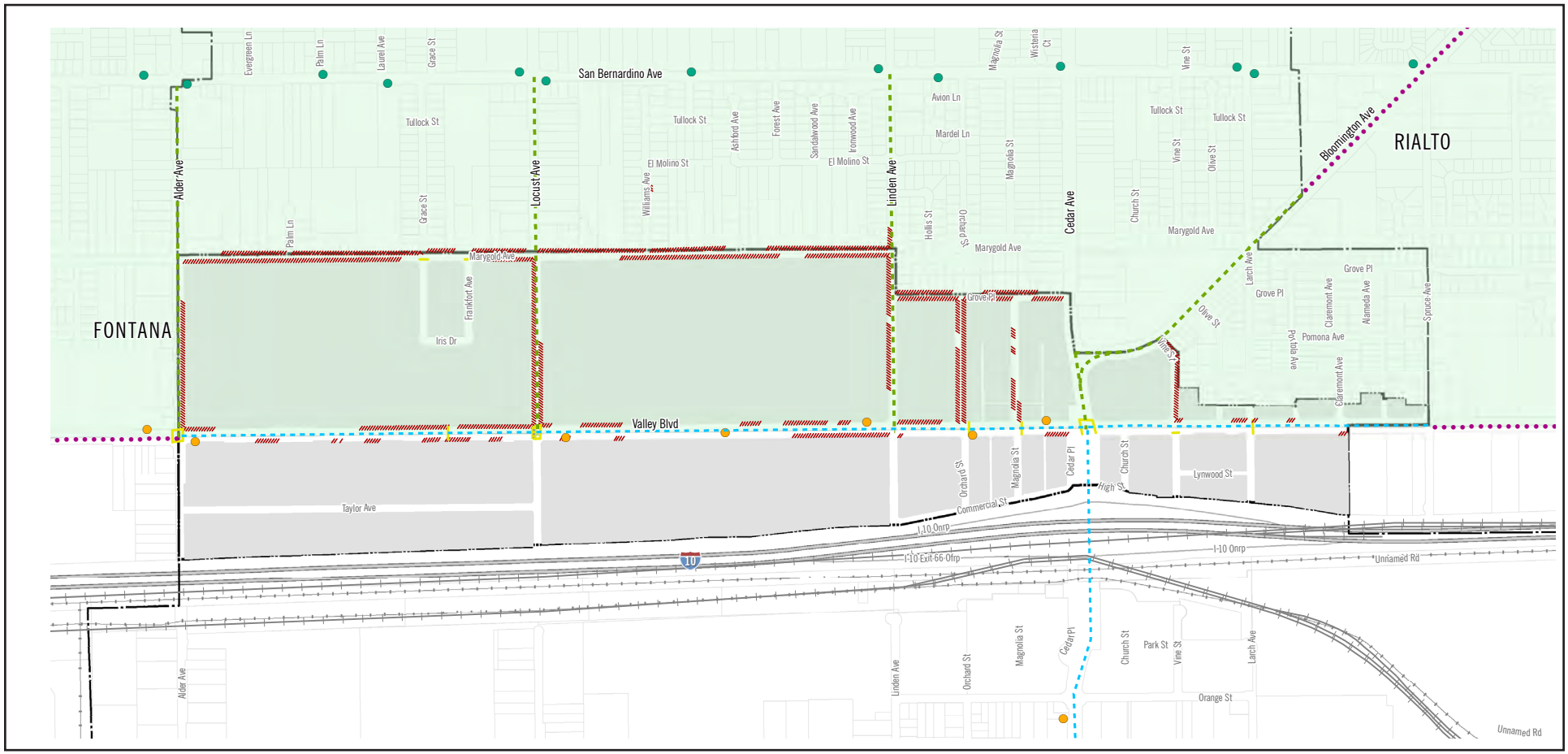
Local bus service is provided by Omnitrans, which operates two routes in and around the Specific Plan: Route 19 and Route 29. Route 29 stops multiple times along Valley Boulevard and provides service to the Bloomington Library, Bloomington Community Medical Center, Kaiser Medical Center, the South Fontana Transfer Center as well as nearby schools, shops, and services.

Omnitrans operates Route 19 along San Bernardino Avenue approximately one-quarter mile north of the Specific Plan area, with service to the Fontana Metrolink Transit Center, Kaiser Medical Center, Arrowhead Regional Medical Center, Loma Linda Medical Center, VA Hospital, Crafton Hills College, and Yucaipa Transit Center as well as numerous shops, services, and institutions.

In addition to creating additional bicycle facilities to expand access to the transit system, the County will encourage Omnitrans to provide shaded bus shelters in the Specific Plan area to increase rider safety and comfort.

Figure 3-5 - Pedestrian, Bicycle, and Transit System

3. Project Description



Pedestrian, Bicycle, and Transit System

- Proposed Specific Plan Class II Bike Lane
- Proposed Specific Plan Class III Bike Route
- Proposed SANBAG Bikeway*
- Omnitrans | Route 19
- Omnitrans | Route 29
- Proposed Sidewalks
- Existing Crosswalks**
- Proposed Crosswalks
- Railroad
- High Quality Transit Area (HQTA)***
- Valley Corridor Specific Plan Boundary
- Bloomington Community Boundary

Omnitrans Transit Routes

NOTE:
* This figure does not represent the full San Bernardino Association of Governments (SANBAG) proposed bike system. Only bikeways that make a significant connection to the bicycle transit proposed as part of the Specific Plan are shown on this figure.
** The Interstate 10 & Cedar Avenue interchange will be improved in 2017 and the crosswalk configuration shown is subject to change.
*** Per 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy prepared by the Southern California Association of Governments.

0 700
Scale (Feet)

Base Map Source: ESRI, 2016; SCAG; SANBAG

3. Project Description

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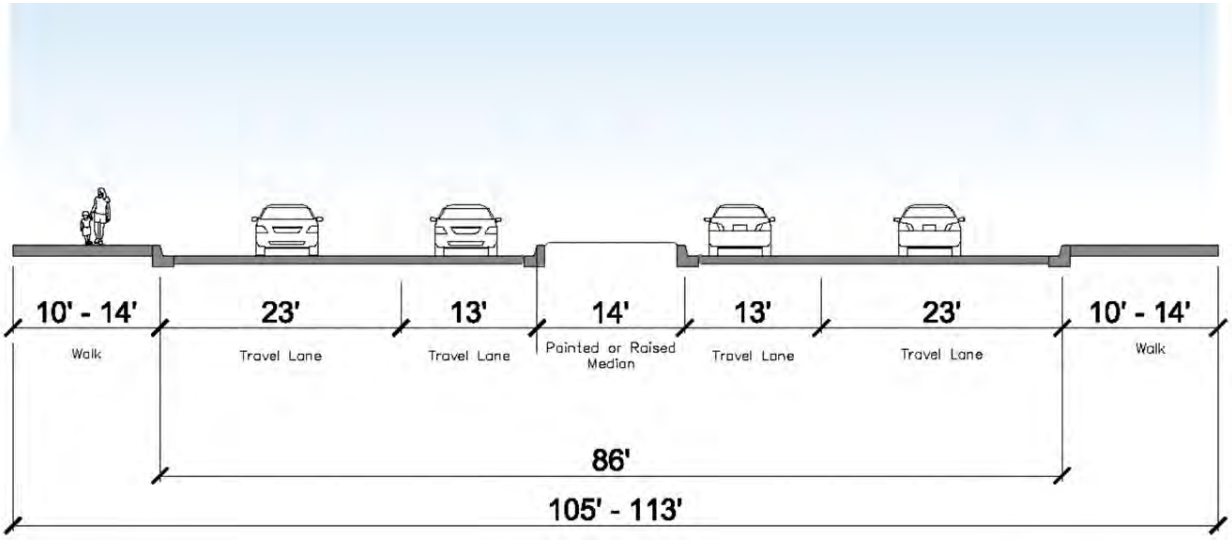
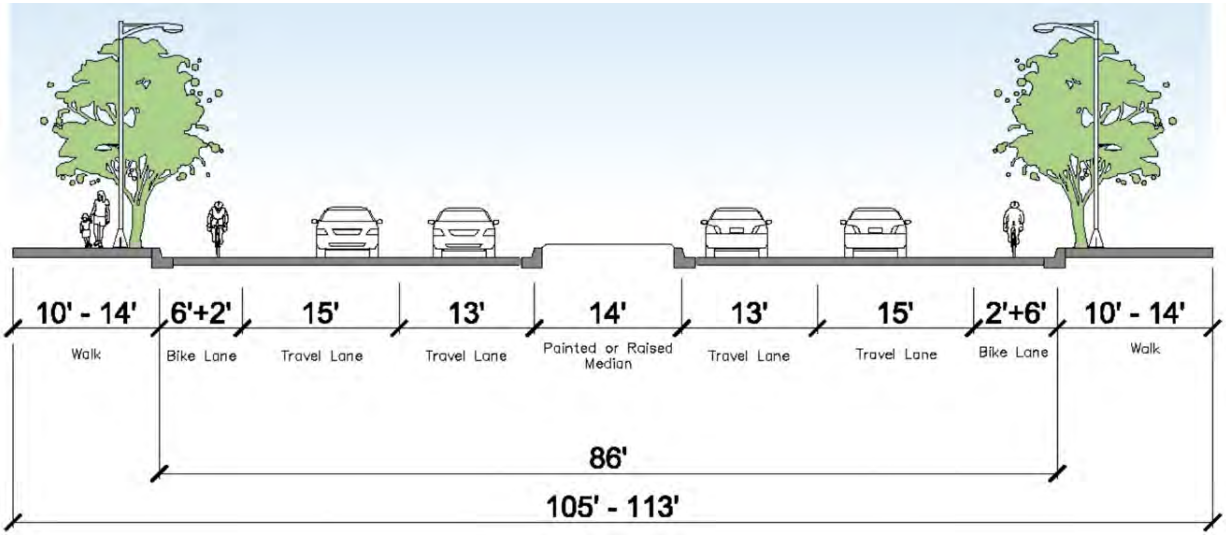
Figure 3-6 - Valley Boulevard Street Section
3. Project Description

EXISTING



PROPOSED



Notes:

1. The street section illustrations depict typical midblock conditions only. Intersections will include additional turning lanes and a change in median size (when present) and are not shown.

2. The curb-to-curb dimensions (86 feet) should stay consistent in future designs and implementation. The total right-of-way dimensions (105 to 113 feet) represent the typical dimensions, though the right-of-way can be as large as 117 feet along some parts of Valley Boulevard.

3. Project Description

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Valley Boulevard

Valley Boulevard is a heavily traveled corridor accommodating thousands of residents, employees, customers, and business owners daily. The Specific Plan establishes a multimodal design for Valley Boulevard that improves the existing roadway framework, minimizes short-term and ongoing maintenance costs, and considers a variety of users in the area–pedestrians, bicyclists, and vehicles.

Figure 3-6, *Valley Boulevard Street Section*, illustrates the existing and proposed midblock street cross-section for Valley Boulevard. Valley Boulevard is designated a Major Highway in the County's roadway system and currently provides four travel lanes. The street's right-of-way is sufficient to accommodate six 12-foot-wide travel lanes through restriping alone. However, the Specific Plan proposes to maintain the existing four travel lanes, which are adequate to serve project buildout, to add pedestrian and bicycle improvements.

The midblock design for Valley Boulevard accommodates four lanes of vehicular traffic with a Class II bike lane on each side of the street and a wide sidewalk shaded by street trees. This new design will create a more pedestrian- and bicycle-friendly area, enhance the appearance of the Specific Plan area and Bloomington overall, and serve as an overall unifying element for various development types and districts along Valley Boulevard. All new development fronting Valley Boulevard must improve the adjacent right-of-way to be consistent with the proposed design in Figure 3-6 and the ultimate streetscape design prepared in implementation tasks following the adoption of this Specific Plan.

Infrastructure

In addition to the proposed development, improvements infrastructure would be required to support buildout of the proposed project. Proposed onsite infrastructure improvements include, but are not limited to, storm drains, wastewater, water, and dry utilities that would connect to existing facilities adjacent to the project area. Infrastructure improvements to existing streets to address stormwater management, would also be included. (Valley Corridor Specific Plan Section 3.5).

Phasing

No specific phasing program has been identified. The proposed project would be implemented on a parcel-by-parcel basis as future development applications are submitted. Public realm improvements would occur as funding becomes available. For purposes of environmental analysis, the proposed Specific Plan is expected to be built out by 2035.

3.4.1.1 GENERAL PLAN AND ZONING MAP AMENDMENT

A General Plan and Zoning Map Amendment would be required provide consistency between the San Bernardino General Plan and the proposed Valley Corridor Specific Plan. Although the Valley Corridor Specific Plan is consistent with the objectives and policies in the General Plan, new land uses are proposed. Therefore, the project will require an amendment to the land use element to update the land use plan (General Plan Land Use Zoning Districts) to include the boundaries of the Valley Corridor Specific Plan with land use districts established in the specific plan.

3.5 INTENDED USES OF THE EIR

This is a Program EIR that examines the potential environmental impacts of the proposed Valley Corridor Specific Plan. This DEIR also addresses various actions by the County and others to adopt and implement the Specific Plan. It is the intent of the DEIR to evaluate the environmental impacts of the proposed project, thereby enabling the County of San Bernardino, 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
San Bernardino County Board of Supervisors	• Certification of the Valley Corridor Specific Plan EIR • Adoption of the Specific Plan • General Plan Amendment to the Land Use Plan • Zoning Map Amendment to replace zoning district designations with the new Valley Corridor Specific Plan zoning districts.
Responsible Agencies	**Action**
Santa Ana Regional Water Quality Control Board	• Approval of water quality management plans for projects developed pursuant to the Specific Plan
South Coast Air Quality Management District	• Issuance of permits to construct and permits to operate for facilities that would emit hazardous air emissions

4. Environmental Setting

4.1 INTRODUCTION

The purpose of this section is to provide, pursuant to provisions of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, 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." Additional details of the environmental setting for each environmental topic analyzed in this EIR are provided in each topical section in Chapter 5, *Environmental Analysis*. 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 Valley Corridor Specific Plan area (Specific Plan area) is in the unincorporated community of Bloomington in San Bernardino County, California. As shown in Figure 3-1, *Regional Location*, Bloomington is in the San Bernardino Valley and is surrounded by the City of Rialto to the northeast and east, the City of Fontana to the west and northwest, and the City of Jurupa Valley in Riverside County to the south. Regional access to the community is provided by Interstate 10 (I-10).

4.2.2 Regional Planning Considerations

4.2.2.1 AIR QUALITY AND CLIMATE CHANGE

Bloomington 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 are regulated by federal and state law. Air pollutants for which ambient air quality standards (AAQS) have been developed are known as criteria air pollutants; these are 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 NOx 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. The SoCAB is designated nonattainment for O_3, $PM_{2.5}$, PM_{10}, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for NO_2 under the California AAQS.

The proposed project's consistency with the applicable AAQS is discussed in Section 5.2, *Air Quality*.

AB 32 and SB 375

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-03-05, signed June 1, 2005, set the following GHG reduction targets for the State of California:

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

AB 32 was passed by the 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 the 2008 Scoping Plan, the California Air Resources Board (CARB) approved a 2020 emissions limit of 427 million metric tons of carbon dioxide-equivalent ($MMTCO_2e$) for the state (CARB 2008). Since release of the 2008 Scoping Plan, CARB has updated the statewide GHG emissions inventory to reflect GHG emissions in light of the economic downturn and of measures not previously considered in the 2008 Scoping Plan baseline inventory. The updated forecast predicts emissions to be 507 $MMTCO_2e$ by 2020. The new inventory identifies that an estimated 80 $MMTCO_2e$ of reductions are necessary to achieve the statewide emissions reduction of AB 32 by 2020 (CARB 2012).

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 requires CARB to establish GHG emissions reduction targets for each of the 17 regions in California managed by a metropolitan planning organization (MPO). The Southern California Association of Government's (SCAG) targets 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). The proposed targets would result in 3 $MMTCO_2e$ of reductions by 2020 and 15 $MMTCO_2e$ of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's 2008 Scoping Plan (for AB 32) would be met (CARB 2010).

The proposed project's consistency with CARB's Scoping Plan is discussed in Section 5.5, *Greenhouse Gas Emissions*.

4.2.2.2 SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG)

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. As the southern California region's MPO, SCAG cooperates with SCAQMD, the California Department of Transportation (Caltrans), and other agencies in preparing regional planning documents. SCAG has developed regional plans to achieve specific regional objectives, as discussed below.

The Specific Plan is considered a project of "regionwide significance" pursuant to the criteria outlined in SCAG's Intergovernmental Review Procedures Handbook (November 1995) and Section 15206 of the CEQA Guidelines.

Regional Transportation Plan/Sustainable Communities Strategy

On April 7, 2016, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016–2040 RTP/SCS), a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2016 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the National Ambient Air Quality Standards. This long-range plan, required by the state of California and the federal government, is updated by SCAG every four years as demographic, economic, and policy circumstances change. The 2016 RTP/SCS is a living, evolving blueprint for the region's future (SCAG 2016). The proposed project's consistency with applicable 2016–2040 RTP/SCS policies is analyzed in detail in Section 5.10, *Land Use and Planning*.

Unique to the SCAG region is the option for subregions to create their own SCS. However, the San Bernardino Associated Governments (SANBAG), of which the County of San Bernardino is a member jurisdiction, has not chosen to do this. Instead, SANBAG relies on SCAG's 2016–2040 RTP/SCS.

High Quality Transit Areas

The 2016-2040 RTP/SCS designates high quality transit areas (HQTA), which are generally walkable transit villages or corridors within a half mile of a well-serviced transit stop or transit corridor with 15-minute or less service frequency during peak commute hours. The overall land use pattern of the 2016–2040 RTP/SCS focuses jobs and housing in the region's designated HQTAs (SCAG 2016). The Valley Boulevard corridor is identified as an HQTA in the 2016–2040 RTP/SCS (see Figure 3-5).

4.2.2.3 REGIONAL WATER QUALITY CONTROL BOARD

Under the Porter-Cologne Water Quality Act, California's water quality control law, the State Water Resources Control Board (SWRCB) has ultimate control over water quality policy and allocation of state water resources. The SWRCB, through its nine Regional Water Quality Control Boards, 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. Bloomington is in the Santa Ana River Basin, Region 8.

Santa Ana River Basin Plan

The water quality control plan for the Santa Ana River Basin was updated in 2008. This basin plan gives direction on the beneficial uses of state waters within 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 in the basin plan.

4.3 LOCAL ENVIRONMENTAL SETTING

4.3.1 Location and Land Use

Location

The Valley Corridor Specific Plan area consists of 355 acres that is oriented to a 1.25-mile corridor of Valley Boulevard between Bloomington's western boundary with Fontana (Alder Avenue) and eastern boundary with Rialto (Spruce Avenue). The project area includes properties fronting Valley Boulevard but also extends north to Marygold Avenue and south to Interstate 10 (I-10). Regional access to the site is provided by I-10, Valley Boulevard, and Cedar Avenue. The Union Pacific Railroad traverses Bloomington just south of the project area and parallel to I-10. An aerial photograph of the project area is shown in Figure 3-2.

Existing Land Use

The Specific Plan area contains a diverse collection of land uses that are often interspersed. Major land use categories onsite include residential (525 units on 126 acres, with 267 detached single-family units, 80 multifamily units, and 178 mobile home units); retail, services, and storage (72 acres); and industrial (39 acres). Existing land uses are shown in Figure 4-1.

Surrounding Land Uses

Surrounding land uses consist of residential and office uses to the west in Fontana; residential and institutional (church) uses to the north; Bloomington Christian School to the northeast; Ruth Grimes Elementary School, vacant parcels, and commercial uses to the east in Rialto; and the I-10 freeway to the south. Beyond the I-10 to the south are school uses (Slover Mountain [Continuation] High School and Bloomington Junior High School) and to the south and southeast, the Union Pacific Railroad, Colton Railyard.

4.3.2 General Plan and Zoning

General Plan Land Use designations and zoning classifications in the unincorporated areas of San Bernardino County are the same. Current General Plan Land Use/zoning designations onsite are described below and shown in Figure 4-2.

The project area is within the city of Rialto's sphere of influence, which designates the project area as light industrial in its general plan.

Figure 4-1 - Existing Land Uses

4. Environmental Setting

Existing Land Use

- Single Family Detached
- Multi Family
- Mobile Home
- Commercial*
- Industrial
- Open Storage
- Parks
- Public / Semi-Public**
- Parking
- Vacant
- Valley Corridor Specific Plan
- Bloomington Community Boundary

NOTE:
*Commercial Land Uses Include: Auto repair/services; Auto Sales; Retail Store/Service; Restaurant/Bar; Plant Nursery; Service Station; Commercial Storage; General Office; Hotel
**Public / Semi-Public Land Uses Include: Church; Post Office; Fire Station; American Legion; Library; Other Community Facilities

0 700
Scale (Feet)

Base Map Source: ESRI, 2016

4. Environmental Setting

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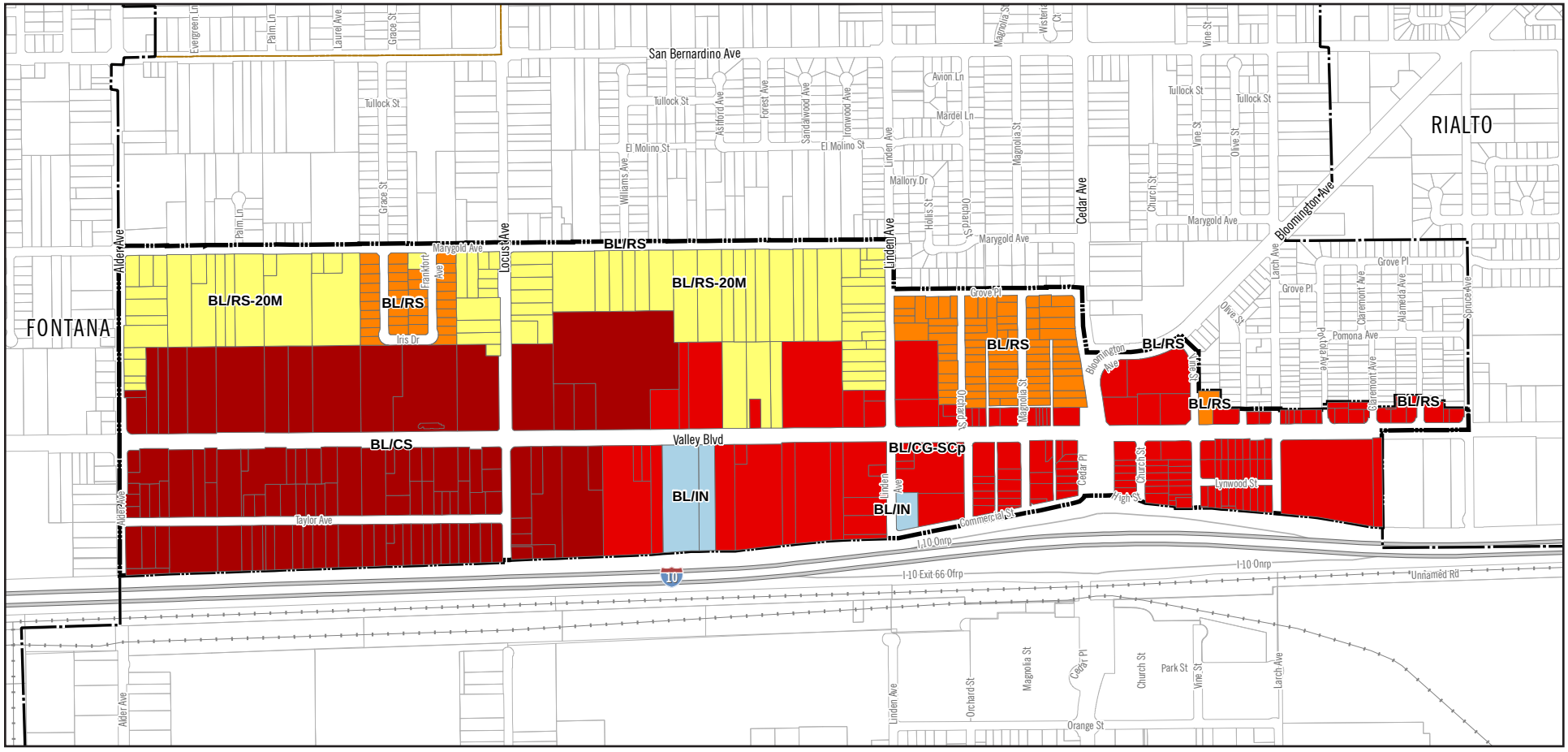
Figure 4-2 - Current General Plan Land Uses/Zoning Designations

4. Environmental Setting



Land Use Districts

- BL/RS-20M, Bloomington/Single Residential - 20,000 square feet Minimum
- BL/RS, Bloomington/Single Residential
- BL/CG-SCp, Bloomington/General Commercial-Sign Control Primary
- BL/CS, Bloomington/Service Commercial
- BL/IN, Bloomington/Institutional

- Valley Corridor Specific Plan
- Bloomington Community Boundary

BL/CG-SCp
- Detailed Designation if applicable (SCp = Sign Control Primary)
- Land Use Designation (CG = General Commercial)
- Area Designation (BL = Bloomington)

Note: Land Use Districts do not apply to federal or state owned property or to the right of way.

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Scale (Feet)

Base Map Source: ESRI, 2016

4. Environmental Setting

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Single Residential (RS-1). This designation is intended to provide areas for single-family homes on individual lots; to provide for accessory and nonresidential uses that complement single-family residential neighborhoods; and to discourage incompatible nonresidential uses in single-family residential neighborhoods. Lots are required to have a minimum area of 7,200 square feet.

This designation applies to a small residential area along Marygold Avenue in the western portion of the corridor. It also applies to most of the northeast quadrant of the Specific Plan area (e.g., along Grove Place and Pomona Avenue). This area primarily consists of existing single-family residential uses, but also includes Bloomington Christian School and the Church of the Nazarene.

Single Residential - 20,000 square feet minimum (RS-20M). This designation is the same as RS-1, above, except that the minimum lot size is 20,000 square feet. In the Specific Plan area, this designation currently applies to a number of deep lots along Marygold Avenue, Locust Avenue, and the west side of Linden Avenue that currently feature single-family homes.

Neighborhood Commercial (CN). The purpose of this designation is to provide suitable locations for retail and service commercial establishments to meet daily convenience needs of a residential area. In the Specific Plan area, this designation only applies to the small shopping center on the northeast side of the Cedar Avenue/Bloomington Avenue intersection.

General Commercial (CG). This designation is intended to appropriately identify areas for stores, offices, service establishments, and amusements offering a wide range of commodities and services scaled to meet neighborhood and community needs.

In the Specific Plan area, this designation applies to almost all the parcels fronting on Valley Boulevard in the eastern half of the corridor. These parcels currently contain a wide range of uses, including retail uses, restaurants, self-storage facilities, mobile home parks, and single-family residences.

Service Commercial (CS). This designation is intended to provide suitable areas for a mixture of commercial and industrial uses, including manufacturing uses, where they will not adversely affect surrounding properties.

Nearly the entire southwest quadrant of the site—and most of the parcels on the north side of Valley Boulevard in the west half of the site—are designated Service Commercial.

Institutional (IN). In the Specific Plan area, this designation is applied to Ayala Park and the United States Post Office at 10191 Linden.

4.4.1 Visual Character

The project area covered under the Specific Plan is mostly built out with urban land uses. Major land uses include residential uses (126 acres); retail, service, and storage uses (72 acres); and industrial uses (39 acres). Vacant and underutilized lots are scattered through the western half of the project site (see Figure 3-3, *Aerial Photograph*). Some developed parcels in the northwest quadrant of the project area are mostly vacant land, containing one to a few buildings per parcel on parcels of about five acres each. Two major transportation

corridors, I-10 and the Union Pacific Railroad, traverse Bloomington in an east-west direction along the project area's southern boundary (Figures 3-3 and 3-4, *Proposed Land Use Districts and Zoning Designations*). The Union Pacific West Colton Railyard is opposite I-10 to the southeast. The project area is bounded on the east and north mostly by residential land uses. Ruth Grimes Elementary School in the City of Rialto abuts the east end of the project area. The project area is bounded on the west by commercial and residential uses in the City of Fontana.

The Specific Plan area offers prominent distant views of the San Gabriel Mountains to the northwest and the San Bernardino Mountains to the northeast. The area also has scenic views of the Jurupa Hills, which are one mile to the south. The nearest designated state scenic highway is State Route 91, about 18 miles to the southwest (Caltrans 2011).

Visual resources including the Bloomington Garage and the adjacent LaGue family home—both of which are designated California Points of Historical Interest—are within the southeastern portion of the project area on Commercial Street west of Cedar Avenue.

4.4.2 Biological Resources

The site is not in the plan area of a habitat conservation plan or natural communities conservation plan. The nearest substantial protected habitat area to the site is the 861-acre Martin Tudor-Jurupa Hills Regional Park in the city of Fontana, 1.5 miles to the south. The project area is built out and there are no native habitats or natural plant communities. Vegetation present on vacant lands consists of disturbed annual grassland, ruderal, and ornamental plants.

Refer to Section 5.3, *Biological Resources*, for additional information concerning plant communities, wildlife, and sensitive biological resources and an analysis of project impacts on biological resources.

4.4.3 Geology and Landform

The project area is in the Peninsular Ranges Geomorphic Province, which consists of a series of northwest-trending mountain ranges and valleys. The site is underlain by two types of soils:

- Young alluvial-fan deposits of late Holocene age consisting of unconsolidated to slightly consolidated coarse-grained sand to boulder sediments. The Holocene Epoch extends from 11,700 years ago to the present.

- Old alluvial fan deposits of sand and gravel of middle Pleistocene age; the Pleistocene Epoch extends from 2.6 million years ago to 11,700 years ago (USGS 2006).

Elevations in the project area range from approximately 1,075 feet above mean sea level at the southeast corner of the site to about 1,130 feet above mean sea level at the northwest corner of the area.

4.4.4 Hydrology

The project site is in the Middle Santa Ana River Hydrologic Unit of the Santa Ana Watershed. The Middle Santa Ana River Hydrologic Unit spans 292 square miles, encompassing much of the central part of the Upper Santa Ana River Valley and extending north into the southeast corner of the San Gabriel Mountains.

The project site north and upstream of the Chino Subbasin of the Upper Santa Ana Groundwater Basin; the Chino Subbasin underlies most of the west and central Upper Santa Ana River Valley.

Refer to Section 5.7, *Hydrology and Water Quality*, for additional information regarding hydrological conditions and an analysis of project impacts on hydrology and water quality.

4.4.5 Noise

Existing sources of onsite noise include industrial and commercial land uses; traffic noise from roadways within and near the site, including I-10; and railroad noise generated by the Union Pacific rail tracks and the West Colton Railyard, both south of I-10.

Refer to Section 5.9, *Noise*, for additional information concerning the noise environment and an analysis of project-related noise impacts.

4.4.6 Population and Housing

As of the 2010 US Census, the community of Bloomington had a population of 23,851. These residents comprised 5,428 households and inhabited 5,745 housing units. In 2010, the average household size was 4.36 and the vacancy rate was 5.5 percent.

4.4.7 Public Services and Utilities

Public services and utilities in the project area are provided by service providers listed in Table 4-1. Additional information describing the existing provision of public services and utilities in the project area is in Sections 5.11, *Public Services*, and 5.14, *Utilities and Service Systems*, of this DEIR.

Table 4-1 Public Service and Utility Providers

Public Services	
Police	San Bernardino County Sheriff's Department
Fire Protection and Emergency Medical Services	San Bernardino County Fire Department (SBCFD)
Public Schools	Colton Joint Unified School District Lewis Elementary School Smith Elementary School Grimes Elementary School Baca Middle School Grand Terrace High School
Library	San Bernardino County Library, Bloomington Branch Library
Parks	County of San Bernardino, Bloomington Recreation and Park District
Utilities	
Water	Marygold Mutual Water Company West Valley Water District, Fontana Water Company
Wastewater Treatment	City of Rialto
Solid Waste Collection	EDCO Disposal Services
Solid Waste Disposal (Landfills)	Mid-Valley Landfill
Electricity	Southern California Edison (SCE)
Natural Gas	Southern California Gas Company (SoCalGas)

4.4.8 Transportation and Traffic

The project area is within the Bloomington Community (unincorporated San Bernardino County). Bloomington is bounded on the east by the city of Rialto and on the west by the city of Fontana. The main east-west roadway through the site is Valley Boulevard, a four- to six-lane divided highway. In the city of Fontana Circulation Master Plan, it is classified as a Modified Major Highway. In the city of Rialto General Plan Circulation Chapter, Valley Boulevard is classified as a Major Arterial, typically four to six lanes with a 120-foot right-of-way. In the Bloomington Community Plan Circulation Element, it is classified as a Major Highway. Street parking is allowed on some portions of the street. Existing sidewalks are on both sides of the street in the City of Fontana, but only intermittent in the project area. No designated bike lanes are present on this street within the study area.

Regional access to the project area is provided by I-10, which borders the site to the south. Freeway ramps to and from I-10 are at Cedar Avenue.

Refer to Section 5.13, *Transportation and Traffic*, for additional information concerning the circulation system and an analysis of project-related traffic impacts.

4.5 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed when a project's incremental effect is cumulatively considerable. 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 detail as that necessary for the

proposed project alone. Section 15355 of the CEQA Guidelines defines cumulative impacts as "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 the proposed project when added to effects of past projects, other current projects, and probable future projects in the vicinity.

CEQA Guidelines Section 15130 (b)(1) states that the information utilized in an analysis of cumulative impacts should come from one of two sources, either:

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

2) A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions.

The cumulative impacts analyses in Chapter 5, *Environmental Analysis*, of this DEIR uses method No. 2, which consists of the buildout projections in the County of San Bernardino's General Plan and/or SCAG's regional growth forecasts. The approach is discussed in each topical section.

For example, in most cases, the potential for cumulative impacts is contiguous with the project area and the Bloomington Community. Cumulative impacts that have the potential for impacts beyond this area (e.g., traffic, air quality, noise) have been addressed through cumulative growth in the County and region. Regional growth is accounted for in the traffic, air quality, and noise impacts through use of the San Bernardino Transportation Analysis Model (SBTAM), which uses regional growth projections to calculate future traffic volumes.

4.6 REFERENCES

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4. Environmental Setting

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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.

Scope of Environmental Analysis

This chapter has a separate section for each environmental issue area that was determined to need further study in the EIR. This scope was identified in the notice of preparation (NOP) published on June 24, 2015 (see Appendix A), and was based in part on public and agency comments received during the NOP comment period from June 29, 2015, to July 28, 2015 (see Appendix B). Environmental issues and their corresponding sections are:

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

Sections 5.1 through 5.14 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.

Topics Not Analyzed in Detail in this DEIR

As noted in the NOP, it was determined that certain issues would not be significantly affected by implementation of the proposed project. Chapter 8, *Impacts Found Not to Be Significant*, of this DEIR substantiates why impacts related to the following topics would be less than significant:

5. Environmental Analysis

- Agriculture and Forestry Resources
- Geology and Soils
- Mineral Resources

Organization of Environmental Analysis

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

- Environmental Setting
- Thresholds of Significance
- Environmental Impacts
- Cumulative Impacts
- Existing Regulations and Standard Conditions
- Level of Significance Before Mitigation
- Mitigation Measures
- Level of Significance After Mitigation
- References

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

Terminology Used in the Draft EIR

The level of significance is identified for each impact in this DEIR. Although the criteria for determining significance are unique 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 Report (DEIR) discusses potential impacts to the visual character of the project area associated with implementation of the proposed Specific Plan (proposed project). In addition to a discussion of the aesthetic characteristics of the environment that could be potentially degraded by implementation of the proposed project, this section evaluates the project's consistency with adopted policies related to visual resources. The information presented in this section is based on field reconnaissance, review of aerial photographs, and review of applicable regulations related to aesthetics and community character.

5.1.1 Environmental Setting

5.1.1.1 REGULATORY BACKGROUND

Local laws, regulations, plans, or guidelines that are applicable to the proposed project are summarized below.

San Bernardino County Development Code

Title 8 of the San Bernardino County Code is known as the Development Code (SBCDC). The purpose of the Development Code is, in part, to "protect the County's important agricultural, cultural, natural, open space and scenic resources." The code provides standards and guidelines for development in the unincorporated County and aims to protect the "character and identity of the San Bernardino County and its distinct communities." One notable area of consideration is compatibility—including visual compatibility—between different types of land uses and development types. Provisions of the Development Code that directly address aesthetic and light and glare issues and are relevant to the proposed project are summarized below.

- **Chapter 83.02 (Height Limitations, Screening, Setbacks).** This chapter of the Development Code is intended to ensure that all development produces an environment of stable and desirable character that is harmonious with existing and future development, and protects the use and enjoyment of neighboring properties, consistent with the General Plan. The code provides requirements for height limitations of structures, screening and buffering and minimum setback requirements.

- **Chapter 83.07 (Glare and Outdoor Lighting).** This chapter of the Development Code is intended to encourage lighting practices and systems that 1) minimize light pollution, glare, and light trespass; 2) conserve energy and resources while maintaining nighttime safety, visibility, utility, and productivity; and 3) curtail the degradation of the nighttime visual environment. In the Valley Region of the unincorporated County—which includes Bloomington—the code prohibits light trespass from outdoor lighting of commercial or industrial uses onto abutting residential land use zoning districts, residential parcels, and public rights-of-way. In the interest of reducing glare impacts, the code requires that light fixtures not cause glare above 0.5 foot-candle.

- **Chapter 83.13 (Sign Regulations).** Chapter 82.13 establishes the County's regulations for signs and other exterior advertising formats. Stated goals include improving the appearance of the County and preventing excessive and/or confusing signage. The chapter lists prohibited types of signs and provides detailed standards for the dimensions and placement of allowed signage.

Division 4 (Standards for Specific Land Uses and Activities) of the Development Code includes additional standards and regulations that affect the visual quality of the built environment.

Bloomington Community Plan

The Bloomington Community Plan is a component of the current San Bernardino County General Plan, which was adopted in 2007. It serves as Bloomington's comprehensive planning document and is intended to guide the future use and development of land in the community.

Community Character

The Bloomington Community Plan designates community character as one of the plan's "community priorities." In order to preserve the community's character:

- Protect and preserve the rural character of the community by maintaining areas of low-density residential development while also providing adequate opportunities for residential and commercial development to meet the needs of a diverse and growing population.

- Key features of the rural lifestyle that should be maintained are spaciousness, an equestrian-friendly environment and agricultural and animal-raising opportunities.

- Maintain the character of the community through a network of public and private open space, trail corridors and facilities for active and passive recreation.

- Provide adequate infrastructure commensurate with meeting the community needs.

Goals and Policies

Although the Bloomington Community Plan does not have a section dedicated specifically to visual character and quality, it contains goals and policies for land use that aim to preserve and enhance the aesthetics of the community. These include:

- Goal BL/LU 2 and Policy BL/LU 2.2, which support agricultural uses that are consistent with the community's rural character and lifestyle.

- Goal BL/LU 3 and Policies BL/LU 3.1 and 3.2, which require that commercial and industrial development be sited and designed to be compatible with surrounding land uses, including residential uses.

Scenic Routes

According to the Bloomington Community Plan, the only County-designated scenic route in Bloomington is Cedar Avenue from Bloomington Avenue on the north to the Riverside County line to the south; scenic resources visible to motorists and passerby along this north-south corridor include the San Gabriel and San Bernardino Mountains to the north and Jurupa Hills to the south.

5.1.1.2 EXISTING CONDITIONS

Visual Character

The project area covered under the Specific Plan is mostly built out with urban land uses. Major land uses include residential uses (126 acres); retail, service, and storage uses (72 acres); and industrial uses (39 acres). Vacant and underutilized lots are scattered throughout the western half of the project area (see Figure 3-3, *Aerial Photograph*). Some developed parcels in the northwest quadrant of the project area are mostly vacant land, containing one to a few buildings per parcel on parcels of about five acres each. Two major transportation corridors, Interstate 10 (I-10) and the Union Pacific Railroad, traverse Bloomington in an east-west direction along the project area's southern boundary (Figure 3-3 and Figure 3-4, *Proposed Land Use Districts and Zoning Designations*). The Union Pacific West Colton Railyard, one of the nation's largest freight facilities, is located opposite I-10 to the southeast. The project area is bounded on the east and north mostly by residential land uses. Ruth Grimes Elementary School in the City of Rialto abuts the east end of the project area. The project area is bounded on the west by commercial and residential uses in the City of Fontana.

Because the project area straddles rural residential uses (primarily to the north) and an important nonresidential corridor (oriented to the freeway, railway, and Valley Boulevard), the overall visual character of the project area is transitional. The mixture of land uses and building types along Valley Boulevard in particular give the area an eclectic aesthetic. However, existing low densities and the presence of large-lot, single-family homes and vacant and underutilized parcels give the area a rural character. Unlike in surrounding areas, where land use patterns and community character are heavily influenced by planned residential subdivisions, the project area's eclectic and rural character offers visual cues that the area was once an agricultural community that grew organically over time.

Landform and Topography

The project area is generally flat with a south slope of about 1.4 percent grade. The most notable topographic feature of the project area is the man-made elevation change in Cedar Avenue where it crosses I-10 and the Union Pacific railway. The street—along with the westbound ramps of the freeway—is elevated above the surrounding area's natural grade to allow a grade separation between the three modes of travel. The resulting downslope toward Valley Boulevard offers motorists views of the project area as they travel north along I-10.

Visual Resources

The Bloomington Garage and the adjacent LaGue family home—both of which are designated California Points of Historical Interest—are in the southeastern portion of the project area on Commercial Street and

Orchard Street west of Cedar Avenue. Although these structures are not easily visible as one travels through the project area, they are visible from the I-10 Freeway and considered important visual—and cultural—landmarks to residents of Bloomington. The Bloomington Garage and the La Gue Residence were originally built in 1912 on corner of Cedar Avenue and Valley Boulevard. The Bloomington Garage served as a landmark for people driving to Las Vegas or other eastern destinations. The Garage closed in 1968 and was slated for demolition in the 1990s until long-time resident Virginia Geil formed the Bloomington Preservation Foundation and raised $40,000 to move the garage from its original location to its current location. The Garage now sits opposite the La Gue Home, which together are ted as a California Point of Historic Interest.

Visual resources in the project area also include ornamental trees characteristic of urban land uses. These are scattered on developed parcels throughout the project area. Figure 5.1-1, *Photographs of Existing Visual Character*, shows examples of the current visual character and resources in the project area, including a photo of the historic Bloomington Garage.

Scenic Vistas and Corridors

The project area offers prominent distant views of the San Gabriel Mountains to the northwest and the San Bernardino Mountains to the northeast. The area also has scenic views of the Jurupa Hills, which are approximately one mile to the south. The nearest designated state scenic highway to the project area is State Route 91, approximately 18 miles to the southwest (Caltrans 2016). Numerous highway corridors in the nearby San Bernardino Mountains are considered "eligible" as State Scenic Highways, but these are over six miles to the northeast and there is no visibility between the corridors and the project area. According to the Bloomington Community Plan, the only County-designated scenic route in Bloomington is Cedar Avenue from Bloomington Avenue on the north to the Riverside County line to the south.

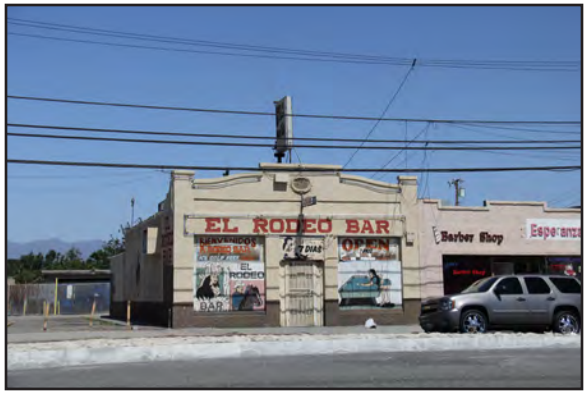
Light and Glare

Excessive light and glare can negatively affect sensitive land uses when those uses are placed close to land uses that have outdoor lighting or include building materials that reflect light. Existing sources of light and glare throughout the project area include building (interior and exterior), security, sign illumination, and parking-area lighting. In addition, nighttime light and glare include street lights and vehicular traffic along Valley Boulevard and its adjoining/surrounding roadways (e.g., I-10, Alder, Locust and Cedar Avenues). A significant amount of ambient lighting also comes from surrounding residential, commercial, retail, and industrial land.

Figure 5.1-1 - Photographs of Existing Visual Character
5. Environmental Analysis

View down Valley Boulevard looking east toward the San Bernardino Mountains.

Children's play area in Ayala Park.



Commercial uses on Magnolia Street.

Historic Bloomington Garage at the corner of Commercial Street and Orchard Street.

Homes on Linden Avenue.

Signage along Valley Boulevard east of Alder Avenue.

5. Environmental Analysis
AESTHETICS

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5.1.2 Thresholds of Significance

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 the site and its surroundings.

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

5.1.3 Environmental Impacts

The evaluation of aesthetics and aesthetic impacts is highly subjective. It requires the application of a process that objectively identifies the visual features of the environment and their importance. Aesthetic description involves identifying existing visual character, including visual resources and scenic vistas unique to Bloomington. Visual resources are determined by identifying landforms (e.g., topography and graded areas), views (e.g., scenic resources such as natural features or urban characteristics), viewing points/locations, and existing light and glare (e.g., nighttime illumination).

Changes to aesthetic resources due to implementation of the proposed project are identified and qualitatively evaluated based on the proposed modifications to the existing setting and the viewer's sensitivity. Potential aesthetic impacts can be evaluated by considering proposed grade separations, landform alteration, building setbacks, scale, building massing, and landscaping features associated with the design of the proposed project. It should be noted, however, that there are no locally designated or defined standards or methodologies for the assessment of aesthetic impacts. Furthermore, implementation of the proposed Specific Plan does not approve any specific development project. Therefore, the analysis below is based on the potential "worst case" (i.e., most intense) form and massing that would be allowed under the proposed land use designations.

The following impact analysis addresses thresholds of significance for which the NOP disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.1-1: Future development that would be accommodated by the Valley Corridor Specific Plan would not result in a substantial adverse effect on a scenic vista resource or substantially damage scenic resources within a state scenic highway. [Thresholds AE-1 and AE-2]

Impact Analysis: Following is a discussion of the potential impacts to/on scenic vistas and resources as a result of future development that would be accommodated under the proposed Specific Plan.

Scenic Vistas and Resources

The County of San Bernardino General Plan Conservation and Open Space elements describe areas of the county with identified scenic resources and vistas. In addition to scenic corridors, scenic resources include natural landmarks and prominent or unusual features of the landscape. Scenic backdrops include hillsides and ridges that rise above urban or rural areas or highways. Scenic vistas are points accessible to the general public that provide views of highly valued landscape or open space areas. Scenic vistas include panoramic views of natural or man-made features—such as mountains, oceans or lakes, forests, or urban skylines—not available from most places.

The project area and its surroundings offer prominent distant views of the San Gabriel Mountains to the northwest and the San Bernardino Mountains to the northeast. The project area is also afforded scenic views, although partial and interrupted, of the Jurupa Hills, which are approximately one mile to the south. The introduction of buildings and structures on vacant and underutilized lots in the project area as well as redevelopment of currently developed lots (i.e., introduction of higher intensity uses and building heights) could impact public views of these mountains and hills to motorists and passersby traveling along Valley Boulevard and I-10. Private views of the mountains and hills from private properties within or adjacent to the project area are not protected by the County's General Plan (including the Bloomington Community Plan). However, SBCDC Chapter 83.02 sets structural height limitations and minimum setbacks to protect views and community character.

The project area and its immediate surroundings are in an urbanized area of Bloomington and are developed with a mix of commercial, retail, residential, and industrial uses that do not exhibit any significant or unique visual resources (see Figure 5.1-1, *Photographs of Existing Visual Character*). Additionally, there are no designated open space resources within or in the vicinity of the project area; this is a designation typically used to determine the value of certain public vistas in order to gauge adverse effects. There are also no natural landmarks or prominent or unusual landscape features within or in the vicinity of the project area.

According to the Bloomington Community Plan, the only County-designated scenic route in Bloomington is Cedar Avenue from Bloomington Avenue on the north to the Riverside County line to the south; scenic resources visible to motorists and passerby along this north-south corridor include the San Gabriel and San Bernardino Mountains to the north and Jurupa Hills to the south. As shown in Figure 3-4, *Proposed Land Use Districts and Zoning Designations*, a very small portion of this scenic route falls within the eastern portion of the project area. However, future development that would be accommodated under the proposed Specific Plan would not obstruct views of the aforementioned mountains or hills along this county-designated scenic route, because development would occur on the west and east sides of Cedar Avenue, and the viewshed along this corridor is to the north and south along Cedar Avenue. Aside from Cedar Avenue, the County of San Bernardino's General Plan does not designate any scenic vistas or protected viewsheds within the project area or surrounding vicinity. However, the project area does offer distant views of the surrounding mountains, San Gabriel Mountains to the northwest and the San Bernardino Mountains to the northeast.

Additionally, views of the mountains and hills afforded to motorists and passerby traveling along Valley Boulevard are already partially obstructed by existing buildings, structures, and mature trees on both sides of

the boulevard; there are no clear and uninterrupted views of the mountains and hills anywhere along Valley Boulevard. The introduction of higher intensity uses and building heights (up to 60 feet maximum building height along the majority of Valley Boulevard) under the proposed Specific Plan than currently exist along Valley Boulevard may interrupt views of the mountains and hills to the north and south, respectively, but not to a much greater extent than currently. Additionally, in some instances, redevelopment of currently developed lots would be an improvement over existing conditions. Development projects require a minimum building setback of 15 feet from the public street or right of way; thereby stepping back buildings from the public right-of-way and providing increased views of the mountains and hills.

Views of the San Gabriel and San Bernardino mountains to motorists traveling along I-10 are already very limited by the existing row of mature eucalyptus trees that line the entire stretch of the northern side of I-10, which forms the southern project boundary. Also, a freeway screening zone (as shown in Specific Plan Figure 4-1, Landscape Zones) is proposed along the southern boundary of the project area, which is formed by I-10. The purpose of this landscaping zone is to improve the appearance of Bloomington as viewed from I-10 through a mix of broad-canopied trees and drought-tolerant shrubs. The freeway screening zone, when installed and mature, would be the predominant view of the southern portion of the project area for motorists traveling along I-10. As discussed below under Impact 5.1-2, buildout of the project area consistent with the proposed Specific Plan would result in beneficial aesthetic impacts along the segment of I-10 that traverses Bloomington.

The height of the mountains and hills also ensures that they will remain a scenic backdrop in the project area and overall community of Bloomington without detriment from anticipated development that would be accommodated under the proposed Specific Plan.

The Bloomington Garage and LaGue family home—both of which are designated California Points of Historical Interest—are in the southeastern portion of the project area on Commercial Street west of Cedar Avenue (see Figure 5.1-1, *Photographs of Existing Visual Character*, for a photograph of the Bloomington Garage). Although these structures are not visible traveling on Valley Boulevard—the primary corridor through the project area—the Bloomington Garage is visible from I-10 and is a known landmark for the region. Both structures are important cultural landmarks to residents of Bloomington. These landmarks would remain in their existing condition and not undergo any changes under the proposed Specific Plan. In fact, the proposed Specific Plan includes language that prohibits changes to such historic structures; thereby ensuring that they remain a visual landmark in Bloomington (see Specific Plan Section 3.2.2, Permitted Land Uses).

Based on the preceding, no adverse impacts to scenic vistas or resources are anticipated.

Scenic Resources within a State Scenic Highway

There are no designated state scenic highways or highways eligible for such a designation in or near the project area. The nearest designated state scenic highway is State Route 91, approximately 18 miles to the southwest of the project area (Caltrans 2016). Numerous highway corridors in the nearby San Bernardino Mountains are also considered "eligible" as State Scenic Highways (Caltrans 2016), but these begin over 6

miles to the northeast, and there is no visibility between the corridors and the project area. Therefore, no adverse impacts to scenic resources along a state scenic highway are anticipated.

Impact 5.1-2: Future development that would be accommodated by the Valley Corridor Specific Plan would alter but not substantially degrade the visual character of the project area and its surroundings. [Threshold AE-3]

Impact Analysis: The land use and development framework in the proposed Specific Plan could ultimately support approximately 1,093 housing units in residential and mixed-use projects and up to 1.9 million square feet of nonresidential uses consisting of a variety of retail stores, restaurants, hotels, and business development/office space. Development in the project area under the proposed Specific Plan would occur incrementally by individual landowners over time within the framework established by the Specific Plan. Accordingly, other than potential public improvements to the Valley Boulevard streetscape, the visual appearance of the project area would be expected to change incrementally without a dramatic transformation in community character.

The assessment of aesthetic impacts is subjective by nature. Aesthetics generally refers to the identification of visual resources and their quality, as well as an overall visual perception of the environment. A project is generally considered to have a significant aesthetic impact if it substantially changes the character of the project area so that the site becomes visually incompatible with or visually unexpected in its surroundings.

Anticipated changes in visual appearance and community character resulting from public and private improvements to the Valley Boulevard corridor as a result of the proposed Specific Plan are described below.

Land Use Changes and Increased Development

The existing character of the project area includes mostly single-story buildings associated with a mix of commercial and retail uses, auto-oriented services, and residential uses, as well as number of vacant parcels. The current appearance of the project area lacks a cohesive architectural character. As construction has occurred over many years, architectural style is quite varied, and due to the area's agricultural origins, many properties underutilize their available building space. Three-story buildings for a new affordable housing complex were recently completed at the intersection of Valley Boulevard and Bloomington Way. The complex also houses a new regional library and community center.

Under the proposed Specific Plan, the project area would transition into an area with higher-density residential, commercial, and mixed-use land uses. The variety, scale, siting, and appearance of privately owned land uses are typically what have the largest impact on a neighborhood's visual appearance and character. As shown in Figure 3-4, *Proposed Land Use Districts and Zoning Designations*, implementation of the proposed Specific Plan would allow development of a variety of land uses and increased development throughout the project area. Specifically, land use changes under the Specific Plan would involve replacing current conventional zoning districts with six Specific Plan land use districts: Mixed Use, Bloomington Enterprise, Commercial, Low & Medium Residential, and Medium & High Residential, and Open Space. Greater allowable building heights, building intensity, and allowance of mixed uses under the Specific Plan would result in a change to the visual character of the project area, but it would not result in a degradation of visual

character or quality. It is intended that, over time, newer development and redevelopment will replace older properties and that newer standards will represent an improvement to the aesthetics of the area.

The proposed Specific Plan provides design guidelines designed to ensure that future development projects are visually compatible with surrounding land uses and development standards that address land use compatibility. The design guidelines establish parameters for building design and massing, facades and street walls, open space, circulation and parking, landscaping, signage, public art, and utility areas. The design guidelines would help create a uniform architectural theme for the project area. Site design guidelines (Chapter 4 of the proposed Specific Plan) encourage landscaping to buffer adjacent land uses that are different in scale, use, or design. Additionally, new development within the Mixed-Use District would be designed with a pedestrian emphasis and architectural aesthetic to encourage alternative modes of transportation. Compliance with the development standards of the proposed Specific Plan related to permitted uses, development intensity, building placement (i.e., setbacks and fronting), building heights, and parking requirements would ensure that all new development projects under the proposed Specific Plan share similar character and style to unify the entire project area. For example, minimum and maximum setbacks and building heights have been established in the proposed Specific Plan to create a consistent street scene, provide attractive landscaping, and provide a buffer for pedestrians from street activity.

Mixed Use

Buildout of the area proposed for mixed use development—in the western half of project area along the north side of Valley Boulevard, mostly west of Locust Avenue but also to the east (see Figure 3-4)—would allow for the development of a variety of uses, including commercial, residential, and office uses. This district permits higher density detached and attached residential uses at densities between 10 and 40 units per acre. Development projects could consist entirely of residential or nonresidential development and could also be integrated into mixed-use buildings.

The Affordable Bloomington/branch library project—recently completed on the north side of the new intersection of Valley Boulevard and Bloomington Way—is an example of the scale and massing of a mixed-use project expected for the project area under the proposed Specific Plan. The Affordable Bloomington/branch library project not only provides economic and community revitalization consistent with the Mixed Use District of the proposed Specific Plan, also serves as a catalyst for other development and redevelopment projects throughout the project area.

Additionally, the Mixed Use District encourages the creation of complementary recreation and community meeting space, including the potential for introduction of community gardens and other agriculture, pocket parks, and interlinking bike paths and nodes to improve connectivity and integration between uses. The introduction of such complementary recreation and community meeting spaces would not only provide for much needed open space and green areas for residents in the project area and its surroundings, but would also provide visual relief in this urbanized area of Bloomington.

Bloomington Enterprise

The Bloomington Enterprise District is designated for the central and western half of the project area, both south and north of Valley Boulevard and west of Linden Avenue (see Figure 3-4). This district permits a wide range of office and light industrial businesses with development standards that encourage and accommodate entrepreneurs and business startups as well as medium-scale and more established operations and business complexes. This district also permits ancillary commercial uses such as retail, dining, and hotel businesses that may serve the business community and the surrounding neighborhoods.

As proposed, the placement of the Bloomington Enterprise District would act as a buffer between vehicular activity along I-10 and the residential neighborhoods north of Valley Boulevard. Additionally, the Bloomington Enterprise District does not permit large warehousing, which is considered inconsistent and incompatible with residential and commercial neighborhoods and local goals for community development.

Commercial

The Commercial District, centered at the intersection of Valley Boulevard and Cedar Avenue, would provide shopping and employment opportunities. This district maintains the existing commercial designation for the eastern portion of the project area along both sides of Valley Boulevard and fronting I-10 (see Figure 3-4). The Commercial District continues to permit a wide range of retail uses, including restaurants, hotels, entertainment, general merchandise stores, personal service businesses, and professional and medical offices, and auto-oriented commercial.

West of Cedar Avenue and south of Valley Boulevard, the Commercial District encourage an interconnected sequence of plazas, paseos, walkable streets, and distinctive building designs to create a pedestrian-friendly town center, or "mercado", that celebrates Bloomington's history, establishing identity and reinforcing a sense of community for residents and businesses in the project area. Additionally, this district, along with the Bloomington Enterprise District, serves as a buffer between vehicular activity along I-10 and neighborhoods north of Valley Boulevard.

Low & Medium Density Residential

The Low & Medium Density Residential District, which would accommodate conventional single-family detached homes as well as other types of single-family detached and attached housing at densities of up to 10 units per acre, is proposed for the northern portions of the project area, including almost all parcels abutting Marygold Avenue and Grove Place (see Figure 3-4). Other types of single-family detached and attached homes can be configured in ways such as small-lot, 2 pack, zero-lot line, cottage, alley-loaded, gardencourt, and motorcourt designs.

Although additional development capacity in this portion of the project area would allow denser residential development than currently existing, development of parcels designated for Low & Medium Density Residential would be expected to occur gradually over time. This district also serves as a transition and buffer between the wide range of uses and development intensities that could be accommodated along Valley Boulevard under the proposed Specific Plan and the surrounding neighborhoods to the north.

The various residential product types permitted in the Low & Medium Density Residential District would not detract from the existing rural residential character of the area. Instead, newer product types would enhance the character of the project area, updating architecture and building elements along the street frontages and unifying styles and themes. For example, as noted above, one of the product types permitted in this district is the 2 pack. Under this product type, by configuring the units so that the garages of two adjoining units share a zero lot line (the structures are offset to preserve minimum building separation), garages can be either to the rear of the lot or set back from the front of the homes at a distance, which preserves the street scene for home frontage. Another product type example is a courtyard housing product known as the motorcourt. A motorcourt is a module of housing generally composed of four to eight residential units surrounding a common motorcourt or driveway. Garages are accessed from the motorcourt, which allows the fronts of garages to be turned away from the street or set back far enough from the street that the residential architecture is the predominant street scene feature.

Medium & High Density Residential

The Medium & High Density Residential District, which would allow development of a variety of housing types, densities and designs, would apply to an area directly north of Valley Boulevard and east of Alder Avenue in the western end of the project area (see Figure 3-4). The designation would allow higher-density detached and attached residential uses at densities ranging from 10 to 24 units per acres.

Although the scale of development allowed within this district would be more intense than residential neighborhoods to the north and elsewhere in Bloomington, the area to the immediate north—which is designated Low & Medium Residential Density (see Figure 3-4)—is expected to serve as a transition area where development intensity and building scale "steps down" as one travels farther from Valley Boulevard. The proposed Low & Medium Residential Density to the north would also serve as a transition and buffer between the higher-density residential development that would be accommodated within the Medium & High Density Residential District and the existing residential neighborhoods to the north.

Conclusion

The Specific Plan, would help to improve the visual quality of the project area by forming a consistent matrix of urban fabric and updated architecture throughout the project area. It would also help to revitalize the character of Valley Boulevard, and reinvigorate business investment in the community.

The proposed Specific Plan would ensure high quality and context-sensitive design within the project area through implementation of detailed design guidelines and development standards. Specific Plan Chapter 3, Development Plan and Standards, includes the land use plan, permitted uses, and development standards that are intended to shape the physical form of the project area. Chapter 4 of the Specific Plan, Design Guidelines, encourages cohesive, quality design that is consistent with the overall vision for the project area while allowing flexibility for creative and innovative ideas.

Additionally, the proposed Specific Plan includes a number of guiding principles that would help improve the visual character and quality of the project area and its surroundings. For example, one of the guiding principles is to improve the image, wayfinding, and sustainable design of Bloomington and the corridor along

Valley Boulevard and I-10. As also stated in the vision of the proposed Specific Plan, "The Valley Corridor Specific Plan would provide the foundation for a healthier and more vibrant community corridor that offers employment and retail opportunities in a walkable, safe, and attractive environment".

Overall, the proposed Specific Plan would include landscaping and architectural treatments and improvements that would bring consistency and stylistic improvements to the existing visual character of the project area and its surroundings. Although development in accordance with the proposed Specific Plan would visually alter the area, it would not deteriorate the existing visual character or conflict with any existing architectural characteristics specific to the area. Therefore, impacts related to aesthetic and visual character as a result of land use changes and increased development under the proposed Specific Plan are not anticipated to be significant.

Streetscape Improvements

After land uses, public infrastructure improvements typically have the greatest effect on the visual appearance of a community. In the project area, these include future major public improvements to the Valley Boulevard streetscape.

The proposed Specific Plan includes conceptual diagrams showing the Valley Boulevard street section under existing conditions and with proposed improvements. Specifically, Specific Plan Figure 3-2, Valley Boulevard Street Section, illustrates the existing and proposed midblock cross-section for Valley Boulevard. Specific Plan Figures 3-3, Roadway System, and 3-4, Pedestrian, Bicycle, and Transit System, show existing conditions and recommended improvements to the roadway, pedestrian, and bicycle facilities in the project area. As shown in these figures, the proposed Valley Boulevard street section would largely be similar to current conditions: the overall width would vary from 105 to 113 feet, the center median would be 14 feet wide, and the interior travel lanes would remain 13 feet wide.

The midblock design for Valley Boulevard (Specific Plan Figure 3-2) accommodates four lanes of vehicular traffic with a Class II bike lane on each side of the street and a wide sidewalk shaded by street trees; regularly spaced street trees would be planted on either side of the street. The streetscape design also includes improvements to the existing raised medians and introduction of new raised medians along certain portions of the corridor. The new design and proposed landscape improvements would help create a more pedestrian- and bicycle-friendly area, enhance the visual appearance of the Specific Plan area and Bloomington overall, and serve as an overall unifying element for various development types and districts along Valley Boulevard. As stated in the Specific Plan, all new development fronting Valley Boulevard would be required to improve the adjacent right-of-way to be consistent with the proposed streetscape design shown in Figure 3-2. Additionally, as future development occurs, property owners would be required to improve the public right-of-way along their frontage consistent with the street section shown in Figure 3-2, which includes 10 to 14 feet of paved sidewalk area and street trees.

Implementation of the proposed streetscape improvements under the proposed Specific Plan would not only improve the image of the project area and its surroundings, but would improve the wayfinding and sustainable design of Bloomington and the corridor along Valley Boulevard and I-10. The proposed streetscape improvements would also enhance safety and mobility to help create complete streets for

pedestrians, bicyclists, and transit users. The proposed Specific Plan establishes a multimodal design for Valley Boulevard that improves the existing roadway framework, minimizes short-term and ongoing maintenance costs, and considers a variety of users in the area.

Based on the preceding, impacts related to aesthetic and visual character as a result of streetscape and infrastructure improvements under the proposed Specific Plan are not anticipated to be significant.

Impact 5.1-3: Future development that would be accommodated by the Valley Corridor Specific Plan would generate additional light and glare within the project area and its surroundings, which could adversely affect day or nighttime views in the area. [Threshold AE-4]

Impact Analysis: Nighttime illumination and glare impacts are the effects of a project's exterior lighting upon adjacent uses and areas. Glare can also be generated by light reflecting off passing cars and large expanses of glazing (i.e., glass windows) or other reflective surfaces. Excessive light and/or glare can impair vision, cause annoyance, affect sleep patterns, and generate safety hazards when experienced by drivers. Light and glare impacts are determined through a comparison of the existing light and glare sources with the proposed lighting plan or policies and the type of development proposed.

Given that the project area is mostly developed and in an urbanized area of Bloomington, the area contains many existing sources of nighttime illumination. These include street and parking area lights, security lighting, and exterior lighting on residential, commercial, retail, and light industrial buildings. Additional onsite nighttime light and glare are caused by surrounding residential, commercial, and industrial land uses as well as by vehicular traffic and light fixtures along Valley Boulevard and other streets in the project area, including I-10. The existing commercial, retail, and light industrial land uses throughout the project area and in the vicinity are not considered sensitive land uses with regards to nighttime lighting and glare. However, single-family residences in the Specific Plan area are considered sensitive land uses, and many of the surrounding areas also include single- and multifamily residences.

Implementation of the proposed Specific Plan would alter and intensify land uses and their related lighting sources throughout the project area by introducing new building (interior and exterior), open space, security, sign, and parking lights. Development under the proposed Specific Plan would also introduce aesthetic lighting, such as illumination of areas for architectural and façade detailing. Additional sources of glare could be introduced in the form of large expanses of glazing (i.e., glass windows) and certain types of architectural treatments and building materials (i.e., reflective metal treatments).

Architectural Treatments and Building Materials

Because the proposed Specific Plan allows higher intensity development throughout the project area, its implementation would likely result in larger buildings with more exterior glazing (e.g., windows and doors) and architectural treatments and building materials (i.e., reflective metal treatments) that could result in new sources of day or nighttime glare.

The architectural treatments of future development projects that would be accommodated under the proposed Specific Plan would include style-appropriate architectural building materials, such as stucco walls

and accent stucco, painted metal finishing, vinyl windows, and precision-cut CMU-block veneer. These building materials and architectural treatments are not reflective and would therefore not create substantial day or nighttime glare. They would be similar to building materials used on existing land uses throughout the project area and its surroundings.

Windows in residential and nonresidential development projects could potentially increase glare, because they would reflect sunlight during certain times of the day, as would vehicles parked on future development sites. However, glare from these sources is typical of the surrounding area and would not increase beyond what is expected for an urbanized area. Additionally, the proposed Specific Plan includes design guidelines (Chapter 4 of the proposed Specific Plan) that help reduce potential glare from building materials and architectural treatments, such as:

- The use of highly reflective materials is discouraged.
- Highly reflective or very dark glass is not allowed in commercial or mixed-use commercial buildings.

Therefore, daytime glare impacts from project-related architectural treatments and building materials are not anticipated to be significant.

Nighttime Lighting

Despite new and expanded sources of nighttime illumination and glare, development under the proposed Specific Plan is not expected to increase light and glare substantially or in a manner that would result in a significant impact. Specific Plan design guidelines would reduce the impacts of light and glare on adjacent and surrounding land uses and the general environment. Specifically, the following design guidelines (Specific Plan Section 4.4, Lighting) would help reduce light and glare impacts of future development projects under the proposed Specific Plan:

- **Overspill.** Exterior lighting elements should be shielded or downward facing to minimize glare, spillover, and light pollution. Lighting elements shall be designed and located to provide sufficient illumination for access and security purposes, but shall not adversely impact the onsite or surrounding residential uses or project offsite onto other adjacent uses.

- **Color and type.** White lighting is preferred. Colored lights are not encouraged unless they contribute to the theming of commercial areas or establishments. Blinking, flashing, and oscillating lights are prohibited.

- **Pedestrian Lighting (7b).** Low-wattage, full-cutoff luminaires should be employed for pedestrian lighting fixtures.

- **Pedestrian Lighting (7c).** Full-cutoff luminaires are lighting fixtures that emit no uplight (no light above 90-degree horizontal plane), and a maximum of 10 percent of the total lumens between 80 and 90 degrees, resulting in minimal glare.

- **Shared Parking and Common Open Space.** Lighting of shared residential parking areas and common open space areas should be aimed downward and/or shielded to minimize glare and light spillage.

Future development projects under the Specific Plan would be required to adhere to the lighting standards in the Development Code, ensuring that existing and future project residents throughout the project area and its surroundings are protected from project-related as well as existing lighting sources. For example, Chapter 83.07 (Glare and Outdoor Lighting) of the Development Code encourages lighting practices and systems that 1) minimize light pollution, glare, and light trespass; 2) conserve energy and resources while maintaining nighttime safety, visibility, utility, and productivity; and 3) curtail the degradation of the nighttime visual environment. In the Valley Region of the unincorporated County—which includes Bloomington—the code prohibits light trespass from outdoor lighting of commercial or industrial uses onto abutting residential land use zoning districts, residential parcels, and public rights-of-way. To reduce glare impacts, the Development Code requires that light fixtures not cause glare above 0.5 foot-candle. Compliance with the applicable lighting provisions of the Development Code would be ensured through the County's development review and building plan check process.

Furthermore, future development projects under the proposed Specific Plan would be required to comply with California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings, Title 24, Part 6, of the California Code of Regulations, which outlines mandatory provisions for lighting control devices and luminaires. For example, proposed lighting sources would be required to be installed in accordance with the provisions of Section 110.9, Mandatory Requirements for Lighting Control Devices and Systems, Ballasts, and Luminaires. Compliance with these state standards would be ensured through the County's development review process and building plan check process.

Finally, the lighting sources associated with development under the Specific Plan would be similar to those of the existing surrounding residential and nonresidential land uses. Considering existing sources of lighting throughout the project area and its surroundings, nighttime lighting under the proposed Specific Plan would not be substantially greater or more intense than existing lighting in the area.

With adherence of the provisions of the proposed Specific Plan, Development Code, and California Building Energy Efficiency Standards for Residential and Nonresidential Buildings, and because the project area and surrounding area are largely developed and contain existing sources of lighting, the proposed Specific Plan would not substantially increase nighttime light and glare in the project area or its surroundings in a manner that would adversely affect day or nighttime views in the area. Therefore, project-related nighttime light and glare impacts are not anticipated to be significant.

5.1.4 Cumulative Impacts

Aesthetics/Visual Character

Aesthetic impacts are localized to the project area and its immediate surroundings. Given that the project area is in an urbanized area of Bloomington, implementation of the proposed Specific Plan, and any other future cumulative development that would be accommodated under the Bloomington Community Plan, would not likely negatively impact the visual character of the project area or its surroundings. Development under the

proposed Specific Plan, and all future cumulative development projects under the Bloomington Community Plan, would be required to adhere to Development Code standards outlined as they relate to aesthetics. In consideration of these factors, the project's contribution to cumulative aesthetic impacts is less than considerable and, therefore, less than cumulatively significant.

Light and Glare

The future development of industrial land uses south of I-10 consistent with the Bloomington Community Plan could, combined with development in the project area under the proposed Specific Plan, increase the overall amount of ambient nighttime illumination in Bloomington. Furthermore, redevelopment under both plans could slightly increase the amount of glare visible to motorists on I-10. However, as concluded above, light and glare impacts of the proposed Specific Plan would be less than significant upon compliance with existing regulations and the provisions of the proposed Specific Plan. In addition, due to the existence of light and glare from existing residential and nonresidential uses in the project area and surrounding properties, the proposed Specific Plan is not anticipated to add significant new sources of nighttime light and glare in the project vicinity. Furthermore, the I-10 corridor is located in a highly urbanized setting that already experiences a high level of nighttime illumination. Finally, as with development that would be accommodated by the proposed Specific Plan, cumulative development projects under the Bloomington Community Plan would be required to adhere to the lighting standards outlined in the Development Code. Therefore, the proposed Specific Plan's contribution to cumulative light and glare impacts is less than considerable and is therefore less than cumulatively significant.

5.1.5 Existing Regulations and Standard Conditions

State

- California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings, Title 24, Part 6, of the California Code of Regulations

Local

- SBCDC, Chapter 83.02 (Height Limitations, Screening, Setbacks
- SBCDC, Chapter 83.07 (Glare and Outdoor Lighting)
- SBCDC, Chapter 83.13 (Sign Regulations)

5.1.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and adherence to the provisions of the proposed Specific Plan, the following impacts would be less than significant: 5.1-1 (scenic vistas and state scenic highways), 5.1-2 (visual character), and 5.1-3, (light and glare).

5.1.7 Mitigation Measures

No significant impacts would occur and no mitigation measures are required.

5.1.8 Level of Significance After Mitigation

Compliance with existing regulations and provisions of the proposed Specific Plan would reduce impacts to a less than significant level. Therefore, no significant unavoidable adverse project or cumulative impacts relating to aesthetics would remain.

5.1.9 References

California Department of Transportation (Caltrans). 2016. Scenic Highway Program. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/scenic_hwy.htm.

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5. Environmental Analysis
AESTHETICS

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5.2 AIR QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Valley Corridor Specific Plan (project) to impact by air quality. This evaluation is based on the methodology recommended by the South Coast Air Quality Management District (SCAQMD). The analysis focuses on air pollution from regional emissions and localized pollutant concentrations. Transportation-sector impacts are based on trip generation provided by Webb Associates (see Appendix G). Criteria air pollutant emissions modeling for the project is included in Appendix B of this DEIR.

5.2.1 Environmental Setting

5.2.1.1 REGULATORY BACKGROUND

State and federal ambient air quality standards (AAQS) have been adopted and are periodically updated for criteria air pollutants. In addition, both the state and federal government regulate the release of toxic air contaminants (TACs). The project site is within the South Coast Air Basin (SoCAB), and development within this Air Basin is subject to the rules and regulations imposed by SCAQMD, as well as those adopted by the California Air Resources Board (CARB) and the United States Environmental Protection Agency (EPA). Federal, state, regional, and local laws, regulations, plans, or guidelines potentially applicable to the project are summarized below.

Federal and State Laws

Ambient Air Quality Standards

The Clean Air Act (CAA) was passed in 1963 by the U.S. Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS.

The National and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants, which are shown in Table 5.2-1, *Ambient Air Quality Standards for Criteria Pollutants*. These pollutants are ozone

(O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 5.2-1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard	Federal Primary Standard	Major Pollutant Sources
Ozone (O_3)	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm[5]	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Average	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm[4]	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	*	0.030 ppm[2]	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm[1,4]	
	24 hours	0.04 ppm	0.014 ppm[2]	
Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g. wind-raised dust and ocean sprays).
	24 hours	50 µg/m^3	150 µg/m^3	
Particulate Matter - Fine ($PM_{2.5}$)	Annual Arithmetic Mean	12 µg/m^3	12 µg/m$^{3, 3}$	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g. wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m^3	
Lead (Pb)	30-Day Average	1.5 µg/m^3	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarterly	*	1.5 µg/m^3	
	Rolling 3-Month Average	*	0.15 µg/m^3	
Sulfates (SO_4)	24 hours	25 µg/m^3	*	Industrial processes.
Visibility-Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles[1]	*	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different

Table 5.2-1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard	Federal Primary Standard	Major Pollutant Sources
				materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	*	Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hour	0.01 ppm	*	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2015b.
Notes: ppm: parts per million; µg/m^3: micrograms per cubic meter
* Standard has not been established for this pollutant/duration by this entity.
1 When relative humidity is less than 70 percent.
2 On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
3 On December 14, 2012, EPA lowered the federal primary $PM_{2.5}$ annual standard from 15.0 µg/m^3 to 12.0 µg/m^3. EPA made no changes to the primary 24-hour $PM_{2.5}$ standard or to the secondary $PM_{2.5}$ standards.
4 NO_2 and SO_2 standards are converted from ppb (parts per billion) to ppm for consistency purposes.
5 On October 1, 2015, the EPA strengthened the National Air Quality Standards for ground-level ozone to 70 ppb, based on extensive scientific evidence about ozone's effects on public health and welfare.

California has also adopted a host of other regulations that reduce criteria pollutant emissions, including:

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code

Tanner Air Toxics Act and Air Toxics Hots Information and Assessment Act

Public exposure to TACs is a significant environmental health issue in California. In 1983, the California legislature enacted a program to identify the health effects of TACs and to reduce exposure to them. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health" (17 CCR § 93000). A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the

federal Clean Air Act (42 U.S. Code § 7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency, acting through CARB, is authorized to identify a substance as a TAC if it is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act set up a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit that TAC. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate "toxics best available control technology" to minimize emissions. To date, CARB has established formal control measures for 11 TACs that are identified as having no safe threshold.

Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, are required to communicate the results to the public through notices and public meetings.

CARB has promulgated the following specific rules to limit TAC emissions:

- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

Regional

SCAQMD has promulgated the following rules related to air quality and nuisance odors:

- SCAQMD Rule 201: Permit to Construct
- SCAQMD Rule 402: Nuisance Odors
- SCAQMD Rule 403: Fugitive Dust
- SCAQMD Rule 1113: Architectural Coatings
- SCAQMD Rule 1403: Asbestos Emissions from Demolition/Renovation Activities
- SCAQMD Rule 1186: Street Sweeping

Local Regulations

The County of San Bernardino Development Code (SBCDC) Section 83.01.040, *Air Quality*, identifies requirements for new development in the County to reduce air pollutant emissions. Pursuant to the County Code, if a project includes stationary sources of air pollutant emissions, the County requires that permits obtained from the applicable air district be filed with the County within 30 days of the air district's approval.

Additionally, Section 83.01.040 requires implementation of the following diesel exhaust control measures:

- On-Road Diesel Vehicles. On-road diesel vehicles comply with CARB regulations.
- Off-Road Diesel Vehicle/Equipment Operations. All business establishments and contractors that use off-road diesel vehicle/equipment as part of their normal business operations shall adhere to the following measures during their operations in order to reduce diesel particulate matter emissions from diesel-fueled engines:
  - Off-road vehicles/equipment shall not be left idling on site for periods in excess of five minutes. The idling limit does not apply to:
    - idling when queuing,
    - idling to verify that the vehicle is in safe operating condition,
    - idling for testing, servicing, repairing or diagnostic purposes,
    - idling necessary to accomplish work for which the vehicle was designed (such as operating a crane),
    - idling required to bring the machine system to operating temperature, and
    - idling necessary to ensure safe operation of the vehicle.
  - Use reformulated ultra-low-sulfur diesel fuel in equipment and use equipment certified by the EPA or that pre-dates EPA regulations.
  - Maintain engines in good working order to reduce emissions.
  - Signs shall be posted requiring vehicle drivers to turn off engines when parked.
  - Any requirements or standards subsequently adopted by the SCAQMD, Mojave Desert Air Quality Management District, or CARB.
  - Provide temporary traffic control during all phases of construction.
  - Onsite electrical power connections shall be provided for electric construction tools to eliminate the need for diesel-powered electric generators, where feasible.
  - Maintain construction equipment engines in good working order to reduce emissions. The developer shall have each contractor certify that all construction equipment is properly serviced and maintained in good operating condition.

- Contractors shall use ultra-low sulfur diesel fuel for stationary construction equipment as required by Air District Rules 431.1 and 431.2 to reduce the release of undesirable emissions.
- Substitute electric and gasoline-powered equipment for diesel-powered equipment, where feasible.

- Project Design. Distribution centers, warehouses, truck stops and other facilities with loading docks where diesel trucks may reside overnight or for periods in excess of three hours shall be designed to enable any vehicle using these facilities to utilize on-site electrical connections to power the heating and air conditioning of the cabs of such trucks, and any refrigeration unit(s) of any trailer being pulled by the trucks, instead of operating the diesel engines and diesel refrigeration units of such trucks and trailers for these purposes. This requirement shall also apply to Recreational Vehicle Parks (as defined in Section 810.01.200(k) of this title) and other development projects where diesel engines may reasonably be expected to operate on other than an occasional basis.

Additionally, Section 84.12.070, *Development Standards Applicable to All Classes*, part l, *odors and vibrations*, states that no equipment or processes used on the subject property shall create smoke, fumes, odors, or vibrations that are disruptive to surrounding properties.

Air Pollutants of Concern

Criteria Air Pollutants

The pollutants emitted into the ambient air by stationary and mobile sources are categorized as primary and/or secondary pollutants. Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb) are primary air pollutants. Of these, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that AAQS have been established for them. VOC and NO_x are criteria pollutant precursors that form secondary criteria air pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and nitrogen dioxide (NO_2) are the principal secondary pollutants.

A description of each of the primary and secondary criteria air pollutants and its known health effects is presented below.

- **Carbon Monoxide** is a colorless, odorless gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (SCAQMD 2005; USEPA 2015a). The SoCAB is designated under the California and National AAQS as being in attainment of CO criteria levels (CARB 2014).

- **Volatile Organic Compounds** are composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources include evaporative emissions from paints and solvents, asphalt paving, and household consumer products such as aerosols (SCAQMD 2005). There are no AAQS for VOCs. However, because they contribute to the formation of O_3, SCAQMD has established a significance threshold.

- **Nitrogen Oxides** are a by-product of fuel combustion and contribute to the formation of ground-level O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NO_X are nitric oxide (NO) and nitrogen dioxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_X produced by combustion is NO, but NO reacts quickly with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO_2 is only potentially irritating. NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO_2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between elevated short-term NO_2 concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (SCAQMD 2005; USEPA 2015a). The SoCAB is designated an attainment area for NO_2 under the National and California AAQS (CARB 2014).

- **Sulfur Dioxide** a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2. When sulfur dioxide forms sulfates (SO_4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_X). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO_2, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing.) At lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics (SCAQMD 2005; USEPA 2015a). The SoCAB is designated attainment under the California and National AAQS (CARB 2014).

- **Suspended Particulate Matter** consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤10 millionths of a meter or 0.0004 inch). Inhalable fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 microns or less (i.e., ≤2.5 millionths of a meter or 0.0001 inch). Particulate discharge into

the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The EPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing) (SCAQMD 2005). There has been emerging evidence that ultrafine particulates (UFPs), which are even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.1 millionths of a meter or <0.000004 inch), have human health implications, because UFPs' toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (SCAQMD 2013). However, the EPA or CARB has yet to adopt AAQS to regulate these particulates. Diesel particulate matter (DPM) is classified by CARB as a carcinogen (CARB 1998). Particulate matter can also cause environmental effects such as visibility impairment,[1] environmental damage,[2] and aesthetic damage[3] (SCAQMD 2005; USEPA 2015a). The SoCAB is a nonattainment area for $PM_{2.5}$ under California and National AAQS and a nonattainment area for PM_{10} under the California AAQS (CARB 2014).[4]

- **Ozone** is commonly referred to as "smog" and is a gas that is formed when VOCs and NO_X, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O_3 is a secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O_3 can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O_3 also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O_3 harms sensitive vegetation during the growing season (SCAQMD 2005; USEPA 2015a). The SoCAB is designated extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2014).

- **Lead** is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system,

[1] $PM_{2.5}$ is the main cause of reduced visibility (haze) in parts of the United States.

[2] Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

[3] Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

[4] CARB approved the 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 did not violate federal 24-hour PM_{10} standards from 2004 to 2007. 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.

reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (SCAMQD 2005; USEPA 2015a). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the EPA and CARB adopted more strict lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.[5] As a result of these violations, the Los Angeles County portion of the SoCAB is designated as nonattainment under the National AAQS for lead (SCAQMD 2012; CARB 2014). Because emissions of lead are found only in projects that are permitted by SCAQMD, lead is not a pollutant of concern for the project.

Toxic Air Contaminants

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified diesel particulate matter as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particles are 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs.

Air Quality Management Planning

SCAQMD is the agency responsible for improving air quality in the SoCAB and assuring that the National and California AAQS are attained and maintained. SCAQMD is responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

[5] Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (SCAQMD 2012).

2012 AQMP

On December 7, 2012, SCAQMD adopted the 2012 AQMP, which employs the most up-to-date science and analytical tools and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on- and off-road mobile sources, and area sources. It also addresses several state and federal planning requirements, incorporating new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and new meteorological air quality models. The 2012 AQMP builds upon the approach identified in the 2007 AQMP for attainment of federal PM and ozone standards and highlights the significant amount of reductions needed. It also highlights the urgent need to engage in interagency coordinated planning to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria air pollutant standards within the time frames allowed under the CAA. The 2012 AQMP demonstrates attainment of federal 24-hour $PM_{2.5}$ standard by 2014 and the federal 8-hour ozone standard by 2023. Preliminary ambient air quality data suggests that meeting the 2016 federal 24-hour $PM_{2.5}$ standards by the end of 2014 is not likely, largely due to the extreme drought conditions in the SoCAB (SCAQMD 2015e). It includes an update to the revised EPA 8-hour ozone control plan with new commitments for short-term NO_X and VOC reductions. The plan also identifies emerging issues—ultrafine ($PM_{1.0}$) particulate matter, near-roadway exposure, and energy supply and demand.

2016 Draft AQMP

The SCAQMD is in the process of updating the AQMP. The 2016 AQMP will address strategies and measures to attain the 2008 federal 8-hour ozone standard by 2032 and the 2012 federal annual $PM_{2.5}$ standard by 2021. The 2016 AQMP will also take an initial look at the 2015 federal 8-hour ozone standard and will update previous attainment plans for ozone and $PM_{2.5}$ that have not yet been met (SCAQMD 2015f).

Lead State Implementation Plan

In 2010, the EPA designated the Los Angeles County portion of the SoCAB as a nonattainment area under the federal lead classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in the City of Vernon and the City of Industry that exceeded the new standard in the 2007-to-2009 period. The remainder of the SoCAB, outside the Los Angeles County nonattainment area, remains in attainment of the 2008 lead standard. On May 24, 2012, CARB approved the State Implementation Plan (SIP) revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to the EPA for approval.

5.2.1.2 EXISTING CONDITIONS

South Coast Air Basin

The project site is in the SoCAB, which includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest, with high mountains forming the remainder of the perimeter. The general region lies in the semipermanent high-pressure zone of the eastern

Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (SCAQMD 2005).

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest to the project site that best represents the climatological conditions of the project area is the San Bernardino Monitoring Station (ID 047723). The average low is reported at 39.4°F in January, and the average high is 96.2°F in July and August (WRCC 2016).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from November through May. Rainfall averages 16.12 inches per year in the vicinity of the project site (WRCC 2016).

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of a shallow marine layer. This "ocean effect" is dominant except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (SCAQMD 2005).

Wind

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

Between periods of wind, periods of air stagnation may occur in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east inhibit the eastward transport and diffusion of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (SCAQMD 2005).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area (SCAQMD 2005).

SoCAB Nonattainment Designations

The AQMP provides the framework for air quality basins to achieve attainment of the California and National AAQS through the SIP. Areas are classified as attainment or nonattainment areas for particular pollutants depending on whether they meet the ambient air quality standards. Severity classifications for ozone nonattainment are marginal, moderate, serious, severe, and extreme. The attainment status for the SoCAB is shown in Table 5.2-2, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*. The SoCAB is designated in attainment of the California AAQS for sulfates and designated a nonattainment area for lead (Los Angeles County only) under the National AAQS.

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

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM_{10}	Serious Nonattainment	Attainment/Maintenance
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only)[1]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2014.
[1] In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new 2008 federal AAQS as a result of large industrial emitters. Remaining areas within the SoCAB are unclassified.

Existing Ambient Air Quality

Existing ambient air quality, historical trends, and projections in the vicinity of the project site are best documented by measurements made by SCAQMD. The project site lies within Source Receptor Area (SRA) 34 (Central San Bernardino Valley). The air quality monitoring station closest to the project site in SRA 34 is the Fontana Monitoring Station. Data from this station is summarized in Table 5.2-3. The data show that the area regularly exceeds the state and federal one-hour and eight-hour O_3 standards, the state PM_{10} standards, and the federal $PM_{2.5}$. The CO, NO_2, and SO_2 standards have not been exceeded in the last five years in the project vicinity.

Table 5.2-3 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations				
	2010	2011	2012	2013	2014
Ozone (O_3)					
State 1-Hour ≥ 0.09 ppm	28	39	60	34	31
State 8-hour ≥ 0.070 ppm	52	53	88	68	52
Federal 8-Hour > 0.075 ppm[1]	33	39	62	42	37
Max. 1-Hour Conc. (ppm)	0.143	0.144	0.142	0.151	0.127
Max. 8-Hour Conc. (ppm)	0.101	0.124	0.110	0.123	0.106
Carbon Monoxide (CO)					
State 8-Hour > 9.0 ppm	0	0	0	0	0
Federal 8-Hour ≥ 9.0 ppm	0	0	0	0	0
Max. 8-Hour Conc. (ppm)	1.144	1.16	1.76	*	*
Nitrogen Dioxide (NO_2)					
State 1-Hour ≥ 0.18 ppm	0	0	0	0	0
Max. 1-Hour Conc. (ppb)	71.9	76.4	69.1	81.7	70.4
Sulfur Dioxide (SO_2)					
State 1-Hour ≥ 0.04 ppm	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.002	0.003	0.004	0.001	*
Coarse Particulates (PM_{10})					
State 24-Hour > 50 µg/m^3	6	4	5	15	10
Federal 24-Hour > 150 µg/m^3	0	0	0	0	0
Max. 24-Hour Conc. (µg/m^3)	62.0	84.0	67.0	90.0	68.0
Fine Particulates ($PM_{2.5}$)					
Federal 24-Hour > 35 µg/m^3	2	2	3	1	1
Max. 24-Hour Conc. (µg/m^3)	42.6	60.1	39.9	43.6	78.9

Source: CARB 2015b. Data obtained from the Fontana Arrow-Highway Monitoring Station.
ppm: parts per million; ppb: parts per billion; µg/m^3: micrograms per cubic meter; NA: not available
[1] On October 1, 2015, the EPA adopted a new 8-hour National AAQS for ozone of 0.070 ppm (70 ppb).

Existing Criteria Air Pollutant Emissions

Table 5.2-4, *Existing Valley Corridor Specific Plan Criteria Air Pollutant Emissions Inventory*, is based on existing land uses in the Valley Corridor Specific Plan. Criteria air pollutant emissions generated in the plan area were estimated using the California Emissions Estimator Model (CalEEMod), version 2013.2.2.

Table 5.2-4 Existing Valley Corridor Specific Plan Criteria Air Pollutant Emissions Inventory

Sector	Criteria Air Pollutant Emissions (pounds per day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	105	1	44	0	1	1
Energy[1]	1	7	5	0	1	1
On-Road Transportation[2]	103	316	1,178	2	157	45
Total	209	324	1,227	2	158	46

Source: CalEEMod 2013.2.2. Totals may not add to 100 percent due to rounding.
[1] Assumes the average age of the existing building stock is pre-2005.
[2] Transportation emissions are based on trip generation provided by Webb Associates.

Existing Health Risk Mapping

Colton Railyard Health Risk Assessment

The Colton Railyard is a major source of TACs proximate to the Valley Boulevard Specific Plan. According to CARB, cancer risk associated with on-site diesel PM emissions is substantially reduced beyond a one-mile distance from a railyard (CARB 2005; CARB 2008). However, within a mile of a railyard, health risk may be elevated above the background levels. To reduce health risk from diesel PM at railyards, CARB entered into a statewide railroad pollution reduction agreement with Union Pacific Railroad (UP) and the Burlington Northern Santa Fe Railway Company (BNSF) in 2005. The agreement required that health risk assessments (HRA) be prepared for each of the 17 major or designated railyards in California; these were ultimately used to formulate mitigation plans to reduce diesel PM and associated health risks. Based on the results of the 2008 HRA for the Colton Railyard, over 99 percent of the diesel PM emissions are from locomotives. Yard trucks and equipment (e.g., off-road equipment and generators) represent less than 1 percent of the emissions inventory for the Colton Railyard. Since this study, the Colton Railyard has implemented a mitigation plan to reduce emissions.

SoCAB Multiple Air Toxics Exposure Study

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on ambient concentrations of TACs and the potential health risks from air toxics in the SoCAB. In 2008, SCAQMD conducted its third update to the MATES study (MATES III) based on the Office of Environmental Health Hazards Assessment (OEHHA) 2003 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (2003 HRA Guidance Manual). The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in a million. The largest contributor to this risk was diesel exhaust, which accounted for 84 percent of the cancer risk (SCAQMD 2008a).

SCAQMD recently released the fourth update (MATES IV), which was also based on OEHHA's 2003 HRA Guidance Manual. The results showed that the overall monitored risk for excess cancer from a lifetime exposure to ambient levels of air toxics decreased to approximately 418 in one million. Compared to the 2008 MATES III, monitored excess cancer risks decreased by approximately 65 percent. Approximately 90 percent of the risk is attributed to mobile sources, and 10 percent is attributed to TACs from stationary sources, such as refineries, metal processing facilities, gas stations, and chrome plating facilities. The largest contributor to this risk was diesel exhaust, which accounted for approximately 68 percent of the air toxics risk. Compared to MATES III, MATES IV found substantial improvement in air quality and associated decrease in air toxics exposure. As a result, the estimated basinwide population-weighted risk decreased by approximately 57 percent since MATES III. Based on the results of the MATES°IV analysis, cancer risk within the Valley Boulevard Specific Plan measures at 342 per million over a 70-year lifetime. The updated MATES IV study reflects the results of the emissions reduction programs implemented by UP at the Colton Railyard since the 2008 HRA was conducted (SCAQMD 2015c).

OEHHA updated the guidelines for estimating cancer risks on March 6, 2015. The new method utilizes higher estimates of cancer potency during early life exposures, which result in a higher calculation of risk.

There are also differences in the assumptions on breathing rates and length of residential exposures. When combined together, SCAQMD estimates that risks for a given inhalation exposure level will be about 2.7 times higher than the risk identified in MATES IV using the 2015 OEHHA guidance methodology (e.g., 2.7 times higher than 418 in one million overall excess cancer risk) (SCAQMD 2015c).

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases.

Residential areas are considered sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Other sensitive receptors include retirement facilities, hospitals, and schools. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial, commercial, retail, and office areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, because the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public.

5.2.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

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

AQ-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

AQ-3 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

AQ-4 Expose sensitive receptors to substantial pollutant concentrations.

AQ-5 Create objectionable odors affecting a substantial number of people.

South Coast Air Quality Management District

The analysis of the project's air quality impacts follows the guidance and methodologies recommended in SCAQMD's *CEQA Air Quality Handbook* and the significance thresholds on SCAQMD's website.[6] CEQA

[6] SCAQMD's air quality significance thresholds are current as of March 2011 and can be found at: http://www.aqmd.gov/ceqa/hdbk.html.

allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. SCAQMD has established regional thresholds of significance. In addition to the regional thresholds, projects are subject to the AAQS.

SCAQMD Regional Significance Thresholds

SCAQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the SoCAB. Table 5.2-5, *SCAQMD Significance Thresholds*, lists thresholds that are applicable for all projects uniformly regardless of size or scope. There is growing evidence that although UFPs contribute a very small portion of the overall atmospheric mass concentration, they represent a greater proportion of the health risk from PM. However, the EPA or CARB have not yet adopted AAQS to regulate UFPs; therefore, SCAQMD has not developed thresholds for them.

Table 5.2-5 SCAQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Nitrogen Oxides (NO_x)	100 lbs/day	55 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

Source: SCAQMD 2015a.

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

- Linked to increased cancer risk ($PM_{2.5}$, TACs)
- Aggravates respiratory disease (O_3, $PM_{2.5}$)
- Increases bronchitis (O_3, $PM_{2.5}$)
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O_3)
- Reduces resistance to infections and increases fatigue (O_3)
- Reduces lung growth in children ($PM_{2.5}$)
- Contributes to heart disease and heart attacks ($PM_{2.5}$)
- Contributes to premature death (O_3, $PM_{2.5}$)
- Linked to lower birth weight in newborns ($PM_{2.5}$) (SCAQMD 2015g)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of $PM_{2.5}$ is responsible

for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists responsible for a landmark children's health study found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (SCAQMD 2015h).

CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to AAQS is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles and introduction of cleaner fuels, as well as implementation of control technology on industrial facilities, CO concentrations in the SoCAB and the state have steadily declined.

Localized Significance Thresholds

SCAQMD identifies localized significance thresholds (LST), shown in Table 5.2-6, *Localized Significance Thresholds*. Emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at a project site (offsite mobile-source emissions are not included in the LST analysis) could expose sensitive receptors to substantial concentrations of criteria air pollutants. A project that generates emissions that trigger a violation of the AAQS when added to the local background concentrations would generate a significant impact.

Table 5.2-6 Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (California AAQS)[1]	20 ppm
8-Hour CO Standard (California AAQS/ National AAQS)	9.0 ppm
1-Hour NO_2 Standard (California AAQS)	0.18 ppm
Annual Average NO_2 Standard ((California AAQS)[1]	0.03 ppm
24-Hour PM_{10} Standard – Construction (SCAQMD)[2]	10.4 µg/m^3
24-Hour $PM_{2.5}$ Standard – Construction (SCAQMD)[2]	10.4 µg/m^3
24-Hour PM_{10} Standard – Operation (SCAQMD)[2]	2.5 µg/m^3
24-Hour $PM_{2.5}$ Standard – Operation (SCAQMD)[2]	2.5 µg/m^3
Annual Average PM_{10} Standard (SCAQMD)[2]	1.0 µg/m^3

Sources: SCAQMD 2015a and CARB 2015a.
ppm – parts per million; µg/m^3 – micrograms per cubic meter
[1] Based on the more restrictive California AAQS for CO and NO_2.
[2] Threshold is based on SCAQMD Rule 403. Since the SoCAB is nonattainment for PM_{10} and $PM_{2.5}$, the threshold is the allowable change in concentration. Background concentration is irrelevant.

Health Risk Thresholds

Whenever a project would require use of chemical compounds that have been identified in SCAQMD Rule 1401, placed on CARB's air toxics list pursuant to AB 1807, or placed on the EPA's National Emissions

Standards for Hazardous Air Pollutants, a health risk assessment is required by the SCAQMD. Table 5.2-7, *Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. Residential, commercial, and office uses do not use substantial quantities of TACs, so these thresholds are typically applied to new industrial projects.

Table 5.2-7 Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Cancer Burden (in areas ≥ 1 in 1 million)	> 0.5 excess cancer cases
Hazard Index (project increment)	≥ 1.0

Source: SCAQMD 2015a.

5.2.3 Environmental Impacts

Methodology

This air quality evaluation was prepared in accordance with the requirements of CEQA to determine if significant air quality impacts are likely to occur in conjunction with future development that would be accommodated by the Valley Corridor Specific Plan. SCAQMD has published guidelines that are intended to provide local governments with guidance for analyzing and mitigating air quality impacts and that were used in this analysis (SCAQMD 1993; SCAMQD 2008; SCAQMD 2015a; SCAQMD 2015d). Industrial sources of emissions that require a permit from SCAQMD (permitted sources) are not included in the Valley Corridor Specific Plan community inventory. Modeling of criteria air pollutants was conducted using the California Emissions Estimator Model (CalEEMod), version 2013.2.2. On-road transportation sources is based on trip generation rates provided by Webb Associates.

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.2-1: Buildout of the project would generate slightly more growth than the existing general plan; therefore, the project would be inconsistent with SCAQMD's air quality management plans. [Threshold AQ-1]

Impact Analysis: CEQA requires that projects be evaluated for consistency with the AQMP. A consistency determination plays an important role in local agency project review by linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decision makers of the environmental effects of a project under consideration at a stage early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals of the AQMP. The regional emissions inventory for the SoCAB is compiled by SCAQMD and SCAG. Regional population, housing, and employment projections developed by SCAG are based, in part, on the local jurisdictions' general plan land use designations. These projections form the foundation for the emissions inventory of the AQMP. These demographic trends are incorporated into the 2016-2040 RTP/SCS, compiled by SCAG to determine priority transportation projects and vehicle miles traveled within

the SCAG region. Projects that are consistent with the local general plan are considered consistent with the air quality–related regional plan. Typically, only new or amended general plan elements, specific plans, and major projects that have the potential to affect the regional population and employment forecasts need to undergo a consistency review.

Valley Corridor Specific Plan

Per CEQA Guideline Section 15206, the Valley Corridor Specific Plan is considered regionally significant by SCAG. Changes in the population, housing, or employment growth projections associated with this project have the potential to substantially affect SCAG's demographic projections and therefore the assumptions in SCAQMD's AQMP. The Valley Corridor Specific Plan would increase the land use intensity within the project site, resulting in an increase in population and employment in the Valley Corridor Specific Plan area. Because regional transportation modeling is based on the underlying general plan land use designation, the Valley Corridor Specific Plan could potentially change the assumptions of the AQMP.

The AQMP ensures that the region is on track to attain the California and federal AAQS. When a project has the potential to exceed the assumptions of the AQMP because it is more intensive than the underlying land use designation, criteria air pollutants generated during operation of development that would be accommodated by the Valley Corridor Specific Plan are compared to SCAQMD's regional significance thresholds (see Impact 5.2-2 and Impact 5.2-3), which were established to determine whether a project has the potential to cumulatively contribute to the SoCAB's nonattainment designations. Development that would be accommodated by the Valley Corridor Specific Plan would exceed SCAQMD's regional operational thresholds. As a result, the proposed project could potentially exceed the assumptions in the AQMP and would not be considered consistent with the AQMP.

The Valley Corridor Specific Plan would be consistent with SCAG's regional goals of providing infill housing, improving the jobs-housing balance, and integrating land uses near major transportation corridors. One of the key planning principles throughout the Valley Corridor Specific Plan is mobility. The Specific Plan creates safe spaces for pedestrians, cyclists, transit, and motor vehicles along Valley Boulevard and between surrounding neighborhoods. Building upon the recommendations of the RTP/SCS, the Specific Plan incorporates a Mixed Use District of commercial and residential uses to enable local residents to live, play, work, and shop in a connected community.

However, despite furthering the regional transportation and planning objectives, the Specific Plan would represent a substantial increase in emissions compared to existing conditions and would exceed SCAQMD's regional operational significance thresholds (see Impact 5.2-3). As a result, the Valley Corridor Specific Plan could potentially exceed the assumptions in the AQMP and would not be considered consistent with the AQMP. Consequently, impacts would be potentially significant.

Impact 5.2-2: Construction activities associated with the project would generate a substantial increase in short-term criteria air pollutant emissions that exceeds the threshold criteria and would cumulatively contribute to the nonattainment designations of the SoCAB. [Thresholds AQ-2, AQ-3, and AQ-4]

Impact Analysis: A project would normally have a significant effect on the environment if it violates any air quality standard or contributes substantially to an existing or projected air quality violation. Construction activities produce combustion emissions from various sources, such as onsite heavy-duty construction vehicles, vehicles hauling materials to and from the site, and motor vehicles transporting the construction crew. Site preparation activities produce fugitive dust emissions (PM_{10} and $PM_{2.5}$) from grading and excavation and from demolition. Exhaust emissions from construction onsite would vary daily. The potential construction-related air quality impacts resulting from the proposed project are addressed below.

Valley Corridor Specific Plan Area

Construction activities would temporarily increase PM_{10}, $PM_{2.5}$, VOC, NO_X, SO_X, and CO regional emissions within the SoCAB. Construction activities associated with buildout of the Valley Corridor Specific Plan are anticipated to occur sporadically over approximately 20 years or more. Buildout would comprise multiple smaller projects undertaken by individual developers/project applicants, each having its own construction timeline and activities. Development of multiple properties could occur at the same time; however, there is no defined development schedule for these future projects at this time. For this analysis, the maximum daily emissions are based on a very conservative scenario, where several construction projects throughout the Valley Corridor Specific Plan area would occur at the same time and all construction phases would overlap. The amount of construction assumed is consistent with the approximately 20-year anticipated buildout of the Valley Corridor Specific Plan area. An estimate of maximum daily construction emissions is provided in Table 5.2-8, *Estimate of Regional Construction Emissions in the Valley Corridor Specific Pla*n.

Table 5.2-8 Estimate of Regional Construction Emissions in the Valley Corridor Specific Plan

	Construction-Related Regional Emissions (pounds/day)[3]					
Construction Phase[1,2]	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Demolition	4	46	37	<1	4	2
Site Preparation	5	52	40	<1	11	7
Grading	6	70	48	<1	7	5
Building Construction	18	102	224	<1	31	10
Paving	3	20	16	<1	1	1
Architectural Coatings	186	4	26	<1	5	1
Worst-Case Day[4]	222	294	390	1	59	27
SCAQMD Standard	75	100	550	150	150	55
Significant?	Yes	Yes	No	No	No	No

Source: CalEEMod Version 2013.2.2.
1 Construction equipment mix is based on CalEEMod default construction mix. See Appendix B for a list of assumptions on emissions generated on a worst-case day.
2 Grading includes compliance with SCAQMD Rule 403 fugitive dust control measures. Measures include requiring an application of water at least twice per day to at least 80 percent of the unstabilized disturbed onsite surface areas, replacing disturbed ground cover quickly, and restricting speeds on unpaved roads to less than 15 miles per hour. Modeling also assumes a VOC of 100 g/L for interior paints pursuant to SCAQMD Rule 1113.
3 It is assumed that approximately 674830 building square feet of the existing structures would be demolished.
4 Based on overlap of the building construction, paving, and architectural coatings phases.

As shown in the table, construction activities associated with the proposed project could potentially exceed the SCAQMD regional thresholds for VOC and NO_X. The primary source of NO_X emissions is exhaust from vehicles and construction equipment. NO_X is a precursor to the formation of both O_3 and particulate matter (PM_{10} and $PM_{2.5}$). VOC is produced by equipment exhaust and off-gas of architectural coatings and paving. VOC is a precursor to the formation of O_3. Project-related emissions of VOC and NO_X would contribute to the O_3, NO_2, PM_{10}, and $PM_{2.5}$ nonattainment designations of the SoCAB. Therefore, project-related construction activities would result in significant regional air quality impacts. Because cumulative development within the Valley Corridor Specific Plan would exceed the regional significance thresholds, construction of the project could contribute to an increase in health effects in the basin until such time as the attainment standard are met.

Impact 5.2-3: Long-term operation of the project would generate a substantial increase in criteria air pollutant emissions that exceed the threshold criteria and would cumulatively contribute to the nonattainment designations of the SoCAB. [Thresholds AQ-2 and AQ-3]

Impact Analysis: Buildout of the Valley Corridor Specific Plan would result in direct and indirect criteria air pollutant emissions from transportation, energy (natural gas use), and area sources (e.g., natural gas fireplaces, aerosols, landscaping equipment). Transportation sources of criteria air pollutant emission are based on the traffic impact analysis conducted by Webb Associates (see Appendix G of this DEIR). Development that would be accommodated by the Specific Plan would generate a net increase of 23,634 weekday average daily trips. The results of the CalEEMod modeling are included in Table 5.2-9, *Maximum Daily Valley Corridor Specific Plan Operational Phase Regional Emissions*.

Table 5.2-9 Maximum Daily Valley Corridor Specific Plan Operational Phase Regional Emissions

	Operation-Related Regional Emissions (pounds/day)					
Phase	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing						
Area	105	0	43	0	1	1
Energy	1	7	5	0	1	1
Transportation	49	124	567	2	156	44
Total	155	132	615	2	157	45
Project[1]						
Area	147	1	90	0	1	1
Energy	1	13	8	0	1	1
Transportation	105	262	1,199	5	328	92
Total	254	275	1,297	5	330	95
Net Change						
Project Less Existing Emissions Area	42	1	47	0	1	1
Project Less Existing Energy	1	5	4	0	0	0
Project Less Existing Transportation	56	138	632	3	172	48
Total Net Change	99	143	682	3	173	50
SCAQMD Regional Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	No

Source: CalEEMod Version 2013.2.2. Based on highest winter or summer emissions using 2035 emission rates. Totals may not equal 100 percent due to rounding.
[1] Assumes approximately 620,820 building square feet of the existing structures would be demolished.

As shown in the table, the operation phase of the Valley Corridor Specific Plan at buildout would generate air pollutant emissions that exceed SCAQMD's regional significance thresholds for VOC, NO_x, CO, and PM_{10}. Construction of the new residential and non-residential uses would be based on market-demand and would be constructed over the approximately 20-year project buildout; therefore, emissions from construction activities could add to the total emissions during early phases (see Table 5.2-8). Table 5.2-9 shows maximum daily emissions at buildout once construction is complete. Emissions of VOC and NO_x that exceed the SCAQMD regional threshold would cumulatively contribute to the O_3 nonattainment designation of the SoCAB. Emissions of NO_X that exceed SCAQMD's regional significance thresholds would cumulatively contribute to the O_3 and particulate matter (PM_{10} and $PM_{2.5}$) nonattainment designations of the SoCAB. Emissions of PM_{10} would contribute to the PM_{10} and $PM_{2.5}$ nonattainment designations. Therefore, implementation of the Valley Corridor Specific Plan would result in a significant impact because it would significantly contribute to the nonattainment designations of the SoCAB. Because cumulative development within the Valley Corridor Specific Plan would exceed the regional significance thresholds, operation of the project could contribute to an increase in health effects in the basin until such time as the attainment standards are met.

Impact 5.2-4: Construction activities related to buildout of the proposed project could expose sensitive receptors to substantial pollutant concentrations. [Threshold AQ-4]

Impact Analysis: Development that would be accommodated by the Valley Corridor Specific Plan could expose sensitive receptors to elevated pollutant concentrations during construction activities if it would cause or contribute significantly to elevating those levels. Unlike the mass of construction emissions shown in Table 5.2-8, described in pounds per day, localized concentrations refer to an amount of pollutant in a volume of air (ppm or $\mu g/m^3$) and can be correlated to potential health effects. LSTs are the amount of project-related emissions at which localized concentrations (ppm or $\mu g/m^3$) would exceed the AAQS for criteria air pollutants for which the SoCAB is designated a nonattainment area.

Table 5.2-8 provides an estimate of the magnitude of criteria air pollutant emissions generated by the development that would be accommodated by the Valley Corridor Specific Plan for each construction subphase. Buildout of the Valley Corridor Specific Plan would occur over a period of approximately 20 years or longer and would comprise several smaller projects with their own construction time frame and construction equipment. Concentrations of criteria air pollutants generated by a development project depend on the emissions generated onsite and the distance to the nearest sensitive receptor.

Therefore, an LST analysis can only be conducted at a project-level, and quantification of LSTs is not applicable for this program-level environmental analysis. Because potential redevelopment could occur close to existing sensitive receptors, the development that would be accommodated by the Specific Plan has the potential to expose sensitive receptors to substantial pollutant concentrations. Construction equipment exhaust combined with fugitive particulate matter emissions has the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions and result in a significant impact.

Impact 5.2-5: Buildout of the project could result in new source sources of criteria air pollutant emissions and/or toxic air contaminants proximate to existing or planned sensitive receptors. [Threshold AQ-4]

Impact Analysis: Operation of new land uses, consistent with the land use plan of the project, would generate new sources of criteria air pollutants and TACs. The following describes potential localized operational air quality impacts from the implementation of the Valley Corridor Specific Plan.

Onsite Emissions

Operation of residential and nonresidential structures in the Valley Corridor Commercial District and the residential districts would include occasional use of landscaping equipment, natural gas consumption for heating, and nominal truck idling for vendor deliveries. The proposed project would permit residential, commercial, and office land uses and would not involve warehousing or similar uses where substantial truck idling could occur onsite. Table 5.2-10, *Onsite Area Source Emissions Compared to SCAQMD's Screening-Level LSTs*, shows localized maximum daily operational emissions from stationary sources compared to SCAQMD's five-acre screening criteria. As shown in this table, onsite emissions from the residential and nonresidential uses from onsite energy use (natural gas used for cooking and water heating) and other onsite sources (e.g., landscaping fuel, aerosols) would not exceed the screening LSTs and would not generate substantial concentrations of emissions.

Table 5.2-10 Onsite Area Source Emissions Compared to SCAQMD's Screening-Level LSTs

Source	Pollutants (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Area Sources	1	90	1	1
SCAQMD LST	270	1,746	4	2
Exceeds LST?	No	No	No	No

Source: CalEEMod Version 2013.2.2; SCAQMD 2008.
Notes: In accordance with SCAQMD methodology, only onsite stationary sources and mobile equipment are included in the analysis. Operational LSTs are based on receptors within 82 feet (25 meters) of a 5-acre site in SRA 32.

Certain types of land uses have the potential to generate substantial emissions.

Land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from SCAQMD include industrial land uses, such as chemical processing facilities, dry cleaners, and gasoline-dispensing facilities. Operators of certain types of facilities must submit emissions inventories. The Air Toxics Program categorizes each facility as being high, intermediate, or low priority based on the potency, toxicity, quantity, and volume of its emissions. If the risks are above established levels, facilities are required to notify surrounding populations and to develop and implement a risk reduction plan. Stationary sources of emissions associated with the project site, such as emergency generators and boilers, would be controlled by SCAQMD through permitting and would be subject to further study and health risk assessment prior to the issuance of any necessary air quality permits under SCAQMD's New Source Review. In accordance with the

County Code Section 83.01.040, Air Quality, a copy of the permit approved by SCAQMD must be submitted to the County within 30 days of approval.

In addition to stationary/area sources of TACs, warehousing and trucking facilities could generate a substantial amount of diesel particulate matter emissions from off-road equipment use and truck idling. While SCAQMD considers stationary sources, the permit process does not consider area and mobiles sources of emissions. The Bloomington Enterprise District would result in development of office and light industrial land uses. However, this district (and the other districts in the Valley Corridor Specific Plan) would not permit large warehousing since it would be considered inconsistent with surrounding neighborhoods and local goals for community development. Nonetheless, because this district could permit industrial land uses that generate stationary, area, and mobile sources of emissions there is a potential for new industrial uses to generate emissions that could impact nearby sensitive receptors. New discretionary land uses projects pursuant to the Specific Plan would be required to implement diesel exhaust emissions control measures pursuant to SBCDC Section 83.01.040(c). Additionally, the Valley Corridor Specific Plan requires a health risk assessment (see Valley Corridor Specific Plan Section 5.1.4, Required Studies). Development of individual projects would be required to achieve the thresholds established by SCAQMD, and project-level impacts would be less than significant.

CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9.0 ppm. At the time of the 1993 SCAQMD Handbook, the SoCAB was designated nonattainment under the California AAQS and National AAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined. In 2007, the SCAQMD was designated in attainment for CO under both the California AAQS and National AAQS.[7] Furthermore, under existing and future vehicle emission rates, a 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 (BAAQMD 2011). Buildout of the Valley Corridor Specific Plan would not produce the volume of traffic required to generate a CO hotspot (Webb Associates 2015).[8] Therefore, impacts from CO hotspots are considered less than significant.

Impact 5.2-6: Light industrial land uses associated with the project could create objectionable odors. [Threshold AQ-5]

Impact Analysis: Implementation of the Valley Corridor Specific Plan could generate new sources of odors and place sensitive receptors near existing sources of odors. Nuisance odors from land uses in the SoCAB are regulated under SCAQMD Rule 402, Nuisance. Major sources of odors include wastewater treatment plants,

[7] As identified in SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide, peak carbon monoxide concentrations in the SoCAB were the result of unusual meteorological and topographical conditions and not of congestion at a particular intersection.

[8] The highest intersection volumes with the project at buildout were identified as 7,120 vehicles at Sierra Avenue and the I-10 ramps during the PM peak hour.

chemical manufacturing facilities, food processing facilities, agricultural operations, and waste facilities (e.g., landfills, transfer stations, compost facilities). The proposed project does not include these types of potentially odorous land uses but may allow for other minor sources of odors as described below.

This analysis addresses potential impacts from siting new sources of nuisance odors near sensitive receptors, since the Specific Plan designates residential areas and light industrial areas.

- Future nonindustrial development would involve minor odor-generating activities, such as lawn mower exhaust and application of exterior paints for building improvement. Restaurants can generate odors, but these are not typically considered nuisance odors, since restaurants typically do not generate significant odors that affect a substantial number of people.

- Industrial uses, including food processing facilities and waste transfer stations, have the potential to generate substantial odors. The Specific Plan allows light industrial land uses within the Bloomington Enterprise district. Permitted and conditionally permitted land uses within this district may include auto repair, industrial bakery, light manufacturing, research and development, welding, and urban farming. These types of uses may generate odors Individual projects associated with the project, including commercial, industrial, and office, are also required to comply with SCAQMD's Rule 402 to prevent public nuisances. While these odors would need to be controlled, additional measures may be warranted to prevent a nuisance, depending on the nature of the proposed use. Consequently, industrial land uses associated with the buildout of the project may generate odors that affect a substantial number of people.

- Construction activities would require the operation of equipment that would generate exhaust from either gasoline or diesel fuel. Construction and development would also require the application of paints and the paving of roads, which could generate odors. These types and concentrations of odors are typical of developments and are not considered significant air quality impacts.

SCAQMD Rule 402 requires abatement of any nuisance generating an odor complaint. Typical abatement includes passing air through a drying agent followed by two successive beds of activated carbon to generate odor-free air. Facilities listed in Rule 402 would need to consider measures to reduce odors as part of their CEQA review. SBCDC Section 84.12.070, states that no equipment or processes used on the subject property shall create smoke, fumes, odors, or vibrations that are disruptive to surrounding properties. However, this development code does not identify specific land uses or performance standards to reduce odor impacts to less than significant. Odor impacts could be significant for new projects that have the potential to generate odors proximate to sensitive land uses.

5.2.4 Cumulative Impacts

In accordance with the SCAQMD methodology, any project that produces a significant project-level regional air quality impact in an area that is in nonattainment contributes to the cumulative impact. Cumulative projects in the local area include new development and general growth within the project area. The greatest source of emissions within the SoCAB is mobile sources. Due to the extent of the area potentially impacted

from cumulative project emissions, SCAQMD considers a project cumulatively significant when project-related emissions exceed the SCAQMD regional emissions thresholds shown in Table 5.2-5, *SCAQMD Significance Thresholds*.

Construction

The SoCAB is designated nonattainment for O_3, $PM_{2.5}$, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for PM_{10} under the California AAQS.[9] Construction of cumulative projects would further degrade the regional and local air quality. Air quality would be temporarily impacted during construction activities. Implementation of mitigation measures for related projects would reduce cumulative impacts. However, project-related construction emissions could still potentially exceed the SCAQMD significance thresholds on a project and cumulative basis. Consequently, the proposed project's contribution to cumulative air quality impacts would be cumulatively considerable and would therefore be significant.

Operation

For operational air quality emissions, any project that does not exceed or can be mitigated to less than the daily regional threshold values is not considered by SCAQMD to be a substantial source of air pollution and does not add significantly to a cumulative impact. Operation of the proposed project would result in emissions in excess of the SCAQMD regional emissions thresholds for VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$ for long-term operation. Additionally, the proposed project would generate TACs that could contribute to elevated levels of risk in the larger Bloomington community. Based on the results of the MATES°IV analysis, cancer risk within the Valley Boulevard Specific Plan measures at 342 per million over a 70-year lifetime (SCAQMD 2015c). Therefore, the proposed project's air pollutant emissions would be cumulatively considerable and therefore significant.

5.2.5 Existing Regulations and Standard Conditions

State

- Clean Car Standards – Pavely (AB 1493)
- California Advanced Clean Cars CARB (Title 13 CCR)
- California Advanced Clean Cars – LEV III (Title 13 CCR)
- Statewide Retail Provider Emissions Performance Standards (SB 1368).
- Clean Energy and Pollution Reduction Act of 2015 (SB 350)
- Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools (13 CCR 2480)
- Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling (13 CCR 2485)

[9] 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.

- In-Use Off-Road Diesel Idling Restriction (13 CCR 2449)
- Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Code (Title 24, Part 11)
- Appliance Energy Efficiency Standards (Title 20)

Regional

- SCAQMD Rule 201: Permit to Construct
- SCAQMD Rule 402: Nuisance Odors
- SCAQMD Rule 403: Fugitive Dust
- SCAQMD Rule 1113: Architectural Coatings
- SCAQMD Rule 1403: Asbestos Emissions from Demolition/Renovation Activities
- SCAQMD Rule 1186: Street Sweeping

Local

- SBCDC Section 84.12070(i), Odors and vibrations. Equipment permit and inspection requirements
- SBCDC Section 83.01.040a, Equipment permit and inspection requirements
- SBCDC Section 83.01.040b, Permits from Air Quality Management Districts
- SBCDC Section 83.01.040c, Diesel Exhaust Emissions Control Measures

5.2.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: Impact 5.2-5 (toxic air contaminants).

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.2-1** The proposed project is a regionally significant project that would contribute to an increase in frequency or severity of air quality violations in the South Coast Air Basin and would conflict with the assumptions of the applicable Air Quality Management Plan.

- **Impact 5.2-2** The proposed project would generate short-term emissions that exceed the South Coast Air Quality Management District's regional construction significance thresholds and would cumulatively contribute to the nonattainment designations of the South Coast Air Basin.

- **Impact 5.2-3** The proposed project would generate long-term emissions that exceed the South Coast Air Quality Management District's regional operational significance thresholds

and would cumulatively contribute to the nonattainment designations of the South Coast Air Basin.

- **Impact 5.2-4** Construction activities related to the buildout of the proposed project could expose sensitive receptors to substantial pollutant concentrations NO_X, CO, PM_{10}, and $PM_{2.5}$.

- **Impact 5.2-6** Light industrial land uses associated with the project could create objectionable odors.

- **Cumulative** The proposed project would generate TACs that could contribute to elevated levels of risk in the larger Bloomington community

5.2.7 Mitigation Measures

Impact 5.2-1

Mitigation measures applied for Impact 5.2-2 and Impact 5.2-3 would reduce the proposed project's regional construction-related and operational phase criteria air pollutant emissions to the extent feasible to minimize potential conflicts with the SCAQMD AQMP. However, no mitigation measures are available that would reduce impacts associated with inconsistency with the air quality management plans due to the magnitude of growth and associated emissions that would be generated by the buildout of the Valley Corridor Specific Plan.

Impact 5.2-2

AQ-1 Applicants for new development projects within the Valley Corridor Specific Plan area shall require the construction contractor to use equipment that meets the United Stated Environmental Protection Agency (EPA)-Certified emissions standards. All off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 4 emission standards. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 4 diesel emissions control strategy for a similarly sized engine, as defined by the California Air Resources Board's (CARB) regulations.

Prior to construction, the project engineer shall ensure that all demolition and grading plans clearly show the requirement for EPA Tier 4 or higher emissions standards for construction equipment over 50 horsepower. During construction, the construction contractor shall maintain a list of all operating equipment in use on the construction site for verification by the County of San Bernardino. The construction equipment list shall state the makes, models, and numbers of construction equipment onsite. Equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations. Construction contractors shall also ensure that all nonessential idling of construction

equipment is restricted to five minutes or less in compliance with California Air Resources Board's Rule 2449.

AQ-2 Applicants for new development projects within the Valley Corridor Specific Plan area shall require the construction contractor to prepare a dust control plan and implement the following measures during ground-disturbing activities in addition to the existing requirements for fugitive dust control under South Coast Air Quality Management District (SCAQMD) Rule 403 to further reduce PM_{10} and $PM_{2.5}$ emissions. The County of San Bernardino shall verify compliance that these measures have been implemented during normal construction site inspections.

- Following all grading activities, the construction contractor shall reestablish ground cover on the construction site through seeding and watering.
- During all construction activities, the construction contractor shall sweep streets with SCAQMD Rule 1186–compliant, PM_{10}-efficient vacuum units on a daily basis if silt is carried over to adjacent public thoroughfares or occurs as a result of hauling.
- During all construction activities, the construction contractor shall maintain a minimum 24-inch freeboard on trucks hauling dirt, sand, soil, or other loose materials and tarp materials with a fabric cover or other cover that achieves the same amount of protection.
- During all construction activities, the construction contractor shall water exposed ground surfaces and disturbed areas a minimum of every three hours on the construction site and a minimum of three times per day.
- During all construction activities, the construction contractor shall limit onsite vehicle speeds on unpaved roads to no more than 15 miles per hour.

AQ-3 Applicants for new development projects within the Valley Corridor Specific Plan area shall require the construction contractor to use coatings and solvents with a volatile organic compound (VOC) content lower than required under South Coast Air Quality Management District Rule 1113 (i.e., super compliant paints). The construction contractor shall also use precoated/natural-colored building materials, where feasible. Use of low-VOC paints and spray method shall be included as a note on architectural building plans and verified by the County of San Bernardino during construction.

Impact 5.2-3

Stationary Source

AQ-4 Prior to issuance of a building permit for new development projects within the Valley Corridor Specific Plan area, the property owner/developer shall show on the building plans that all major appliances (dishwashers, refrigerators, clothes washers, and dryers) to be

provided/installed are Energy Star appliances. Installation of Energy Star appliances shall be verified by the County prior to issuance of a certificate of occupancy.

Transportation and Motor Vehicles

AQ-5 Prior to issuance of building permits for residential development projects within the Valley Corridor Specific Plan area, the property owner/developer shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of San Bernardino prior to issuance of a certificate of occupancy.

- For multifamily dwellings, electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the CALGreen Code.
- Bicycle parking shall be provided as specified in Section A4.106.9 (Residential Voluntary Measures) of the CALGreen Code.

AQ-6 Prior to issuance of building permits for non-residential development projects within the Valley Corridor Specific Plan area, the property owner/developer shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of San Bernardino prior to issuance of a certificate of occupancy.

- For buildings with more than ten tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3 (Nonresidential Voluntary Measures) of the CALGreen Code.
- Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code.
- Facilities shall be installed to support future electric vehicle charging at each non-residential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code.

Impact 5.2-4

Mitigation measures applied for Impact 5.2-2 would also reduce the proposed project's localized construction-related criteria air pollutant emissions to the extent feasible.

Impact 5.2-6

AQ-7 If it is determined during project-level environmental review that a light industrial project has the potential to emit nuisance odors beyond the property line, an odor management plan may be required, subject to County's regulations. Facilities in the Bloomington Enterprise district that have the potential to generate nuisance odors include but are not limited to:

- Paint Booths
- Industrial Bakery
- Light Manufacturing,
- Research and Development
- Welding
- Urban farming

If an odor management plan is determined to be required through CEQA review, the County of San Bernardino shall require the project applicant to submit the plan prior to approval to ensure compliance with the South Coast Air Quality Management District's Rule 402, for nuisance odors. If applicable, the Odor Management Plan shall identify the Best Available Control Technologies for Toxics (T-BACTs) that will be utilized to reduce potential odors to acceptable levels, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers (e.g., air pollution control devices) at the industrial facility. T-BACTs identified in the odor management plan shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.

5.2.8 Level of Significance After Mitigation

Impact 5.2-1

Mitigation measures applied for Impact 5.2-2 and Impact 5.2-3 would reduce the proposed project's regional construction-related and operational phase criteria air pollutant emissions to the extent feasible. However, given the potential increase in growth and associated increase in criteria air pollutant emissions, the proposed project would continue to be potentially inconsistent with the assumptions in the AQMP. Therefore, Impact 5.2-1 would remain ***significant and unavoidable***.

Impact 5.2-2

Construction activities associated with the buildout of the project would generate criteria air pollutant emissions that would exceed SCAQMD's regional significance thresholds and would contribute to the nonattainment designations of the SoCAB and contribute to known health effects from poor air quality, including worsening of bronchitis, asthma, and emphysema; a decrease in lung function; premature death of people with heart or lung disease; nonfatal heart attacks; irregular heartbeat; decreased lung function; and increased respiratory symptoms. Mitigation Measures AQ-1 through AQ-3 would reduce criteria air pollutants generated from project-related construction activities. Buildout of the proposed project would occur over a period of approximately 20 years or longer. Construction time frames and equipment for individual site-specific projects are not available at this time. Although likely that significant phasing of new development will occur over decades, there is a potential for multiple developments to be constructed at any one time, resulting in significant construction-related emissions. Therefore, despite adherence to Mitigation Measures

AQ-1 through AQ-3, project-level and cumulative impacts under Impact 5.2-2 would remain ***significant and unavoidable***.

Impact 5.2-3

Buildout of the proposed land use plan would generate additional vehicle trips and area sources of criteria air pollutant emissions that exceed SCAQMD's regional significance thresholds and would incrementally contribute to the nonattainment designations of the SoCAB and known health effects from poor air quality. Incorporation of Mitigation Measures AQ-4 through AQ -6 would reduce operation-related criteria air pollutants generated from stationary and mobile sources. Mitigation Measures AQ-5 and AQ-6 would encourage and accommodate use of alternative-fueled vehicles and nonmotorized transportation. However, despite adherence to Mitigation Measures AQ-4 through AQ-6, project-level and cumulative impacts identified under Impact 5.2-3 would remain ***significant and unavoidable*** due to the magnitude of land use development associated with the proposed project.

Impact 5.2-4

Mitigation Measures AQ-1 and AQ-2 applied for Impact 5.2-2 would reduce the proposed project's regional construction emissions and therefore also reduce the project's localized construction-related criteria air pollutant emissions to the extent feasible. However, because existing sensitive receptors may be close to project-related construction activities, construction emissions generated by individual development projects have the potential to exceed SCAMQD's LSTs. Because of the scale of development activity associated with buildout of the project, for this broad-based Specific Plan it is not possible to determine whether the scale and phasing of individual projects would result in the exceedance of the localized emissions thresholds and contribute to known health effects. Therefore, project-level and cumulative impacts under Impact 5.2-3 would remain ***significant and unavoidable***.

Impact 5.2-5

Buildout of the project could result in new sources of air pollutant emissions near existing or planned sensitive receptors. Review of projects by SCAQMD for permitted sources of air emissions (e.g., industrial facilities, dry cleaners, and gasoline dispensing facilities) would ensure health risks are minimized. In accordance with Section 83.01.040, Air Quality, of the County Code, projects that require a permit from SCAQMD are required to submit a copy of the permit to the County within 30 days of SCAQMD's approval.

The Valley Corridor Specific Plan (see Valley Corridor Specific Plan Section 5.1.4, Required Studies) would ensure mobile sources of emissions not covered under SCAQMD permits are considered during subsequent project-level environmental review. Development of individual projects would be required to achieve the thresholds established by SCAQMD, and project-level impacts would be less than significant.

Additionally, the proposed project would generate TACs that could contribute to elevated levels of risk in the larger Bloomington community. While individual projects would achieve the project-level risk thresholds, of 10 per million, they would nonetheless contribute to the higher levels of risk in the larger Bloomington

community. Based on the results of the MATES°IV analysis, cancer risk within the Valley Boulevard Specific Plan measures at 342 per million over a 70-year lifetime (SCAQMD 2015c). Therefore, the project cumulative contribution to health risk is ***significant and unavoidable***.

Impact 5.2-6

Mitigation Measure AQ-7 would ensure that odor impacts are minimized and facilities would comply with SCAQMD Rule 402. Impact 5.2-6 would be less than significant.

5.2.9 References

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5.3 BIOLOGICAL RESOURCES

The information in this section is based partly on "Habitat Assessment for the Valley Corridor Specific Plan Area, Bloomington, San Bernardino County, California" (December 17, 2015), prepared by Phillip Brylski and David Bramlet. This document is included as Appendix C of this DEIR.

5.3.1 Environmental Setting

5.3.1.1 REGULATORY SETTING

Federal

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 US 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 those 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 for the impacted species must be developed in support of incidental take permits to minimize impacts to the species and formulate viable mitigation measures.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (MBTA) affirms and implements the United States' commitment to four international conventions—with Canada, Japan, Mexico, and Russia—to protect shared migratory bird resources. The MBTA governs the take, kill, possession, transportation, and importation of migratory birds and their eggs, parts, and nests. It prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of these items, except under a valid permit or as permitted in the implementing regulations. USFWS administers permits to take migratory birds in accordance with the MBTA.

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,

[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

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, Section 401and 402

Section 401(a)(1) of the 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 permits issued by the US Environmental Protection Agency (EPA) under Section 402 of the CWA. These permits are issued by the applicable RWQCB. The project area is in the jurisdiction of the Santa Ana RWQCB (Region 8).

State

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 addresses potentially significant adverse impacts within CDFW's jurisdictional limits.

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

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."

occurrences of sensitive species. Informally listed taxa are not protected per se, but warrant consideration in the preparation of biological resources assessments.

California Fish and Game Code Sections 3503 et seq.

California Fish and Game Code Sections 3503 et seq. prohibit the take, possession, or needless destruction of the nest or eggs of any bird; Section 3503.5 applies specifically to birds of prey, including owls.

San Bernardino County Development Code

San Bernardino County Development Code (SBCDC) Section 88.01.070, Tree Removal Permits, stipulates that the removal of native trees and row-planted palm trees requires a tree or plant removal permit if they meet the thresholds for that section (6-inch diameter at 4.5 feet above grade for native trees, and at least three trees in a row for planted palm trees).

Existing Conservation Plans and Areas

The site is not in the plan area of a habitat conservation plan or natural communities conservation plan. The nearest substantial protected habitat area to the site is Martin Tudor-Jurupa Hills Regional Park, 861 acres, 1.5 miles to the south in the city of Fontana.

5.3.1.2 EXISTING CONDITIONS

Plant Communities/Habitat

Native habitats and vegetation communities are absent from the project area. The plant communities and land use categories found onsite include disturbed annual grassland, ruderal, ornamental, rural residential, graded, and developed mapping units. Figure 5.3-1, *Plant Communities*, shows the distribution of mapping units onsite. A list of plant species observed is in Appendix C. Descriptions of the mapping units are as follows.

Disturbed Annual Grassland. Vacant land and some pasture areas contain a disturbed annual grassland characterized by a dense cover of naturalized grasses. Characteristic grasses include ripgut brome (*Bromus diandrus*), foxtail barley (*Horduem murinum* ssp. *leporinum)*, red brome (*Bromus madritensis* ssp. *rubens*), wild oat (*Avena fatua*), schismus (*Schismus barbatus*), slender wild oat (*Avena barbata*), and Bermuda grass (*Cynodon dactylon*). Common forbs in this grassland included common fiddleneck (*Amsinckia intermedia*), summer mustard (*Hirschfeldia incana*), red-stemmed filaree (*Erodium cicutarium*), prickly lettuce (*Lactuca serriola*), annual burweed (*Ambrosia acanthicarpa*), common horse weed (*Conyza canadensis*), telegraph weed (*Heterotheca grandiflora*), cheese weed (*Malva parviflora*), common sow thistle (*Sonchus oleraceus*), London rocket (*Sisymbrium irio*), pitseed goosefoot (*Chenopodium belandieri*), and earless crownbeard (*Verbesina encelioides*). Remnant native floral elements found in these grasslands included scalebroom (*Lepidospartum squamatum*) and Spanish lotus (*Acmispon americanus*).

Ruderal. A number of the open, undeveloped parcels contain vegetation more associated with highly disturbed sites and were mapped as a ruderal community. Characteristic annual grasses include schismus,

ripgut brome, red brome, slender wild oat, Bermuda grass, and foxtail barley. However, these habitats also contained dense patches of: caltrop (*Tribulus terrestris*) and Russian thistle (*Salsola tragus*), with tumbling pigweed (*Amaranthus albus*), telegraph weed, common horse weed, annual burweed, summer mustard, red-stemmed filaree, rough pigweed (*Amaranthus retroflexus*), annual sunflower (*Helianthus annuus*), earless crownbeard, prickly lettuce, common purslane (*Portulaca oleracea*), cheese weed, horehound (*Marrubium vulgare*), pitseed goosefoot, telegraph weed, pale-flowered thorn apple (*Datura stramonium*), and annual rattlesnake spurge (*Euphorbia serpens*).

Ornamental. Ayala Park, an existing nursery, and other areas of horticultural plantings were mapped as Ornamental. However, at the scale of the mapping for the project area, many ornamental tree and shrub stands were included in other mapping units. The park area contained a large area of turf grasses, but most of these areas were characterized by stands of large trees. Typical ornamental trees include red river gum (*Eucalyptus camaldulensis*), which is planted along the margin of Interstate 10; Peruvian pepper tree (*Schinus molle*), tree of heaven (*Alianthus altissima*), white mulberry (*Morus alba*), Shamel ash (*Fraxinus udehi*), Mexican fan palm (*Washingtonia robusta*), queen palms (*Sygarus romanoffiana*), carrot wood (*Cupanopsis anacarioides*), aleppo pine (*Pinus pinea*), Canary island pine (*Pinus canariensis*), Brazilian pepper tree (*Schinus terbinthifolius*), orange (*Citrus sinensis*), jacaranda (*Jacaranda mimosifolia*), Chinese elm (*Ulmus parviflora*), salt cedar (*Tamarix aphylla*), magnolia (*Magnolia grandiflora*), Canary date palm (*Phoenix canariensis*), olive (*Olea europea*), Italian cypress (*Cupressus sempervirens*), sweet gum (*Liquidambar styraciflua*), and Texas umbrella tree (*Melia azedarach*).

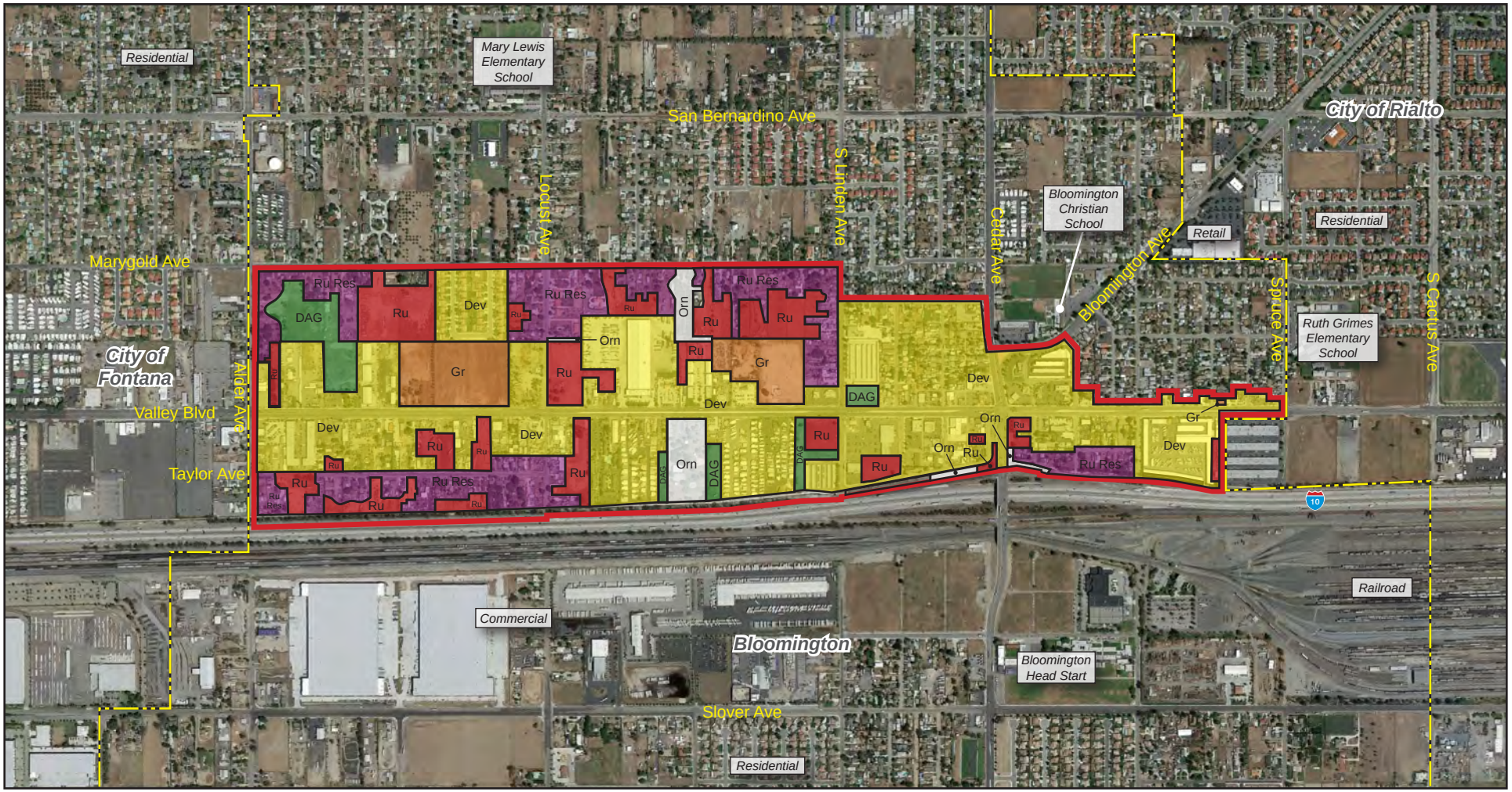
Typical ornamental shrubs in these areas include India hawthorn (*Rhaphiolepis indica*), oleander (*Nerium oleander*), bird of paradise (*Caesalpinia gillesii*), Spanish bayonet (*Yucca alifolia*), Indian fig (*Opuntia ficus-indica*), bougainvillea (*Bouganvillea spectablilis*), Japanese mock orange (*Pittosporum tobria*), bottlebrush (*Callistemon citrinus*), rosemary (*Rosmarinus officinalis*), juniper (*Juniperus chinensis*), and other shrubs typically used for landscaping in the region.

Rural Residential. Residences on large lots, where it was impractical to separate the open land from the homes or structures, were mapped as rural residential. These areas typically had single-family homes on large open lots or were homes with commercial businesses on the parcel.

Graded. Sites that have been bladed or graveled or consist of dirt parking lots or roadways and generally lacking vegetation were mapped as graded.

Developed. The developed mapping unit includes the urbanized areas of the study corridor. This includes paved streets, urban neighborhoods, and commercial districts along Valley Boulevard.

Figure 5.3-1 - Plant Communities
5. Environmental Analysis



Base Map Source: Google Earth Pro, 2015

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Wildlife

The project area has been altered from natural conditions, first by agricultural practices and followed by urbanization. Native habitat is absent in the project area. Common wildlife species occur on the scattered vacant parcels. Birds such as raptors may forage in the area and use trees to roost and nest. The wildlife observed is typical of suburban areas, and includes rock pigeon (*Columba livia*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), Nuttall's woodpecker (*Picoides nuttallii*), northern flicker (*Colaptes auratus*), black phoebe (*Sayornis nigricans*), western kingbird (*Tyrannus verticalis*), common raven (*Corvus corax*), house wren (*Troglodytes aedon*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), song sparrow (*Melospiza melodia*), white-crowned sparrow (*Zonotrichia leucophrys*), Bullock's oriole (*Icterus bullockii*), house finch (*Carpodacus mexicanus*), and house sparrow (*Passer domesticus*).

Sensitive Resources

Sensitive Natural Communities

The project area is on an old alluvial fan with no historical or existing drainages. This area has a long history of agricultural use, mainly as citrus orchards, followed by residential and commercial development. As a result, shrubs or woodlands in the area have been removed, and only remnant annual grasslands occur onsite. No riparian, coastal sage scrub habitats, ephemeral stream courses, or other sensitive habitats occur onsite. The project area lies approximately 2.6 miles northwest of the Santa Ana River.

Sensitive Plants

Table 5.3-1 lists the plant species of special concern known from the project region and their potential to occur onsite. No listed plant species were observed on the project area or have the potential to occur there. Of the nonlisted special interest plant species known from the project area, three have low potential to occur in the project area: one California Native Plant Society Rare Plant Rank (CRPR) 1B.1 species (plants considered rare, threatened or endangered in California and elsewhere), the smooth tarplant (*Centromadia pungens* ssp. *laevis*), and two CRPR 4.2 species (a watch list of plants of limited distribution list), the paniculate tarplant, (*Deinandra paniculata*) and the southern California black walnut (*Juglans californica*).

The botanical survey located six walnut trees in the vacant lot at the southwest corner of Valley Boulevard and Linden Avenue. The trees were identified as northern California black walnut (*Juglans hindsii*). The northern California black walnut is a CNPS RPR 1B.1 species within its native range. However, this walnut is considered an introduced species in southern California and would have no special status in the project area.

Table 5.3-1 Special Status Plant Species Known from Project Region

Species	Federal/ State	CNPS	Known or Expected Localities	Comments
Calochortus plummerae Plummer's mariposa lily	-	RPR 4.2	Cajon and Lytle Creek washes and areas adjacent to these drainages, alluvial fans of Etiwanda and Day Creek, along with the associated foothills of these drainages.	Found in coastal sage scrub or chaparral. Not expected to occur onsite.
Centromadia pungens ssp. *laevis* Smooth tarplant	-	RPR 1B.1	Santa Ana River, Lytle Creek, Cities of San Bernardino, and Ontario.	Found in alkali meadows or grasslands. Also found on the margin of riparian habitats in the region. Not expected to occur onsite.
Chorizanthe xanti var. *leucotheca* White-bracted spineflower	-	RPR 1B.2	Lytle and Cajon Creek washes.	Found mainly in alluvial fans and openings of coastal sage scrub. Not expected to occur onsite.
Chorizanthe parryi var. *parryi* Parry's spineflower	-	RPR 1B.1	Lytle, Cajon Creek washes, along with the alluvial fans of Etiwanda and Day Creeks and associated foothills. Cities of San Bernardino, and Colton.	Found mainly in alluvial fans and openings of coastal sage scrub. Not expected to occur onsite.
Deinandra paniculata Paniculate tar plant	-	RPR 4.2	San Bernardino Valley, Fontana (Etiwanda Creek), Jurupa Hills, Santa Ana River.	Found in annual grasslands and in openings of coastal sage scrub. Very low potential for occurrence in the disturbed grasslands onsite.
Juglans californica Southern California black walnut	-	RPR 4.2	Lower San Bernardino Valley area including Colton, Fontana, City of San Bernardino, Jurupa Hills, Cajon Wash, Santa Ana River, and Lytle Creek.	Grasslands, Riversidian sage scrub, alluvial fan sage scrub. In the City areas this species is often associated with walnuts not native to southern California including *J. hindsii, J. nigra, and J. regia*
Monardella pringlei Pringle's monardella	-	RPR 1A	Historically known from the Colton area, the area between Colton and Rialto, and the Jurupa Hills.	Riversidian sage scrub in loose, sandy soils. The species was last reported in the 1940s, and it is currently considered extinct.

Federal Designations:
FE = Listed by the Federal government as endangered.
FT = Listed by the Federal government as endangered
BLM = A BLM sensitive plant species.

State Designations:
SE =Listed as endangered by the State of California.
ST Listed by the State of California as threatened.
SR Listed by the State of California as rare

California Native Plant Society (CNPS), Rare Plant Rank (CRPR):
RPR 1A = Plants presumed extinct in California.
RPR 1B = Plants considered rare, threatened or endangered in California and elsewhere.
RPR 2 = Plants rare, threatened or endangered in California but more common elsewhere.
RPR 3 = Plants about which we need more information - A review list.
RPR 4 = Plants of limited distribution - A watch list.

CNPS Threat Code Extensions
.1 = Seriously endangered in California.
.2 = Fairly endangered in California.
.3 = Not very endangered in California.

Sensitive Wildlife

Table 5.3-2 lists the animal species of special interest known from the project region and assesses their potential to occur in the project area. No listed animal species are known from the project area. The Delhi sands flower-loving fly (DSF), a federally endangered species, is known from the project region. This species occurs on Delhi sand soils, which are absent from the project area but which occur approximately 1,500 feet west/southwest of the project area.

Of the nonlisted special interest plant and animal species known from the project area, two California Species of Concern have low potential to occur in the project area: the burrowing owl and western yellow bat.

Table 5.3-2 Special Status Animal Species Known From Project Region

Species Name	Status*	Habitat Preference	Potential to Occur on Project area
Invertebrates			
Delhi Sands flower-loving fly *Rhaphiomidas terminatus abdominalis*	FE	Wholly or partially consolidated dunes (Delhi soils series), open sand with sparse vegetation cover. Restricted to the Colton dunes area of northwestern Riverside and southwestern San Bernardino Counties.	Low. The site does not contain Delhi sand soils known to be required for this species.
Vertebrates			
Reptiles			
Coastal western whiptail *Aspidoscelis tigris stejnegeri*	SA	Occurs in coastal sage scrub, chaparral and wash habitats.	None due to the absence of suitable habitat.
San Diego horned lizard *Phrynosoma coronatum blainvillei*	CSC	Occurs in variety of habitats including coastal sage, grassland, chaparral, oak woodland, and riparian woodland with loose sandy soils and abundant native ants or other insects.	None due to the absence of suitable habitat.
Birds			
Burrowing owl *Athene cunicularia*	CSC	Open grassland, fallow fields, sparsely vegetated desert scrub, and edges of disturbed lands, where soil is friable for nesting burrows. Not observed during the biological survey.	Low.
Least Bell's vireo *Vireo bellii pusillus*	FE SE	Occurs in cottonwood-willow forest, but may also occur in oak woodland, shrubby thickets, and dry washes with willow thickets at the edges.	None due to absence of suitable habitat.
Coastal California gnatcatcher *Polioptila californica californica*	FT CSC	Occurs primarily in coastal sage scrub habitat, but also use chaparral, grassland, and riparian habitats where they occur in proximity to sage scrub.	None due to absence of suitable habitat.
Mammals			
San Diego black-tailed jackrabbit *Lepus californicus bennetti*	CSC	Occurs in a variety of habitats, including sage scrubs, chaparral, agricultural lands and other disturbed habitats, but prefers open grassland.	None due to absence of suitable habitat.
Western mastiff bat *Eumops perotis californicus*	CSC	Variety of habitats, from desert scrub and chaparral to oak woodland and ponderosa pine, but only where there are significant rock features for roosting. Natural roosts are often found under large exfoliating slabs of granite, sandstone slabs, or in columnar basalt, on cliff faces, or in large boulders. Some roosts have been found in buildings.	None due to absence of roosting habitat.
Western yellow bat *Lasiurus xanthinus*	CSC	Riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. They may be expanding their range with the	Low.

Table 5.3-2 Special Status Animal Species Known From Project Region

Species Name	Status*	Habitat Preference	Potential to Occur on Project area
		increased usage of ornamental palms in landscaping.	
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	CSC	Inhabits coastal sage scrub and alluvial fan sage scrub habitats.	None due to the absence of suitable habitat
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	CSC	Occurs mainly in sage scrub, chaparral, and grassland habitats.	None due to the absence of suitable habitat

Federal		State	
FE	Federally Endangered	SE	State Endangered
FT	Federally Threatened	ST	State Threatened
FPT	Federally Proposed Threatened	CSC	California Species of Concern
FSC	Federal Species of Concern	CFP	California Fully Protected Species
		SA	Special Animal

Wildlife Movement Corridors

The project area is developed with urban land uses and surrounded by similarly developed land uses. There are no water courses or major utility corridors onsite that might serve as wildlife movement corridors. I-10 forms a hard barrier along the southern border of the site. The of biologically important open space nearest to the site are the Jurupa Hills, approximately 1.5 miles to the southwest, and the Slover Mtn/Santa Ana River wash areas, from approximately 1.4 to 2.5 miles southeast of the site. The intervening areas are developed with residential and commercial land uses, and the project area and does not function as a wildlife movement corridor.

Nesting Birds

The ornamental plants onsite provide nesting habitat for a number of bird species that occur there as residents or migrants. Nesting bird species are protected by California Fish and Game Code Sections 3503, 3503.5, and 3800 and by the Migratory Bird Treaty Act of 1918 (16 USC §§ 703–711), which regulate the take, possession, or destruction of nests or eggs of any migratory bird or bird of prey.

Jurisdictional Waters and Wetlands

No wetlands or riparian habitat are mapped onsite on the National Wetlands Mapper maintained by the USFWS (USFWS 2015). No historical or existing streams pass through the site.

5.3.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

B-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.

B-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.

B-3 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

B-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.

B-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

B-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.

5.3.3 Environmental Impacts

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.3-1: Development of the proposed project could impact sensitive plant and animal species. [Threshold B-1]

Impact Analysis: The project area is developed with urban uses and lacks suitable habitat for most sensitive plant and animal species. Development in accordance with the Specific Plan is not expected to result in impacts to native vegetation or plant communities.

Sensitive Plants

Bloomington has a long history of agricultural use, followed by urban development, which has removed the vast majority of native vegetation. No known listed plant species have the potential to occur in the project area. Three nonlisted special interest plant species known from the project area have low potential to occur there: the smooth tarplant, a CRPR 1B.1 species (see Table 5.3-1 legend), and two CRPR 4.2 species, the paniculate tarplant andsouthern California black walnut. Due to the lack of special status plants and low potential of occurrence, implementation of the Specific Plan would have a less than significant impact on sensitive plants.

Sensitive Animals

No listed animal species are known to occur onsite, and there is low potential for the federally endangered Delhi sands flower-loving fly to occur there. Of the nonlisted special interest animal species known from the project area, two California Species of Concern have low potential to occur onsite—the burrowing owl and western yellow bat. Although there is low potential for burrowing owl to occur onsite, impacts could be

significant due to the dramatic, long-term reduction in its distribution in the project region. Potential impacts of the proposed project on the western yellow bat would not be considered significant because the species could continue to occur in palm trees and other ornamental plants onsite following implementation of the Specific Plan.

Delhi Sands Flower-Loving Fly

Available soil maps (NRCS 2015) indicate that Delhi sands, which are required habitat for DSF, do not occur onsite but do occur approximately 1,500 feet west/southwest of the project area (see Figure 3 of Appendix C). A habitat assessment for DSF that was conducted in the project area suggests that site-specific habitat assessments for DSF are needed to ensure that Delhi sands have not been deposited by wind in areas that are near to historical Delhi sand soils (Jericho 2013). Therefore, project-specific development could result in impacts to the DSF. Impacts to the DSF would be mitigated to a less than significant level with implementation of Mitigation Measure BIO-1, requiring project-specific biological assessment and appropriate mitigation measures to offset any impacts.

Burrowing Owl

The vacant lots that were examined onsite are low quality habitat for burrowing owls. However, burrowing owl presence cannot be excluded, in part because the habitat assessment did not involve intensive surveys and because not all vacant lots were examined due to access constraints. The biological assessment for the proposed project was prepared at a program level to analyze land use changes onsite because site-specific development and design have not been proposed. Because there is a potential for burrowing owl to occur in the project area, future development on vacant lots could disturb burrowing owl habitat. Potential impacts to the burrowing owl would be mitigated to a less than significant level with implementation of Mitigation Measure BIO-1.

Nesting Birds

The proposed project could result in the removal of ornamental trees and shrubs. If construction or site preparation activities would result in the removal of trees and shrub vegetation during the bird nesting season (January 15 to September 1), the project could impact nesting birds. The Migratory Bird Treaty Act prohibits direct impacts to nesting birds and their nests. Also, the California Fish and Game Code (§ 3503.5) prohibits activities that take, possess, or destroy the nest of eggs of any such bird. With adherence to the existing regulations, the potential impact on biological resources would be less than significant.

Impact 5.3-2: Development of the proposed project would not result in the loss of sensitive natural communities, riparian habitats, or jurisdictional waters. [Thresholds B-2 and B-3]

Impact Analysis: The project area contains developed, disturbed, and ruderal habitats. No riparian, coastal sage scrub habitats, ephemeral stream courses, or other sensitive habitats occur onsite. The proposed project would not impact riparian habitat or other sensitive natural communities. No impact would occur.

The project area does not contain any jurisdictional waters or wetland resources. No ephemeral drainages were observed onsite, and the topographic map does not show any "blue line" streams. The project area lies approximately 2.6 miles northwest of the Santa Ana River. The proposed project would not impact any wetlands or other jurisdictional waters.

Impact 5.3-3: Project buildout would not affect wildlife movement. [Threshold B-4]

Impact Analysis: The project area is developed with urban land uses and is surrounded by developed land uses. There are no water courses or major utility corridors onsite that might serve as corridors. I-10 forms a movement barrier along the southern border of the project area. The areas that contain biologically important open space nearest to the project area are the Jurupa Hills, approximately 1.5 miles to the southwest, and the Slover Mtn/Santa Ana River wash areas, approximately from 1.4 to 2.5 miles to the southeast. The intervening areas are developed with residential and commercial land uses. The project area and adjoining area do not function as a wildlife movement corridor. Therefore, the proposed project would not fragment habitat or impede wildlife movement. Impacts would be less than significant.

Impact 5.3-4: Buildout of the proposed Specific Plan would require compliance with SBCDC Section 88.01.050 requiring a permit for removal of native trees or row-planted palm trees. The project area is not in the plan area of a habitat conservation plan or natural community conservation plan, and Specific Plan buildout would not conflict with any such plan. [Thresholds B-5 and B-6]

Impact Analysis:

Local Ordinances

The existing biological resources of the Specific Plan area consist mainly of plant and animal species common in suburban settings, which would be maintained in land uses under the proposed Specific Plan. The Conservation Element of the Bloomington Community Plan, as part of the San Bernardino County General Plan, notes that there are no wildlife habitats in the Bloomington Community Plan Area (San Bernardino County 2007). The goals and policies of the conservation element relate to the conservation of historical sites and structures. The proposed Specific Plan would not conflict with General Plan conservation and open space policies with respect to biological resources.

SBCDC Section 88.01.050 stipulates that the removal of native trees and row-planted palm trees requires a tree or plant removal permit if they meet the thresholds for that section (6-inch diameter at 4.5 feet above grade for native trees, and at least three trees in a row for planted palm trees). The project area was previously in agricultural use, followed by residential and commercial development. No native trees or rows of palm trees were observed during the biological survey. However, not all of the project area was examined due to access constraints and the program-level habitat assessment of the Specific Plan. Review of individual development projects under the Specific Plan would determine whether a tree or plant removal permit would be needed. With adherence to existing regulation, the potential impact on biological resources would be less than significant.

Habitat Conservation Plans

The project area is not within an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. No impact would occur.

5.3.4 Cumulative Impacts

The area considered for cumulative impacts is the Upper Santa Ana River Valley and the San Jacinto Basin. The Upper Santa Ana River Valley is in parts of eastern Los Angeles County, southwestern San Bernardino County, and western Riverside County. The San Jacinto Basin comprises most of the remainder of western Riverside County. The region is slightly drier and subject to somewhat more temperature variation than the Los Angeles Basin to the west. Vegetation historically included coastal sage scrub, chaparral, valley grasslands, and some riparian woodlands (Griffith 2016). Much of the region is now urbanized.

Other projects in the region may impact habitats used by sensitive species. Proponents of other projects would be required to conduct biological resources assessments for their respective project areas using qualified biologists. Such assessments would include biological resources surveys and habitat assessments for sensitive species. Where sensitive species are observed on project areas or determined to be potentially present due to the presence of suitable habitat, the biological resources assessments would evaluate impacts and recommend mitigation measures to reduce those impacts.

Such biological resources assessments would also include impact evaluations and mitigation measures, where necessary, for sensitive natural communities, jurisdictional waters and wetlands, wildlife movement corridors, and habitat conservation plans. Therefore, cumulative impacts to biological resources would be less than significant, and project impacts would not be cumulatively considerable.

5.3.5 Existing Regulations and Standard Conditions

Federal

- United States Code, Title 16, Sections 1531 et seq.: Endangered Species Act
- United States Code, Title 16, Sections 703-712: Migratory Bird Treaty Act
- United States Code, Title 33, Sections 1251 et seq.: Clean Water Act

State

- California Fish and Game Code, Section 2080: Endangered Species Act
- California Fish and Game Code, Sections 3503 et seq.

Local

- SBCDC Section 88.01.050: Tree or Plant Removal Permit

5.3.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.3-2 (sensitive natural communities, riparian habitats, or jurisdictional waters), 5.3-3 (wildlife movement), and 5.3-4 (local ordinances, habitat conservation plans, natural community conservation plans).

Without mitigation, this impact would be **potentially significant**:

- Impact 5.3-1 Project buildout could impact Delhi sands flower-loving fly and burrowing owl.

5.3.7 Mitigation Measures

Impact 5.3-1

BIO-1 Prior to the issuance of any grading permit for development on a vacant site, the project applicant shall prepare a biological resources assessment. The biological resources assessment shall be prepared by a qualified biological consultant and include a characterization of biological resources onsite and a habitat assessment for the Delhi sands flower-loving fly and burrowing owl. If there is potential for direct impacts to special-status species with implementation of development or construction activities, the project-specific biological resources assessment report shall include mitigation measures requiring pre-construction surveys for special-status species and construction monitoring to ensure avoidance, relocation, or safe escape of special-status species from the construction activities, as appropriate. Surveying and mitigation for burrowing owl shall comply with California Department of Fish and Wildlife Staff Report on Burrowing Owl Mitigation, dated March 7, 2012. Surveying and mitigation for the Delhi sands flower-loving fly shall comply with US Fish and Wildlife Guidelines for conducting presence/absence surveys for the Delhi sands flower-loving fly (2004).

5.3.8 Level of Significance After Mitigation

Impacts would be less than significant.

5.3.9 References

California Department of Fish and Game (CDFG). 2012, March 7. Staff Report on Burrowing Owl Mitigation. Natural Resources Agency.

Griffith, G. E., et al. 2016. Ecoregions of California (poster). Open-File Report 2016–1021. US Geological Survey. http://pubs.usgs.gov/of/2016/1021/ofr20161021_sheet2.pdf.

Jericho Systems. 2013. Updated Delhi Sands Flower Loving Fly habitat suitability assessment of the proposed St. George Church Expansion project, located north of Marygold Ave., west of Grace Street, Rialto, California.

5.4 CULTURAL RESOURCES

Cultural resources comprise paleontological, archaeological, tribal cultural, and historical resources. Paleontological resources are the fossilized remains of plants and animals. Archaeology is the branch of paleontology that studies human artifacts, such as places, objects, and settlements that reflect group or individual religious, cultural, or everyday activities. A tribal cultural resource is a site feature, place, cultural landscape, sacred place, or object that is of cultural value to a Native American tribe and is either: 1) eligible for the California Historic Register or a local historic register, or 2) the lead agency, at its discretion, chooses to treat the resource as a tribal cultural resource (Public Resources Code § 21074 [a][1][A]-[B]).

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, historical 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. This section of the draft environmental impact report (DEIR) evaluates the potential for implementation of the Valley Corridor Specific Plan to impact cultural resources. The analysis in this section is based, in part, upon information in the following technical study:

- *Cultural and Paleontological Resources Technical Report for the Valley Corridor Specific Plan, San Bernardino County, California*, Cogstone, August 28, 2015.

A complete copy of this study is included in the Appendix D of this DEIR.

5.4.1 Environmental Setting

5.4.1.1 REGULATORY BACKGROUND

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 coordinates public and private efforts to identify, evaluate, and protect the nation's historic and archaeological resources. The act authorized the National Register of Historic Places, which lists districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.

Section 106 (Protection of Historic Properties) of the act requires federal agencies to take into account the effects of their undertakings on historic properties. Section 106 Review ensures 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.

National Register of Historic Places

The National Register of Historic Places (National Register), as stipulated under the Code of Federal Regulations Title 36 Part 60, is "an authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment."

Criteria

As stipulated under Part 60.4, to be eligible for listing in the National Register, a property must be at least 50 years of age and possess significance in American history and culture, architecture, or archaeology. A property of potential significance must meet one or more of four established criteria:

A. Associated with events that have made a significant contribution to the broad patterns of our history.

B. Associated with the lives of persons significant in our past.

C. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

D. Yield, or may be likely to yield, information important in prehistory or history.

Physical Integrity

According to National Register Bulletin #15, "to be eligible for listing in the National Register, a property must not only be shown to be significant under the National Register criteria, but it must also have integrity." Integrity is defined in Bulletin #15 as "the ability of a property to convey its significance." The National Register recognizes seven aspects or qualities that in various combinations define integrity—feeling, association, workmanship, location, design, setting, and materials—and they are defined by Bulletin #15 as follows:

- Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.
- Association is the direct link between an important historic event or person and a historic property.
- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- Location is the place where the historic property was constructed or the place where the historic event occurred.
- Design is the combination of elements that create the form, plan, space, structure, and style of a property.

- Setting is the physical environment of a historic property.

- Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

Context

To be eligible for listing in the National Register, a property must also be significant within a historical context. National Register Bulletin #15 states that the significance of a historic property can be judged only when it is evaluated within its historical context. Historical contexts are defined in Bulletin #15 as "those patterns, themes, or trends in history by which a specific...property or site is understood and its meaning...is made clear." A property must represent an important aspect of the area's history or prehistory and possess the requisite integrity to qualify for the National Register.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites on federal and Indian lands.

Native American Graves Protection and Repatriation Act

NAGPRA is a federal law passed in 1990 that requires 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.

State

California Register of Historical Resources

In 1992, Governor Wilson signed Assembly Bill 2881 into law, establishing the California Register of Historical Resources (CRHR). The CRHR 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 CRHR consists of properties that are listed automatically as well as those that must be nominated through an application and public hearing process. The CRHR automatically includes:

- California properties listed in the National Register and 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 CRHR.

The criteria for CRHR eligibility are based on the National Register criteria, but are numbered 1 to 4 instead of lettered A to D. To be eligible for listing in the CRHR, 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:

1. 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.

2. It is associated with the lives of persons important to local, California, or national history.

3. 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.

4. It has yielded, or has the potential to yield, information important in the prehistory or history of the local area, California, or the nation.

Historical resources eligible for listing in the CRHR 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 CRHR 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 (PRC) Section 4852.

The CRHR may also include properties identified during historical resource surveys. However, in accordance with PRC 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 Form 523.

If the survey is five or more years old at the time of the resource's nomination for the CRHR, 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 Public Resources Code

Archaeological, paleontological, and historical sites are protected under a wide variety of state policies and regulations in the PRC. In addition, cultural and paleontological resources are recognized as nonrenewable resources and receive protection under the PRC and CEQA.

PRC Sections 5020 to 5029.5 continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission. The commission oversees the administration of the CRHR and is responsible for designating State Historical Landmarks and Historical Points of Interest.

PRC Sections 5079 to 5079.65 define the functions and duties of the OHP, which administers federal- and state-mandated historic preservation programs in California as well as the California Heritage Fund.

PRC Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites; identify the powers and duties of the Native American Heritage Commission (NAHC); require that descendants be notified when Native American human remains are discovered; and provide for treatment and disposition of human remains and associated grave goods.

PRC Sections 21074 and 21080.3.1 to 21080.3.2 define tribal cultural resources and provide a process for consultation that is linked to the preparation of negative declarations, mitigated negative declarations, and environmental impact reports under CEQA. Mitigation measures may be proposed during consultation, including, but not limited to, those recommended in Section 21084.3, capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource.

California 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.

SB 18 was signed into law in September 2004 and went into effect on March 1, 2005. It placed new requirements on local governments for developments within or near traditional tribal cultural places (TTCP). The law requires local jurisdictions to provide opportunities for California Native American tribes to participate in the land planning process for the purpose of preserving TTCPs. The Final Tribal Guidelines recommend that the NAHC provide written information as soon as possible but no later than 30 days after being notified 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(s), and interested parties agree on the mitigation measures necessary for the proposed project, they will be included in the project's EIR. If both the lead agency and the tribe agree that adequate mitigation or preservation measures cannot be taken, then neither party is obligated to take action.

SB 18 requires a city or county to consult with the NAHC and any appropriate Native American tribe 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 that requires 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 required only an association with traditional beliefs, practices, lifeways, and ceremonial activities. In addition, SB 18 law amended Civil Code Section 815.3 and added 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

Assembly Bill 52 is applicable to projects that have a notice of preparation or a notice of (mitigated) negative declaration filed on or after July 1, 2015. AB 52 requires the inclusion of tribal cultural resources as new class of resources to be evaluated in the CEQA review process. A "tribal cultural resource" is defined in AB 52 as a site feature, place, cultural landscape or object which is if cultural value to a Native American tribal group, and is either:

- Eligible for the California Historic Register or a local historic register; or
- Officially treated as a Tribal Cultural Resource by the lead agency.

The Bill requires the consideration of tribal cultural values in determining both project impacts and appropriate mitigation measures. It also establishes a consultation process with all California Native American Tribes on the Native American Heritage Commission list, to be concluded only when parties agree to mitigation measures or one party, acting in good faith and after reasonable effort concludes that mutual agreement cannot be reached.

Local

San Bernardino County Code of Ordinances

Ordinances Protecting Paleontological Resources

San Bernardino County Development Code (SBCDC) Section 82.20.030 requires that paleontologic mitigation programs include, but not be limited to:

> (a) All paleontological work will be supervised by a qualified paleontologist.
>
> (b) Field survey before grading. In areas of potential but unknown sensitivity, field surveys before grading shall be required to establish the need for paleontologic monitoring.
>
> (c) Monitoring during grading. A project that requires grading plans and is located in an area of known fossil occurrence, or that has been demonstrated to have fossils present in a field survey,

shall have all grading monitored by trained paleontologic crews working under the direction of a qualified paleontologist, so that fossils exposed during grading can be recovered and preserved.

Paleontologic monitors shall be equipped to salvage fossils as they are unearthed, to avoid construction delays, and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring is not necessary if the potentially fossiliferous units described for the property in question are not present, or if present are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.

(d) Recovered specimens. Qualified paleontologic personnel shall prepare recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils is essential in order to fully mitigate adverse impacts to the resources.

(e) Identification and curation of specimens. Qualified paleontologic personnel shall identify and curate specimens into the collections of the San Bernardino County Museum Division of Geological Sciences, an established, accredited museum repository with permanent retrievable paleontologic storage. These procedures are also essential steps in effective paleontologic mitigation and CEQA compliance. The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts to significant paleontologic resources is not considered complete until curation into an established museum repository has been fully completed and documented.

(f) Report of findings. Qualified paleontologic personnel shall prepare a report of findings with an appended itemized of specimens. A preliminary report shall be submitted and approved before granting of building permits, and a final report shall be submitted and approved before granting of occupancy permits. The report and inventory, when submitted to the appropriate Lead Agency along with confirmation of the curation of recovered specimens into the collections of the San Bernardino County Museum, will signify completion of the program to mitigate impacts to paleontologic resources.

SBCDC Section 82.20.040 defines a qualified paleontologist as meeting the following criteria:

Education: An advanced degree (masters or higher) in geology, paleontology, biology, or related disciplines (exclusive of archaeology).

Professional experience: At least five years professional experience with paleontologic (not including cultural) resources, including the collection, identification and curation of the resources.

Ordinances Protecting Archaeological Resources

SBCDC Sections 82.12.010 to 82.12.050 cover County requirements for culture resources work.

The Cultural Resources Preservation (CP) Overlay established by Sections 82.01.020 (Land Use Plan and Land Use Zoning Districts) and 82.01.030 (Overlays) is intended to provide for the identification and preservation of important archaeological and historical resources. This is necessary because:

(a) Many of the resources are unique and nonrenewable; and

(b) The preservation of cultural resources provides a greater knowledge of County history, thus promoting County identity and conserving historic and scientific amenities for the benefit of future generations.

SBCDC Section 82.12.020 states that the CP Overlay may be applied in areas where archaeological and historic sites that warrant preservation are known or likely to be present. Specific identification of known cultural resources is indicated by listing in one or more of the following inventories:

(a) California Archaeological Inventory

(b) California Historic Resources Inventory (HRI)

(c) California Historical Landmarks

(d) California Points of Historic Interest

(e) National Register of Historic Places

SBCDC Section 82.12.030 states that the application for a project proposed within the CP Overlay shall include a report prepared by a qualified professional that determines through appropriate investigation the presence or absence of archaeological and/or historical resources on the project site and within the project area, and recommends appropriate data recovery or protection measures. The measures may include:

(a) Site recordation;

(b) Mapping and surface collection of artifacts, with appropriate analysis and curation;

(c) Excavation of sub-surface deposits when present, along with appropriate analysis and artifact curation; and/or

(d) Preservation in an open space easement and/or dedication to an appropriate institution with provision for any necessary maintenance and protection; and/or

(e) Proper curation of archeological and historical resource data and artifacts collected within a project area pursuant to federal repository standards. Such data and artifacts shall be curated at the SBCM.

SBCDC 82.12.040 states that:

(a) The proposed project shall incorporate all measures recommended in the report required by Section 82.12.030 (Application Requirements).

(b) Archaeological and historical resources determined by qualified professionals to be extremely important should be preserved as open space or dedicated to a public institution when possible.

SBCDC Section 82.12.050 states that if Native American cultural resources are discovered during grading or excavation of a development site or the site is within a high sensitivity CP Overlay District, the local tribe will be notified. If requested by the tribe, a Native American Monitor shall be required during such grading or excavation to ensure all artifacts are properly protected and/or recovered.

5.4.1.2 NATURAL SETTING

The project site is in the Upper Santa Ana River Valley, which is surrounded by mountains and hills—the San Bernardino Mountains to the northeast, the San Gabriel Mountains to the northwest, the San Jose Hills to the west, the Santa Ana Mountains to the southwest, and the Box Springs Mountains and San Timoteo Badlands to the southeast.

Nearly the entire site is developed with urban land uses, mainly residential, commercial, and industrial uses. There are two contiguous vacant lots totaling about nine acres in the northwest quadrant of the site. Some of the developed parcels are large, on the order of five acres each, with just a few buildings per parcel; thus, the majority of these parcels are vacant. Vegetation on the few vacant parcels and on vacant portions of developed parcels consists of disturbed annual grassland, ruderal, and ornamental plant communities, which are described further in Section 5.3, *Biological Resources*, of this DEIR.

5.4.1.3 CULTURAL SETTING

Prehistoric Cultural Setting

Chronology

Several classification systems for prehistoric cultural chronology have been developed; the system used here is based on cultural traditions. Two cultural traditions are recognized in the project region—the Encinitas Tradition and the Del Rey Tradition. The Encinitas Tradition extends from about 7,500 to 3,500 years ago and gradually transformed into the Del Rey Tradition between approximately 3,500 and 1,250 years ago.

Cultures

Greven Knoll Pattern, Encinitas Tradition

Greven Knoll sites tend to be in valleys such as the project region. These inland peoples did not switch from manos/metates to pestles/mortars like coastal peoples (about 5,000 years ago); this may reflect their closer relationship with desert groups who did not exploit acorns. The Greven Knoll toolkit is dominated by manos and metates throughout its 7,500-year extent. In Phase I, other typical characteristics were pinto dart points for atlatls or spears, charmstones, cogged stones, absence of shell artifacts, and flexed position burials. In later phases of the Greven Knoll pattern, Elko dart points for atlatls or spears and core tools are observed along with increased indications of gathering; stone tools including scraper planes, choppers, and hammerstones are added to the tool kit. Yucca and seeds are staple foods, animals bones are heavily processed (broken and crushed to extract marrow), and burials have cairns above. In addition, the Greven

Knoll populations are biologically Yuman (based on skeletal remains), and the later Angeles populations are biologically Shoshonean.

Angeles Pattern, Del Rey Tradition

The Angeles pattern of the Del Rey Tradition replaces the Greven Knoll pattern of the Encinitas Tradition. The Angeles pattern generally is restricted to the mainland and appears to have been less technologically conservative and more ecologically diverse, with a largely terrestrial focus and greater emphases on hunting and nearshore fishing. The Angeles pattern is divided chronologically into six phases. Phases I through III were during the time that Encinitas Tradition was transforming into Del Rey Tradition. Phases IV through VI, from 1,000 to 150 years ago, are described below.

The Angeles IV phase is marked by new material items, including Cottonwood points for arrows, birdstones (zoomorphic effigies with magico-religious properties), and trade items from the Southwest including pottery. It appears that populations increased and that there was a change in the settlement pattern to fewer but larger permanent villages. Smaller special-purpose sites continued to be used.

Angeles V components contain more and larger steatite artifacts, including larger vessels, more elaborate effigies, and flat cooking stones. Settlement locations shifted from woodland to open grasslands. The use of marine resources seems to have declined and use of small seeds increased. Many Gabrielino burials contained grave goods while cremations did not.

The Angeles VI phase reflects the ethnographic mainland Gabrielino of the postcontact period (i.e., after A.D. 1542). One of the first changes in Gabrielino culture after contact was undoubtedly population loss due to disease as well as the resulting social and political disruption. Angeles VI material culture is essentially Angeles V augmented by a number of Euroamerican tools and materials, including glass beads and metal tools such as knives and needles (used in bead manufacture). The frequency of Euroamerican material culture increased through time until it constituted the vast majority of materials used. Locally produced brownware pottery appears along with metal needle–drilled shell disk beads. Gabrielino subsistence was based primarily on terrestrial hunting and gathering, although nearshore fish and shellfish played important roles. Sea mammals, especially whales (likely from beached carcasses), were prized. In addition, a number of European plant and animal domesticates were obtained and exploited.

Historic Cultural Setting

In 1769, Spanish settlers began to enter and colonize Alta California. These initial settlers introduced the missions, presidios, pueblos, and ranchos. The project area consisted of lands under the control of the Mission San Gabriel between 1771 and 1833 and were likely used to graze cattle. After the Mexican government took control of California and secularized the missions, many lands were given to Mexican citizens to settle. This project area, however, was not part of any Mexican land grant.

Bloomington was originally developed as part of the land holdings of the Semi-Tropic Land and Water Company, which was formed in 1887. In 1907, the Riverside Portland Cement Company built a large plant near Crestmore (South Bloomington) and built a standard gauge railroad to Riverside to provide transportation for employees. On May 20, 1911, the line was opened to Bloomington. The original

community, known as Crestmore, is generally located between Locust Avenue and Larch Avenue, south of Jurupa Avenue, extending to the County line. The Pacific-Electric Crestmore Line (Riverside-Rialto) provided local service for many years. The Semi-Tropic Land and Water Company (now known as West Valley Water District) laid out the town sites of Bloomington, Rialto, Fontana, and Sansevaine. The town site for Bloomington, after being surveyed in April 1888, was bounded on the north by Valley Boulevard, on the south by Slover Avenue, on the east by Larch Avenue, and on the west by Linden Avenue.

Initially, the area was settled by homesteaders and farmers, and quickly became a diversified agricultural area with citrus, grain, grapes, poultry, and swine being the leading commodities. Present-day Valley Boulevard was designated US 70/US 99—the Ocean to Ocean Highway—in 1935, contributing to the development of auto-oriented businesses (such as motels) in the area.

The area faced a transition in 1942 when nearby Fontana was selected as the site for the Kaiser Steel Mill. The mill was originally built in World War II to supply steel for Kaiser's wartime shipyards, which produced hundreds of ships on the west coast in just a few years. Fontana was incorporated June 25, 1952, with a population of 13,695 and became southern California's leading producer of steel and related products. The steel industry dominated the area's economy after the mill was built. In the late 1970s, Kaiser Steel began to cut down on production and manpower, and the steel mill closed in 1984. The plate steel and rolling mill plant was acquired by California Steel Company, which continues to produce steel products.

Presently, large parts of the community are still rural, and many residents continue to keep and raise animals.

5.4.1.4 CULTURAL RESOURCES

Historical Resources

The following historical resources were identified in a search for archaeological and historical records conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton, on July 24, 2015. Each resource is identified by a unique Primary Number, e.g., P-36-08542.

The area near the intersection of the former Bloomington Avenue and Cedar Avenue, where the early community of Crestmore once stood, is considered especially sensitive for historic resources. Another area of historic sensitivity is along Valley Boulevard, where recorded historic structures exist and where many historic buildings once stood. Historic resources may also be encountered along Marygold Avenue and Grove Place to the north, Alder Avenue to the west, and Taylor and Commercial Streets to the south.

Onsite Resources

The SCCIC search identified 12 historic built-environment resources, including 2 historic archaeological resources in the Specific Plan area. Note that some of these resources are listed twice and were renumbered.

- **Bloomington Garage (P-36-08542):** This resource is at the intersection of Orchard Street and Commercial Street. The Bloomington Garage and the La Gue Residence were originally built in 1912 on corner of Cedar Avenue and Valley Boulevard. The Bloomington Garage was relocated to its current site and is listed as a California Point of Historic Interest No. P755 and on the OHP HRI as No. 72976.

- **Bloomington Garage and La Gue Residence, Original Footings (P-36-08543):** This historic archaeological site consists of portions of the original footings of the Bloomington Garage and La Gue residence near the northeast corner of Valley Boulevard and Cedar Avenue. P-36-08543 included the basements for both structures, cesspools and septic tanks, a water line from the Semi-Tropic Land and Water Company, and a trash pit that exhibited domestic and personal artifacts ranging from the late nineteenth and early twentieth centuries. Historical background research also shows that a blacksmith shop dating to the early 1910s was on the southernmost portion of the site.

- **Road Subgrade, former Bloomington Avenue (P-36-08544):** This historic feature consists of a road subgrade made of solid-compacted gravel. A water line was beneath the road subgrade and indicated by a vertical steel pipe and nearby cap labeled "WATER." The site around P-36-8544 was once occupied by the right-of-way of the Pacific Electric Railroad, which paralleled Bloomington Avenue on its northwestern side. In the 1940s or 1950s, the rail line was removed and new southbound traffic lanes were added to Bloomington Avenue. In the 1980s, a realignment of Bloomington Avenue left this segment abandoned, and the southbound lanes were removed. The solid-compacted gravel road subgrade is the remains of the former Bloomington Avenue traffic lanes.

- **La Gue Residence (P-36-08551):** This resource, at 18750 Valley Boulevard, is a two-story wood-frame house that embodies the characteristics of a modest example of the Craftsman style. It was built in 1914 by Dan La Gue and has been referred to as the La Gue residence. It was formally part of P-36-08542; however, the Bloomington Garage was relocated to the corner of Commercial Street and Orchard Street. Originally the residence stood west of the Bloomington Garage but was rotated in 1937 to accommodate a street widening project. Shortly afterward the veranda was enclosed to create more interior space, and a few alterations have been made to the building since then.

- **Residence, 18338 Valley Boulevard (P-36-20568):** This one-story, single-family residence is a wood-framed, Craftsman-style bungalow. The house was built by Willis and Catherine R. Reifsnyder around 1927.

- **Residence, 18338 Valley Boulevard (P-36-20569):** This one-story, single-family residence is a wood-framed vernacular building, rectangular in plan, and rests on concrete footings. The residence was one of several small dwellings built on the property and remains the only one standing. Built sometime after 1948 behind the original residence at that location (P-36-20568), it was once referred to as the "Wan-A-Stay Inn".

- **Commercial building, 18412 Valley Boulevard (P-36-20570):** This resource consists of a one-story, box-shaped commercial building. The simple design demonstrates some influence of the post-WWII Modernist movement in American architecture. It was built sometime between 1946 and 1956 and was originally used as a grocery store; in 1960 it was called the "Save-A-Minit Market".

- **Building, 18412 Valley Boulevard (P-36-20571):** This resource is a wood-framed, ranch-style building built sometime between 1946 and 1956, and it originally served as a residence. At the time of the CRM

Tech 2007 evaluation, the building was being used as an office building for the "American Recycling" business.

- **Commercial building, 18434 Valley Boulevard (P-36-20572):** This resource is a post-WWII one-story commercial building that is square in plan and rests on a concrete slab. The building was built sometime between 1945 and 1947.

- **Commercial Building, 18434 Valley Boulevard (P-36-20573):** This resource is a post-WWII one-story commercial wood-frame building built sometime between 1945 and 1947.

- **Bungalow, 18687 Commercial Street (P-36-21608):** This resource is a one-story, single-family vernacular bungalow built between 1940 and 1943.

- **Residence, 9995 Alder Avenue (HRI-73925):** This resource is listed on the OHP HRI as a historic residence built in 1931.

Offsite Resources

A total of 33 cultural resources were documented within a one-mile radius of the project area. Of these, 4 are historical archaeological sites; 29 are historic-era built resources; and 1 resource, the original San Bernardino County Museum (P-36-15135), is listed as a California Point of Historic Interest No. P142 and on the OHP HRI as No. 90992.

Offsite resources within one mile of the site are summarized in Table 5.4-1 and listed in full in the Cultural Resources Technical Report, Appendix D of this DEIR.

Table 5.4-1 Offsite Cultural Resources within One Mile of Project Site

Type of Resource	Number of Resources
Historic Built Resources	
Resources within 0.25 mile of Site	
Residences	19
Educational, Commercial, and Government Buildings	3
Southern Pacific Railroad / Union Pacific Railroad	1
Resources between 0.25 mile and 1 mile of Site	
Residences	3
Educational, Commercial, and Medical Buildings	3
Other Historic Resources	
Resources within 0.25 mile of Site	
Historic Trash Scatter	1
Historic Refuse Deposit	1
Resources between 0.25 mile and 1 mile of Site	
Historic cement and cobble weir box	1
Historic Farm w/foundations and landscaping	1

Source: Cogstone 2015.

Historical Topographic Maps

- **1896:** The Southern Pacific Railroad (now Union Pacific) is present next to the south site boundary. A few scattered buildings and a network of roadways at approximately 0.25-mile intervals are present in the east half of the site. The west half of the site is completely vacant. No roadway is shown in the west half of the site where Valley Boulevard is now.[1]

- **1943:** The Ocean to Ocean Highway (US 70/US 99, now Valley Boulevard) passes east-west through the center of the site. A Pacific Electric railroad track passes northeast-southwest through the eastern part of the site. Several dozen buildings are shown in the Community of Bloomington centered on US 70/99 between Larch Avenue on the east and Magnolia Street on the west. A few dozen buildings are shown in the west half of the site—most along US 70/99 and a few along Marygold Avenue and Taylor Avenue. The Southern Pacific Railroad is present next to the south site boundary, but the West Colton Railyard is not shown.

- **1953:** US 70/99 is now a four-lane highway along the south site boundary. The Ocean to Ocean Highway shown on the 1943 map is now Valley Boulevard. Portions of the site—especially the part west of Locust Avenue and the southeast corner of the site—are shown in orchard use. The Community of Bloomington has expanded west two blocks to Linden Avenue, and the density of structures in the community has increased somewhat compared to the 1943 map The number of structures in the west half of the site has also increased somewhat since 1943; most structures are still along Valley Boulevard, Marygold Avenue, and Taylor Avenue. The Pacific Electric railroad track shown on the 1943 map is absent. Otherwise conditions are similar to those shown on the 1943 map.

- **1967:** The former US 70/99 is now I-10 and has been widened to eight lanes. Much of the northwest quadrant of the site (northwest of Locust Avenue and Valley Boulevard) and part of the southeast corner of the site remain in orchard use. The Community of Bloomington is now urbanized from Spruce Avenue on the east to near Linden Avenue on the west. Trailer parks are shown south of Valley Boulevard between Linden Avenue and Locust Avenue. Otherwise, conditions are similar to those on the 1953 map.

Historical Aerial Photographs

- **1938:** A railroad track passes next to the south site boundary. Most of the site is in agricultural use, including rural residential uses on agricultural lots. Agricultural uses include orchards, row crops, and possibly grass crops. The Community of Bloomington, between Larch Avenue on the east and Magnolia

[1] The dates, names, and scales of the topographic maps are listed below. The maps were obtained from the US Geological Survey's "Topoview" website at http://ngmdb.usgs.gov/maps/TopoView/.
- 1896; San Bernardino Quadrangle; 1:100,000
- 1943; Fontana Quadrangle; 1:31,680
- 1953; Fontana Quadrangle; 1:24,000
- 1967; Fontana Quadrangle; 1:24,000.

Street on the west, is mostly developed with nonagricultural land uses. A railroad track passes northeast-southwest through the Community of Bloomington.

- **1948:** A limited-access highway next to the north side of railroad tracks passes next to the south site boundary. The urbanized Community of Bloomington has expanded east to Spruce Avenue and west to Linden Avenue. Most of the site west of Magnolia Street (south of Valley Boulevard) and Linden Avenue (north of Valley Boulevard) remains in agricultural use (orchards and row crops). A few scattered industrial or commercial uses are shown along the portion of Valley Boulevard west of Linden Avenue.

- **1966:** Agricultural land uses are reduced, supplanted by residential and commercial/industrial uses, and are mostly limited to the western part of the site (west of Locust Avenue) and the southeast corner of the site. A rail yard is visible offsite south of the I-10 and south of the central and western parts of the site (the West Colton Railyard is visible in a 1976 photograph south of the eastern part of the site). A neighborhood shopping center is at the southeast corner of Linden Avenue and Valley Boulevard. An enlarged replacement bridge is under construction on Cedar Avenue over the I-10 and Southern Pacific Railroad.

- **1976:** No agricultural uses remain. The site is largely built out with urban uses. However, many parcels in the west half of the site contain one to a few buildings on parcels of several acres each; thus, there is a substantial amount of vacant land on developed parcels. There are several mobile home communities south of Valley Boulevard. The West Colton Railyard is present south of the eastern part of the site. Two large buildings—one commercial and one industrial—are just north of the east end of the site along the south side of Bloomington Avenue.

- **1994:** Conditions are similar to those shown in the 1976 photographs.

Archaeological Resources

A search for archaeological records was completed by Megan Wilson at the SCCIC at CSU Fullerton on July 24, 2015. Results of the records search indicated that 43 previous cultural resources investigations have been completed within a one-mile radius of the project area. Seven cultural resources investigations were within the 355-acre Specific Plan area. A list of cultural resources studies is provided in Table 3 of the cultural resources report (Appendix D of this DEIR).

Archaeological resources are prehistoric or historic evidence of past human activities, including structural ruins and buried resources. No prehistoric archaeological resources were identified on or within one mile of the project area in the SCCIC records search. The site is considered moderately sensitive for discovery of prehistoric cultural resources and highly sensitive for discovery of historic resources, either buried or on the surface.

Native American Consultation

The NAHC stated that there are no known sacred lands within or next to the project area in a letter dated August 4, 2015. NAHC requested that four individuals representing three Native American tribal

organizations be contacted for further information regarding potential sacred sites or traditional cultural properties near the project area. Letters requesting information on any heritage sites and containing maps and study information were sent on August 4, 2015. Representatives of all three Native American tribal organizations responded, stating they consider the site to be highly sensitive for Native American cultural resources.

- Mr. Dunlap on behalf of the Gabrieliño/Tongva Nation responded that he has no objections to the proposed zone changes. He did express his concerns regarding future development in the Specific Plan area that involves subsurface construction. Mr. Dunlap noted that the project site is within the traditional territory of the Gabrieliño/Tongva Nation and requested that a Native American monitor be present to assist a professional archaeologist during construction activity. He further requested that the Native American monitor be selected from the Gabrieliño/Tongva Nation tribal group.

- Mr. Salas responded on behalf of the Gabrieleño Band of Mission Indians that the project site is within known villages and known trading routes of their people. Therefore, if there is any ground disturbance whatsoever, they would like their tribal monitors to be present. Mr. Salas included a map with the general locations of known villages for the tribe. Mr. Salas also commented that Gabrieliño villages overlapped each other covering vast territory and that many habitation areas were never documented. His group feels that the project area is very sensitive for prehistoric cultural resources.

- On August 17, 2015, Mr. Morales responded on behalf of the Gabrieliño/Tongva San Gabriel Band of Mission Indians. He had no objections to the rezoning but he strongly recommended archaeological survey prior to new development and Native American and archaeological monitoring when groundbreaking activities begin for new developments. His reasons requesting survey and monitoring where that: 1) major freeways such as the I-10 as well as railways like the Southern Pacific Railroad were originally travel and trade corridors for Native Americans living in the area, and sites may be located along these travel corridors; 2) the lack of prehistoric records at the SCCIC is largely due to the early development of the region, which predates the implementation of any environmental protection laws like CEQA and NEPA; and 3) due to the proximity to the Santa Ana River, an area that Mr. Morales considers a cultural landscape or a cultural resource to the Gabrieliño peoples, the project site should be surveyed and monitored. Finally, he requested that when groundbreaking activities begin a Native American monitor from the Gabrieliño/Tongva San Gabriel Band of Mission Indians be retained.

The County also conducted a Native American consultation pursuant to SB 18. The County received a response from four tribes:

- Andy Salas responded on behalf of the Gabrieleño Band of Mission Indians/Kizh on October 26, 2015, requesting that a Native American monitor be present for all ground disturbances activities.

- Daniel McCarthy responded on behalf of the San Manuel Band of Mission Indians on November 24, 2015, requesting that a Native American monitor be present upon the discovery of any tribal cultural resources.

- Raymond Huaute responded on behalf of the Morongo Band of Mission Indians on October 8, 2015. The tribe provided a list of their standard development conditions and requested they be incorporated into the Specific Plan. They also recommended contact with the San Manuel Band of Mission Indians.

- Joseph Ontiveros responded on behalf of the Soboba Band of Luiseno Indians on September 21, 2015, originally requesting formal consultation and that a tribal monitor be present during any project grading. They also provided procedures to follow in the event of a finding of cultural artifacts or human remains. Following receipt of the cultural report and email correspondence, the tribe sent a follow-up letter on November 3, 2015, deferring consultation to the San Manuel Band of Mission Indians.

Paleontological Resources

A search for paleontological records was completed at the San Bernardino County Museum and in published materials. No fossils have been collected from within a one-mile radius of the project area, but one locality is known approximately two miles to the west-southwest. In Fontana, the remains of a saber-toothed cat (*Smilodon sp.*) were recovered from an unknown depth. Other localities in similar sediments in San Bernardino and Riverside counties have produced ground sloths, mammoth, mastodon, dire wolves, short faced bears, horses, bison, and camel.

The study area is situated entirely upon Holocene fan alluvium derived from Lytle Creek. This Holocene alluvium has low potential to contain significant nonrenewable paleontologic resources and is assigned low paleontologic sensitivity. However, this alluvium forms a thin sedimentary veneer over older Pleistocene alluvium in the subsurface, and this subsurface Pleistocene alluvium has high potential to contain fossil resources and is assigned high paleontologic sensitivity. Fossils recovered from these Pleistocene sediments represent extinct taxa including mammoths, mastodons, ground sloths, dire wolves, sabre-toothed cats, horses, camels, and bison.

5.4.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

C-1 Cause a substantial adverse change in the significance of an historical resource pursuant to Section 15064.5.

C-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

C-3 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

C-4 Disturb any human remains, including those interred outside of formal cemeteries.

C-5 Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074.

Archaeological and Historical Resources

CEQA Guidelines Section 15064.5 provides direction on determining significance of impacts to archaeological and historical resources. Generally, a resource shall be considered "historically significant" if the resource meets the criteria for listing on the CRHR (PRC § 5024.1; 14 CCR § 4852), including the following:

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

The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, or is not included in a local register of historical resources, does not preclude a lead agency from determining that the resource may be a historical resource.

A project has a significant impact on a historic resource if it "would result in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resources would be materially impaired" (CEQA Guidelines § 15064.5[b][1]). Material impairment would occur if the project would result in demolition or material alteration of those physical characteristics that convey the resource's historical significance (CEQA Guidelines § 15064.5[b][2]).

Paleontological Resources

Only qualified, trained paleontologists with specific expertise in the type of fossils being evaluated can determine the scientific significance of paleontological resources. Fossils are considered significant if one or more of the following criteria apply:

- The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct.
- The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein.
- The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas.
- The fossils demonstrate unusual or spectacular circumstances in the history of life.

- The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

Significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation are also critically important—particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology. Paleontological remains are recognized as nonrenewable resources significant to the history of life.

5.4.3 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.4-1: Implementation of the Specific Plan has the potential to impact historical and historical archaeological resources. [Threshold C-1]

Impact Analysis: The preservation of historic resources is important to residents and their desire to maintain the character of the Bloomington community. The Bloomington Garage and La Gue Family Home are the most notable historic buildings within the Valley Corridor Specific Plan area (as well as the original town site). These buildings do and could function as community, workforce training, and general activity centers. They could also be repurposed as grassroots/community or professional commercial businesses.

As described above in the descriptions of historical aerial photographs and topographic maps, most of the eastern and central parts of the site were built out with urban land uses by 1970, and by 1966 agricultural land uses were limited to the western part of the site (west of Locust Avenue) and the southeast corner of the site. As stated, there are 12 historical resources in the project area. In addition to the resources that have been officially designated, other structures and landmarks have the potential to meet National or State Register criteria. Implementation of the Specific Plan would occur over a period of 20 years, and structures that become 50 years of age during the life of the plan could become eligible to meet historical criterial. Further, a resource may be considered historical even if it is not officially registered on the National and State Register or local list.

Under CEQA, a project has a significant impact on a historical resource if it "would result in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resources would be materially impaired" (CEQA Guidelines § 15064.5[b][1]). Material impairment would occur if the project would result in demolition or material alteration of those physical characteristics that convey the resource's historical significance (CEQA Guidelines § 15064.5[b][2]).

The Specific Plan has built in measures to ensure that new development and redevelopment that would occur in the project area protects historical resources. As detailed Section 5.1.4, Required Studies, of the Valley Corridor Specific Plan, development projects on or near buildings or structures 45 years of age are required

to prepare a historical evaluation. Historical resource defined in CEQA Section 15064.5(a) (i.e., it would reduce its integrity to the point that it would no longer be eligible for inclusion in the California Register of Historical Resources), must be protected through avoidance or preservation, rehabilitation, retention/reuse, or onsite relocation. The applicant shall follow the Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. Therefore, demolition or damage to historical resources would be prohibited and impacts are considered less than significant.

Historical Archaeological

Developments and redevelopments pursuant to the proposed Specific Plan could involve soil disturbances on the entire site. The site is considered highly sensitive for buried historic resources and for undocumented surface historic resources due to the number of historic-era structures onsite. Ground disturbance pursuant to the Specific Plan could damage buried historical resources and/or undocumented surface historical resources. In accordance with SBCDC Sections 82.12.010 to 82.12.040, the project applicant would retain a San Bernardino County qualified archaeologist to determine the presence or absence of archaeological and/or historical resources in a project area prior to any construction activities. The report recommends appropriate data recovery or protection measures, including site recordation, mapping, excavation, preservation, and curation. The code requires a summary of survey findings and a cultural resources mitigation plan, as necessary. A cultural resources mitigation plan must contain: 1) preconstruction archaeological resources sensitivity training for earthmoving personnel, including documentation of training (sign-in sheets, hardhat stickers); 2) a signed repository agreement; 3) field and laboratory methods for recovered artifacts (must be consistent with repository requirements); and 4) production of a cultural resources mitigation report upon completion of project earthmoving. Compliance with SBCDC Chapter 82.12 would ensure that potential impacts to historical archaeological resources are less than significant.

Impact 5.4-2: Implementation of the Specific Plan has the potential to damage prehistoric archaeological resources. [Threshold C-2]

Impact Analysis:

The site is considered moderately sensitive for impacts to prehistoric archaeological resources. Development and redevelopment pursuant to the proposed Specific Plan could involve soil disturbances on the entire site, which could damage buried prehistoric resources. Standard County development protocol and practice requires new development projects to provide a CHRIS Report from the South Central Coastal Information Center at California State University, Fullerton. These reports in turn make recommendation as to whether further cultural resource review, such as a Phase I Cultural Report, would be merited for further protection of an historical resource. As a result, historical resources will continue to be evaluated fully under CEQA, and are not considered to be significant under this EIR for the Valley Corridor Specific Plan.

In accordance with SBCDC Sections 82.12.010 to 82.12.040, the project applicant would retain a San Bernardino County qualified archaeologist to determine the presence or absence of archaeological and/or historical resources in a project area prior to any construction activities. The report recommends appropriate

data recovery or protection measures, including site recordation, mapping, excavation, preservation, and curation. The code requires a summary of survey findings and a cultural resources mitigation plan, as necessary. A cultural resources mitigation plan must contain: 1) preconstruction archaeological resources sensitivity training for earthmoving personnel, including documentation of training (sign-in sheets, hardhat stickers); 2) a signed repository agreement; 3) field and laboratory methods for recovered artifacts (must be consistent with repository requirements); and 4) production of a cultural resources mitigation report upon completion of project earthmoving. Compliance with SBCDC Chapter 82.12 would ensure that potential impacts to prehistoric archaeological resources are less than significant.

Impact 5.4-3: Project ground-disturbing activities could damage paleontological resources. Project development would not destroy a unique geological feature. [Threshold C-3]

Impact Analysis:

Paleontological Resources

The site is considered moderately sensitive for fossil resources at depth. Construction-related excavations that exceed seven feet below the surface have the potential to encounter fossils. Due to the fairly flat topography of the site, deep impacts would likely only occur during excavations for underground parking structures, utilities, and flood control channels. However, projects must comply with SBCDC Sections 82.20.030 to 82.20.040, which require the project applicant to retain a San Bernardino County qualified paleontologist to determine the presence or absence of paleontological resources in the project area prior to any construction activities. The code requires a field survey; monitoring during grading; recovery, identification, and curation of specimens; a report of findings and a paleontological resources mitigation plan, as necessary. A paleontological resources mitigation plan must contain: 1) preconstruction paleontological resources sensitivity training for earthmoving personnel, including documentation of training (sign-in sheets, hardhat stickers); 2) a signed repository agreement; 3) field and laboratory methods for recovered fossils (must be consistent with repository requirements); and 4) production of a paleontological resources monitoring report upon completion of project earthmoving. Compliance with SBCDC Chapter 82.20 would ensure that potential impacts to paleontological resources is less than significant.

Unique Geological Features

There are no unique geological resources onsite because the site is flat with a south slope of about 1.5 percent grade. No impact would occur.

Impact 5.4-4: Grading activities could potentially disturb human remains. [Threshold C-4]

Impact Analysis: Although unlikely, the discovery of human remains is always a possibility. In the event that human remains are encountered during project development, all work must cease in the vicinity of the find immediately. In accordance with California Health and Safety Code Section 7050.5, the County coroner must be notified if potentially human bone is discovered. The coroner will determine, within two working days of being notified, if the remains are subject to his or her authority. If the coroner recognizes the remains to be Native American, he or she shall contact the NAHC by phone within 24 hours, in accordance with Public

Resources Code Section 5097.98. The NAHC will designate a most likely descendant of the human remains. The most likely descendant has the opportunity to recommend—to the property owner or the person responsible for the excavation work—means for treating or disposing of, with appropriate dignity, the human remains and any associated grave goods. Work may not resume in the vicinity of the find until all requirements of the Health and Safety Code have been met. Compliance with California Health and Safety Code Section 7050.5 would ensure that impacts to human remains are less than significant.

Impact 5.4-5: Implementation of the proposed Specific Plan could impact tribal cultural resources. [Threshold C-5]

Impact Analysis: Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the CRHR or local register of historical resources (PRC § 21074).

NAHC conducted a sacred land file search and did not discover any tribal cultural resources. Although no tribal cultural resources were identified in the project area, six tribes responded to a Native American consultation request indicating that the area has the potential to yield cultural resources. New development or redevelopment in accordance with the proposed Specific Plan may uncover tribal cultural resources. However, SBCDC Section 82.12.050 requires notification of the local tribe when Native American cultural resources are discovered during grading or excavation of a development site is within a high sensitivity Cultural Resources Preservation Overlay District. Since three tribes requested a Native American monitor during ground disturbing activities, a Native American Monitor shall be required during such grading or excavation to ensure all artifacts are properly protected and/or recovered. With implementation of SBCDC 82.12.050, impacts are considered less than significant.

5.4.4 Cumulative Impacts

The area considered for cumulative impacts is Bloomington. Cultural resources within one mile of the project site are enumerated in Section 5.4.1.4, *Cultural Resources*, above. Other projects could damage resources that may be historically significant through demolition, relocation, alteration, or changes to the surroundings of those resources. Proponents of other projects would be required to have cultural resources investigations for their respective project sites conducted by qualified archaeologists or architectural historians. Such investigations would include cultural records searches, field surveys, Native American consultations, and paleontological overviews. Such investigations would evaluate resources identified for historical or cultural significance; identify impacts of their respective projects on such resources; and recommend mitigation measures to reduce those impacts. Implementation of the project in combination with other projects in Bloomington or a one-mile radius would not result in a cumulative impact to cultural resources. Therefore, cumulative impacts to cultural resources would be less than significant, and project impacts would not be cumulatively considerable.

5.4.5 Existing Regulations and Standard Conditions

Federal

- United States Code, Title 16, Sections 470 et seq.: National Historic Preservation Act
- United States Code, Title 16, Sections 470aa et seq.: Archaeological Resources Protection Act
- United States Code, Title 25, Sections 3001 et seq.: Native American Graves Protection and Repatriation Act

State

- California Public Resources Code Sections 5020–5029.5: Authorized State Historical Resources Commission.
- California Public Resources Code Sections 5079–5079.65: Authorized Office of Historic Preservation.
- California Public Resources Code Sections 5097.9–5097.99: Protections for Native American historical and cultural resources and sacred sites; authorized Native American Heritage Commission (NAHC); prescribes responsibilities respecting discoveries of Native American human remains.

Local

- SBCDC Sections 82.12.010–82.12.050 (Archaeological Resources)
- SBCDC Sections 82.20.030–82.20.040 (Paleontological Resources)

5.4.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.4-1 (historical resources), 5.4-2 (prehistoric archaeological resources), 5.4-3 (paleontological resources), 5.4-4 (disturb human remains), 5.4-5 (tribal cultural resources).

5.4.7 Mitigation Measures

Impacts related to cultural resources are less than significant and no mitigation is necessary.

5.4.8 Level of Significance After Mitigation

Impacts would be less than significant. No significant and unavoidable impacts related to cultural resources would occur.

5.4.9 References

Cogstone Resource Management, Inc. 2015, August 28. Cultural and Paleontological Resources Technical Report for the Valley Corridor Specific Plan, San Bernardino County, California.

5.5 GREENHOUSE GAS EMISSIONS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Valley Corridor Specific Plan (project) to cumulatively contribute to greenhouse gas (GHG) emissions impacts. Because no single project is large enough to result in a measurable increase in global concentrations of GHG emissions, climate change impacts of a project are considered on a cumulative basis. This evaluation is based on the methodology recommended by the South Coast Air Quality Management District (SCAQMD). Transportation-sector impacts are based on trip generation rates provided by Webb Associates (see Appendix G) and water and wastewater demand rates provided by Webb Associates. Emissions modeling for the project is included in Appendix B of this DEIR.

5.5.1 Environmental Setting

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHGs, to the atmosphere. The primary source of these GHGs is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHGs identified by the IPCC that contribute to global warming to a lesser extent are nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).[1,2] The major GHGs are briefly described below.

- **Carbon dioxide (CO_2)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.

- **Methane (CH_4)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.

- **Nitrous oxide (N_2O)** is emitted during agricultural and industrial activities as well as during the combustion of fossil fuels and solid waste.

[1] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, because it is considered part of the feedback loop rather than a primary cause of change.

[2] Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2014a). However, state and national GHG inventories do not include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.

    - ***Chlorofluorocarbons (CFCs)*** are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down the ozone layer. These gases are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.

    - ***Perfluorocarbons (PFCs)*** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF_4] and perfluoroethane [C_2F_6]) were introduced as alternatives, along with HFCs, to ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high GWP.

    - ***Sulfur Hexafluoride (SF_6)*** is a colorless gas soluble in alcohol and ether, and slightly soluble in water. SF_6 is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.

    - ***Hydrochlorofluorocarbons (HCFCs)*** contain hydrogen, fluorine, chlorine, and carbon atoms. Although they are ozone-depleting substances, they are less potent than CFCs. They have been introduced as temporary replacements for CFCs.

    - ***Hydrofluorocarbons (HFCs)*** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs. (IPCC 2001; EPA 2014)

GHGs are dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Some GHGs have a stronger greenhouse effect than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 5.5-1, *GHG Emissions and their Relative Global Warming Potential Compared to CO_2*. The GWP is used to convert GHGs to CO_2-equivalence (CO_2e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's Second Assessment Report GWP values for CH_4, a project that generates 10 metric tons (MT) of CH_4 would be equivalent to 210 MT of CO_2. [3]

[3] CO_2-equivalence is used to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. The global warming potential of a GHG is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

Table 5.5-1 GHG Emissions and Their Relative Global Warming Potential Compared to CO_2

GHGs	Atmospheric Lifetime (Years)	Second Assessment Report (SAR) Global Warming Potential Relative to CO_2[1]	Fourth Assessment Report (AR4) Global Warming Potential Relative to CO_2[1]
Carbon Dioxide (CO_2)	50 to 200	1	1
Methane[2] (CH_4)	12 (±3)	21	25
Nitrous Oxide (N_2O)	120	310	298
Hydrofluorocarbons:			
HFC-23	264	11,700	14,800
HFC-32	5.6	650	675
HFC-125	32.6	2,800	3,500
HFC-134a	14.6	1,300	1,430
HFC-143a	48.3	3,800	4,470
HFC-152a	1.5	140	124
HFC-227ea	36.5	2,900	3,220
HFC-236fa	209	6,300	9,810
HFC-4310mee	17.1	1,300	1,030
Perfluoromethane: CF_4	50,000	6,500	7,390
Perfluoroethane: C_2F_6	10,000	9,200	12,200
Perfluorobutane: C_4F_{10}	2,600	7,000	8,860
Perfluoro-2-methylpentane: C_6F_{14}	3,200	7,400	9,300
Sulfur Hexafluoride (SF_6)	3,200	23,900	22,800

Source: IPCC 2001; IPCC 2007.

Note: The IPCC has published updated global warming potential (GWP) values in its Fifth Assessment Report (2013) that reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO_2 (radiative forcing is the difference of energy from sunlight received by the earth and radiated back into space). However, GWP values identified in the Second Assessment Report are still used by SCAQMD to maintain consistency in GHG emissions modeling. In addition, the 2008 Scoping Plan was based on the GWP values in the Second Assessment Report.

1 Based on 100-year time horizon of the GWP of the air pollutant relative to CO_2.

2 The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

California's Greenhouse Gas Sources and Relative Contribution

California is the tenth largest GHG emitter in the world and the second largest emitter of GHG emissions in the United States, surpassed only by Texas (CEC 2005). However, California also has over 12 million more people than Texas. Because of more stringent air emission regulations, in 2001, California ranked fourth lowest in carbon emissions per capita and fifth lowest among states in CO_2 emissions from fossil fuel consumption per unit of Gross State Product (total economic output of goods and services)(CEC 2006a).

The California Air Resources Board's (CARB) last update to the statewide GHG emissions inventory was in 2012 for year 2009 emissions and used the Second Assessment Report GWPs.[4] In 2009, California produced 457 million metric tons (MMT) of CO_2e GHG emissions. California's transportation sector is the single largest generator of GHG emissions, producing 37.9 percent of the state's total emissions. Electricity

[4] Methodology for determining the statewide GHG inventory is not the same as the methodology used to determine statewide GHG emissions under Assembly Bill 32 (2006).

consumption is the second largest source, producing 22.7 percent. Industrial activities are California's third largest source of GHG emissions at 17.8 percent. (CARB 2011).

In 2015, the statewide GHG emissions inventory was updated for 2000 to 2013 emissions using the GWPs in IPCC's Fourth Assessment Report (AR4). Based on these GWPs, California produced 459 $MMTCO_2e$ GHG emissions in 2013. California's transportation sector remains the single largest generator of GHG emissions, producing 36.8 percent of the state's total emissions. Electricity consumption made up 19.7 percent, and industrial activities produced 20.2 percent. Other major sectors of GHG emissions include commercial and residential, recycling and waste, high global warming potential GHGs, and agriculture (CARB 2015a).

Human Influence on Climate Change

For approximately 1,000 years before the Industrial Revolution, the amount of GHGs in the atmosphere remained relatively constant. During the 20th century, however, scientists observed a rapid change in the climate and the quantity of climate change pollutants in the Earth's atmosphere that is attributable to human activities. The amount of CO_2 in the atmosphere has increased by more than 35 percent since preindustrial times and has increased at an average rate of 1.4 parts per million per year since 1960, mainly due to combustion of fossil fuels and deforestation (IPCC 2007). These recent changes in the quantity and concentration of climate change pollutants far exceed the extremes of the ice ages, and the global mean temperature is warming at a rate that cannot be explained by natural causes alone. Human activities are directly altering the chemical composition of the atmosphere through the buildup of climate change pollutants (CAT 2006). In the past, gradual changes in the earth's temperature changed the distribution of species, availability of water, etc. However, human activities are accelerating this process so that environmental impacts associated with climate change no longer occur in a geologic time frame but within a human lifetime (IPCC 2007).

Like the variability in the projections of the expected increase in global surface temperatures, the environmental consequences of gradual changes in the Earth's temperature are also hard to predict. Projections of climate change depend heavily upon future human activity. Therefore, climate models are based on different emission scenarios that account for historic trends in emissions and on observations of the climate record that assess the human influence of the trend and projections for extreme weather events. Climate-change scenarios are affected by varying degrees of uncertainty. For example, there are varying degrees of certainty on the magnitude of the trends for:

- Warmer and fewer cold days and nights over most land areas.
- Warmer and more frequent hot days and nights over most land areas.
- An increase in frequency of warm spells/heat waves over most land areas.
- An increase in frequency of heavy precipitation events (or proportion of total rainfall from heavy falls) over most areas.

- Areas affected by drought increases.
- Intense tropical cyclone activity increases.
- Increased incidence of extreme high sea level (excluding tsunamis).

Potential Climate Change Impacts for California

Observed changes over the last several decades across the western United States reveal clear signals of climate change. Statewide average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada. By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1–8.6°F, depending on emissions levels (California Climate Change Center 2012).

In California and western North America, observations of the climate have shown: 1) a trend toward warmer winter and spring temperatures; 2) a smaller fraction of precipitation falling as snow; 3) a decrease in the amount of spring snow accumulation in the lower and middle elevation mountain zones; 4) a shift in the timing of snowmelt of 5 to 30 days earlier in the spring; and 5) a similar shift (5 to 30 days earlier) in the timing of spring flower blooms (CAT 2006). According to the California Climate Action Team—a committee of state agency secretaries and the heads of agencies, boards, and departments, led by the Secretary of the California Environmental Protection Agency—even if actions could be taken to immediately curtail climate change emissions, the potency of emissions that have already built up, their long atmospheric lifetimes (see Table 5.5-1), and the inertia of the Earth's climate system could produce as much as 0.6°C (1.1°F) of additional warming. Consequently, some impacts from climate change are now considered unavoidable. Global climate change risks to California are shown in Table 5.5-2, *Summary of GHG Emissions Risks to California*, and include public health impacts, water resources impacts, agriculture impacts, coastal sea level impacts, forest and biological resources impacts, and energy impacts.

Table 5.5-2 Summary of GHG Emissions Risks to California

Impact Category	Potential Risk
Public Health Impacts	Heat waves will be more frequent, hotter, and longer Fewer extremely cold nights Poor air quality made worse Higher temperatures increase ground-level ozone levels
Water Resources Impacts	Decreasing Sierra Nevada snow pack Challenges in securing adequate water supply Potential reduction in hydropower Loss of winter recreation
Agricultural Impacts	Increasing temperature Increasing threats from pests and pathogens Expanded ranges of agricultural weeds Declining productivity Irregular blooms and harvests

Table 5.5-2 Summary of GHG Emissions Risks to California

Impact Category	Potential Risk
Sea Level Rise and Storm Surge Impacts	Accelerated sea level rise Increasing coastal floods Shrinking beaches Worsened impacts on infrastructure
Forest and Biological Resource Impacts	Increased risk and severity of wildfires Lengthening of the wildfire season Movement of forest areas Conversion of forest to grassland Declining forest productivity Increasing threats from pest and pathogens Shifting vegetation and species distribution Altered timing of migration and mating habits Loss of sensitive or slow-moving species
Energy Demand Impacts	Potential reduction in hydropower Increased energy demand

Sources: CEC 2006b; CEC 2009; California Climate Change Center 2012; California Natural Resource Agency 2014.

Specific climate change impacts that could affect the project include:

Water Resources Impacts. By late-century, all projections show drying, and half of the projections suggest 30-year average precipitation will decline by more than 10 percent below the historical average. This drying trend is caused by an apparent decline in the frequency of rain and snowfall. Even in projections with relatively small or no declines in precipitation, central and southern parts of the state can be expected to be drier from the warming effects alone—the spring snowpack will melt sooner, and the moisture contained in soils will evaporate during long dry summer months (California Climate Change Center 2012).

Wildfire Risks. Earlier snowmelt, higher temperatures and longer dry periods over a longer fire season will directly increase wildfire risk. Indirectly, wildfire risk will also be influenced by potential climate-related changes in vegetation and ignition potential from lightning. Human activities will continue to be the biggest factor in ignition risk. The number of large fires statewide are estimated to increase from 58 percent to 128 percent above historical levels by 2085. Under the same emissions scenario, estimated burned area will increase by 57 percent to 169 percent, depending on location (California Climate Change Center 2012).

Health Impacts. Many of the gravest threats to public health in California stem from the increase of extreme conditions, principally more frequent, more intense, and longer heat waves. Particular concern centers on the increasing tendency for multiple hot days in succession, and heat waves occurring simultaneously in several regions throughout the state. Public health could also be affected by climate change impacts on air quality, food production, the amount and quality of water supplies, energy pricing and availability, and the spread of infectious diseases. Higher temperatures also increase ground-level ozone levels. Furthermore, wildfires can increase particulate air pollution in the major air basins of California (California Climate Change Center 2012).

Increase Energy Demand. Increases in average temperature and higher frequency of extreme heat events combined with new residential development across the state will drive up the demand for cooling in the increasingly hot and longer summer season and decrease demand for heating in the cooler season. Warmer, drier summers also increase system losses at natural gas plants (reduced efficiency in the electricity generation process at higher temperatures) and hydropower plants (lower reservoir levels). Transmission of electricity will also be affected by climate change. Transmission lines lose 7 percent to 8 percent of transmitting capacity in high temperatures while needing to transport greater loads. This means that more electricity needs to be produced to make up for the loss in capacity and the growing demand (California Climate Change Center 2012).

5.5.1.1 REGULATORY BACKGROUND

This section describes the federal, state, and local regulations applicable to GHG emissions.

Federal Laws

The US Environmental Protection Agency (EPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 US Supreme Court decision that GHG emissions fit within the Clean Air Act (CAA) definition of air pollutants. The findings did not themselves impose any emission reduction requirements, but allowed the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (EPA 2009).

The EPA's endangerment finding covers emissions of six key GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the project's GHG emissions inventory because they constitute the majority of GHG emissions, and per SCAQMD guidance are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 $MTCO_2e$ or more per year are required to submit an annual report.

Update to Corporate Average Fuel Economy Standards (2010/2012)

The current Corporate Average Fuel Economy (CAFE) standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25 percent by 2016 (resulting in a fleet average of 35.5 miles per gallon [mpg] by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued new standards in 2012 for model years 2017–2025, which will require a fleet average of 54.5 mpg in 2025.

EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)

Pursuant to its authority under the CAA, the EPA has been developing regulations for new stationary sources such as power plants, refineries, and other large sources of emissions. Pursuant to the President's 2013 Climate Action Plan, the EPA will be directed to also develop regulations for existing stationary sources.

State Laws

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Order S-03-05, Executive Order B-30-15, Assembly Bill 32 (AB 32), and Senate Bill 375 (SB 375).

Executive Order S-03-05

Executive Order S-03-05, 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

Executive Order B-30-15

Executive Order B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions within the state to 40 percent of 1990 levels by year 2030. Executive Order B-30-15 also directs CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in Executive Order S-03-05. It also requires the Natural Resources Agency to conduct triennial updates of the California adaption strategy, Safeguarding California, in order to ensure climate change is accounted for in state planning and investment decisions.

Assembly Bill 32, the Global Warming Solutions Act (2006)

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in AB 32, the Global Warming Solutions Act. 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-03-05.

CARB 2008 Scoping Plan

The final Scoping Plan was adopted by CARB on December 11, 2008. AB 32 directed CARB to adopt discrete early action measures to reduce GHG emissions and outline additional reduction measures to meet the 2020 target. In order to effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG emissions levels for large stationary sources that generate more than 25,000 MT of CO_2e per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012.

The 2008 Scoping Plan identified that GHG emissions in California are anticipated to be approximately 596 $MMTCO_2e$ in 2020. In December 2007, CARB approved a 2020 emissions limit of 427 $MMTCO_2e$ (471 million tons) for the state. The 2020 target requires a total emissions reduction of 169 $MMTCO_2e$, 28.5 percent from the projected emissions of the business-as-usual (BAU) scenario for the year 2020 (i.e., 28.5 percent of 596 $MMTCO_2e$) (CARB 2008).[5]

Key elements of CARB's GHG reduction plan that may be applicable to the project include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards (adopted and cycle updates in progress).
- Achieving a mix of 33 percent for energy generation from renewable sources (anticipated by 2020).
- A California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system for large stationary sources (adopted 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets (several sustainable communities strategies have been adopted).
- Adopting and implementing measures pursuant to state laws and policies, including California's clean car standards (amendments to the Pavley Standards adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating target fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the state's long-term commitment to AB 32 implementation (in progress).

Table 5.5-3, *Scoping Plan GHG Reduction Measures and Reductions toward 2020 Target*, shows the proposed reductions from regulations and programs outlined in the 2008 Scoping Plan. In recognition of the critical role that local governments play in the successful implementation of AB 32, CARB is recommending GHG reduction goals of 15 percent of baseline 2005-2008 levels by 2020 to ensure that municipal and community-wide emissions match the state's reduction target.[6] Measures that local governments take to support shifts in land use patterns are anticipated to emphasize compact, low-impact growth over development in greenfields, resulting in fewer vehicle miles traveled (VMT) (CARB 2008).

[5] CARB defines BAU in its Scoping Plan as emissions levels that would occur if California continued to grow and add new GHG emissions but did not adopt any measures to reduce emissions. Projections for each emission-generating sector were compiled and used to estimate emissions for 2020 based on 2002–2004 emissions intensities. Under CARB's definition of BAU, new growth is assumed to have the same carbon intensities as was typical from 2002 through 2004.

[6] The Scoping Plan references a goal for local governments to reduce community GHG emissions by 15 percent from current (interpreted as 2008) levels by 2020, but it does not rely on local GHG reduction targets established by local governments to meet the state's GHG reduction target of AB 32.

Table 5.5-3 Scoping Plan GHG Reduction Measures and Reductions toward 2020 Target

Recommended Reduction Measures	Reductions Counted toward 2020 Target of 169 MMT CO2e	Percentage of Statewide 2020 Target
Cap and Trade Program and Associated Measures		
California Light-Duty Vehicle GHG Standards	31.7	19%
Energy Efficiency	26.3	16%
Renewable Portfolio Standard (33 percent by 2020)	21.3	13%
Low Carbon Fuel Standard	15	9%
Regional Transportation-Related GHG Targets[1]	5	3%
Vehicle Efficiency Measures	4.5	3%
Goods Movement	3.7	2%
Million Solar Roofs	2.1	1%
Medium/Heavy Duty Vehicles	1.4	1%
High Speed Rail	1.0	1%
Industrial Measures	0.3	0%
Additional Reduction Necessary to Achieve Cap	34.4	20%
Total Cap and Trade Program Reductions	146.7	87%
Uncapped Sources/Sectors Measures		
High Global Warming Potential Gas Measures	20.2	12%
Sustainable Forests	5	3%
Industrial Measures (for sources not covered under cap and trade program)	1.1	1%
Recycling and Waste (landfill methane capture)	1	1%
Total Uncapped Sources/Sectors Reductions	27.3	16%
Total Reductions Counted toward 2020 Target	174	100%
Other Recommended Measures – Not Counted toward 2020 Target		
State Government Operations	1.0 to 2.0	1%
Local Government Operations[2]	To Be Determined	NA
Green Buildings	26	15%
Recycling and Waste	9	5%
Water Sector Measures	4.8	3%
Methane Capture at Large Dairies	1	1%
Total Other Recommended Measures – Not Counted toward 2020 Target	42.8	NA

Source: CARB 2008.
Notes: The percentages in the right-hand column add up to more than 100 percent because the emissions reduction goal is 169 $MMTCO_2e$ and the Scoping Plan identifies 174 $MTCO_2e$ of emissions reductions strategies. Based on the Second Assessment Report GWPs.
$MMTCO_2e$: million metric tons of CO_2e
[1] Reductions represent an estimate of what may be achieved from local land use changes. It is not the SB 375 regional target.
[2] According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately 2 percent through land use planning, resulting in a potential GHG reduction of 2 million metric tons of CO_2e (or approximately 1.2 percent of the GHG reduction target). However, these reductions were not included in the Scoping Plan reductions to achieve the 2020 target.

First Update to the Scoping Plan

CARB recently completed a five-year update to the 2008 Scoping Plan, as required by AB 32. The First Update to the Scoping Plan was adopted at the May 22, 2014, board hearing. The Update to the Scoping Plan defines CARB's climate change priorities for the next five years and lays the groundwork to reach post-2020

goals in Executive Orders S-03-05 and B-16-2012. The update includes the latest scientific findings related to climate change and its impacts, including short-lived climate pollutants. The GHG target identified in the 2008 Scoping Plan is based on IPCC's GWPs identified in the Second and Third Assessment Reports (see Table 5.5-1). IPCC's Fourth and Fifth Assessment Reports identified more recent GWP values based on the latest available science. CARB recalculated the 1990 GHG emission levels with the updated GWPs in the Fourth Assessment Report, and the 427 $MMTCO_2e$ 1990 emissions level and 2020 GHG emissions limit, established in response to AB 32, is slightly higher, at 431 $MMTCO_2e$ (CARB 2014a). CARB projected that statewide BAU emissions in 2020 would be approximately 509 million $MTCO_2e$.[7] Therefore, to achieve the AB 32 target of 431 million $MTCO_2e$ (i.e., 1990 emissions levels) by 2020, the state would need to reduce emissions by 78 million $MTCO_2e$ compared to BAU conditions, a reduction of 15.3 percent from BAU in 2020 (CARB 2014a).[8]

The update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the original 2008 Scoping Plan. As identified in the Update to the Scoping Plan, California is on track to meeting the goals of AB 32. However, the Update to the Scoping Plan also addresses the state's longer-term GHG goals within a post-2020 element. The post-2020 element provides a high level view of a long-term strategy for meeting the 2050 GHG goals, including a recommendation for the state to adopt a mid-term target. According to the Update to the Scoping Plan, local government reduction targets should chart a reduction trajectory that is consistent with, or exceeds, the trajectory created by statewide goals (CARB 2014a).

According to the Update to the Scoping Plan, reducing emissions to 80 percent below 1990 levels will require a fundamental shift to efficient, clean energy in every sector of the economy. Progressing toward California's 2050 climate targets will require significant acceleration of GHG reduction rates. Emissions from 2020 to 2050 will have to decline several times faster than the rate needed to reach the 2020 emissions limit (CARB 2014a).

Second Update to the Scoping Plan

The new Executive Order B-30-15 requires CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. According to CARB, the Scoping Plan will be updated by late 2016 to address the new 2030 interim target to achieve a 40 percent reduction below 1990 levels by 2030 (CARB 2015b).

Senate Bill 375

In 2008, Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act, 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 VMT

[7] The BAU forecast includes GHG reductions from Pavley and the 33% Renewable Portfolio Standard.

[8] If the GHG emissions reductions from Pavley I and the Renewable Electricity Standard are accounted for as part of the BAU scenario (30 million $MTCO_2e$ total), then the state would need to reduce emissions by 108 million $MTCO_2e$, which is a 20 percent reduction from BAU.

and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPOs). Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets 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 2010a). SB 375 requires CARB to periodically update the targets, no later than every 8 years. CARB plans to propose updated targets for consideration in 2016, with the intent to make them effective in 2018. Sustainable communities strategies (SCSs) adopted in 2018 would be subject to the updated targets (CARB 2015c).

The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 $MMTCO_2e$ of reductions by 2020 and 15 $MMTCO_2e$ of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010b).

CARB is currently in the process of updating the next round of targets and methodology to comply with the requirement for updates every eight years. Considerations for the next round of targets include whether to change the nature or magnitude of the emissions reduction targets for each of the MPOs, and whether the target-setting methodology should account for advances in technologies that reduce emissions. Such changes in methodology would permit cities to account for emissions reductions from advances in cleaner fuels and vehicles and not only from land use and transportation planning strategies.

SCAG's 2016 RTP/SCS

SB 375 requires the MPOs to prepare a sustainable communities strategy in their regional transportation plan. For the SCAG region, the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted in April 2016 (SCAG 2016). 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. Through implementation of the strategies in the RTP/SCS, SCAG anticipates lowering GHG 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)

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 CAFE standards under *Federal Laws*, above). In January 2012, CARB approved the 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.

Executive Order S-01-07

On January 18, 2007, the state set a new low carbon fuel standard (LCFS) for transportation fuels sold within the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in carbon dioxide equivalent gram per unit of fuel energy sold in California. The LCFS requires a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and would use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

Senate Bills 1078 and 107, and Executive Order S-14-08

A major component of California's Renewable Energy Program is the renewable portfolio standard (RPS) established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S-14-08 was signed in November 2008, which expands the state's renewable energy standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SBX1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects, because electricity production from renewable sources is generally considered carbon neutral.

Senate Bill 350

Senate Bill 350 (de Leon), was signed into law September 2015. SB 350 establishes tiered increases to the RPS of 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.

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate zero-emissions vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directs the number of zero-emission vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are zero-emission by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions from the transportation sector 80 percent below 1990 levels.

California Building Code – Building and 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 2013 (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 May 31, 2012, the CEC adopted the 2013 Building and Energy Efficiency Standards, which went into effect on July 1, 2014. Buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features.

Most recently, the CEC adopted the 2016 Building and Energy Efficiency Standards. The 2016 Standards will continue to improve upon the current 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. These standards will go into effect on January 1, 2017. Under the 2016 Standards, residential buildings are 28 percent more energy efficient than the 2013 Standards, and nonresidential buildings are 5 percent more energy efficient than the 2013 Standards (CEC 2015a).

The 2016 standards will not achieve zero net energy (ZNE). However, 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 ZNE for newly constructed residential buildings throughout California (CEC 2015b).

California Building Code – CALGreen

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. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[9] The mandatory

[9] The green building standards became mandatory in the 2010 edition of the code.

provisions of the California Green Building Code Standards became effective January 1, 2011, and were updated most recently in 2013.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non-federally regulated appliances. Though these regulations are now often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

Solid Waste Regulations

California's Integrated Waste Management Act of 1989 (AB 939, Public Resources Code 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses.

The California Solid Waste Reuse and Recycling Access Act (AB 1327, California Public Resources Code §§ 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

Section 5.408 of the 2013 California Green Building Standards Code also requires that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

Water Efficiency Regulations

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed "SBX7-7." SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 requires urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by

regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Local Policies and Plans

County of San Bernardino GHG Reduction Plan (Unincorporated County)

The County of San Bernardino's GHG Reduction Plan serves as a roadmap for reducing GHG emissions from county operations and the community to achieve the County's local GHG reduction goals. Although San Bernardino County is the largest county (approximately 13 million acres) in the contiguous United States, the Board of Supervisors' land use authority over the entire County is limited to 15 percent of the total area (about 1.9 million acres). The GHG Reduction Plan identifies external (community-wide) and internal (municipal) strategies to reduce emissions from activities over which the County has jurisdictional and operational control to 15 percent below 2007 levels by 2020, consistent with the target reductions of the 2008 Scoping Plan. The external GHG emissions reduction measures cover emissions reductions from the following GHG emissions sectors: stationary sources,[10] on- and off-road transportation, energy use (natural gas and electricity consumption), solid waste and landfills, agriculture (enteric fermentation and manure management of dairy operations), water-related (wastewater treatment and water conveyance), and other sources (fireplaces and outdoor grills).

SANBAG Regional GHG Reduction Plan (Incorporated Cities)

The San Bernardino Association of Governments (SANBAG) led a regional GHG reduction planning initiative in partnership with its 21 partnership cities. The Regional GHG Reduction Plan (2014) includes 2008 and 2020 inventories, individual GHG reduction goals, and a summary of the actions each of the 21 partnership cities has selected to reduce GHG emissions. The SANBAG GHG regional reduction planning effort complements the unincorporated County's GHG Emissions Reduction Plan to ensure a consistent approach is taken for reducing GHG emissions countywide in the incorporated partnership cities.

5.5.1.2 EXISTING CONDITIONS

Existing Emissions

Table 5.5-4, *Existing Valley Corridor Specific Plan GHG Emissions Inventory*, identifies the existing community GHG emissions inventory for the Specific Plan area. GHG emissions generated within the Valley Corridor were estimated using the California Emissions Estimator Model (CalEEmod), version 2013.2.2.

[10] In 2007, cement plants constituted approximately 95 percent of the stationary source emissions in San Bernardino County, and represented nearly half (45.8 percent) of all external emissions. There are 11 cement plants in California, 3 of which are in the unincorporated area of the County. These 3 cement plants represent approximately 30 percent of GHG emissions from cement production in California (San Bernardino 2011).

Table 5.5-4 Existing Valley Corridor Specific Plan GHG Emissions Inventory

Sector	GHG Emissions $MTCO_2e$/Year	Percent of Emissions
Area	74	0.2%
Energy[1]	6,412	17.9%
On-Road Transportation[2]	26,208	73.4%
Solid Waste Disposal	1,628	4.6%
Water/Wastewater[3]	1,406	3.9%
Total	35,727	100%

Source: CalEEMod 2013.2.2.
[1] Assumes the average age of the existing building stock is pre-2005.
[2] Transportation emissions are based on trip generation provided by Webb Associates.
[3] Water use is based on the water demand rates provided by Webb Associates. Assumes project area is on septic under existing conditions.

5.5.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant effect on the environment with respect to GHG emissions if it would:

GHG-1 Generate GHG 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 GHGs.

SCAQMD GHG Significance Thresholds

SCAQMD has adopted a significance threshold of 10,000 $MTCO_2e$ per year for permitted (stationary) sources of GHG emissions for which SCAQMD is the designated lead agency. To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting held in September 2010 (Meeting No. 15), SCAQMD identified a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency:

- **Tier 1.** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.
- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.
- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. SCAQMD has identified a "bright-line" screening-level threshold of 3,000 $MTCO_2e$ annually for all land use types or the following land-use-specific thresholds: 1,400 $MTCO_2e$ for commercial projects, 3,500 $MTCO_2e$ for residential projects, or 3,000 $MTCO_2e$ for mixed-use projects. This bright-line threshold is based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore less than cumulatively considerable, impact on GHG emissions:

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

SCAQMD has identified an efficiency target for projects that exceed the bright-line threshold: a 2020 efficiency target of 4.8 $MTCO_2e$ per year per service population ($MTCO_2e$/year/SP) for project-level analyses and 6.6 $MTCO_2e$/year/SP for plan-level analyses (e.g., general plans). Service population is defined as the sum of the residential and employment population of a project. The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.[11]

Project emissions are compared to the SCAQMD's project-level efficiency threshold because individual projects may use the Specific Plan EIR for CEQA streamlining, and the SCAQMD plan-level thresholds are more appropriately utilized for general plan–level analyses. However, the proposed project buildout goes beyond year 2020, and for the purposes of this EIR is estimated to be built out by 2035. Therefore, SCAQMD's efficiency targets have been adjusted based on the long-term GHG reduction targets of Executive Order B-30-15, which set a goal of 40 percent below 1990 levels by 2035, and Executive Order S-03-05, which set a goal of 80 percent below 1990 levels by 2050. Based on these long-term targets, project emissions are compared to the SCAQMD's project-level efficiency threshold of:

- 2.2 $MTCO_2e$/year/SP for year 2035

If the project exceeds this per capita efficiency target, GHG emissions would be considered potentially significant in the absence of mitigation measures. It should be noted that at this time, there is no statewide GHG reduction plan for post-2020 targets to achieve either the Executive Order S-03-05 or the new Executive Order B-30-15 long-term GHG goals; therefore, use of the long-term target for the significance criteria is conservative.

[11] SCAQMD took the 2020 statewide GHG reduction target for land use only GHG emissions sectors and divided it by the 2020 statewide employment for the land use sectors to derive a per capita GHG efficiency metric that coincides with the GHG reduction targets of AB 32 for year 2020.

County of San Bernardino GHG Development Review Processes

The County's GHG Development Review Processes (Appendix F of the GHG Reduction Plan) have been adopted as part of the San Bernardino County Development Code (SBCDC), Section 84.30.030, *GHG Performance Standards*, requires applicants for new development projects to comply with the GHG Development Review Process to ensure consistency with the County's GHG Reduction Plan.

All discretionary projects, regardless of size or efficiency, are required to implement the County's GHG Reduction Plan Performance Standards, which are Conditions of Approval for new projects.

Projects that generate 3,000 $MTCO_2e$ or greater are required to implement additional GHG reduction measures. To show consistency with the screening criteria, the large projects with emissions 3,000 $MTCO_2e$ and above are required to either:

- Screening Tables: Implement measures that achieve a minimum of 100 identified in the latest screening tables in the County's GHG Development Review Process; Or

- Alternative GHG Mitigation Analysis: Quantify GHG reductions that are equivalent to 100 points or greater, which is approximately a 31 percent reduction of new development GHG emissions compared to the unmitigated condition.

Small projects under 3,000 $MTCO_2e$ must implement the Performance Standards but do not need to implement the additional measures in the screening tables or alternative GHG mitigation.

5.5.3 Environmental Impacts

Methodology

This GHG emissions evaluation was prepared in accordance with the requirements of CEQA to determine if significant GHG emissions impacts are likely to occur in conjunction with future development that would be accommodated by the project. SCAQMD has published guidelines that are intended to provide local governments with guidance for analyzing and mitigating environmental impacts and which were used in this analysis. Modeling of criteria air pollutants was conducted using the California Emissions Estimator Model (CalEEMod), version 2013.2.2.

- **Transportation:** On-road transportation sources are based on trip generation rates provided by Webb Associates (see Appendix G of this DEIR).

- **Solid Waste Disposal:** Indirect emissions from waste generation are based on waste generation rates of CalRecycle (see Section 5.17, *Utilities and Service Systems*).

- **Water/Wastewater:** GHG emissions from electricity used to supply water, treat water, distribute water, and then treated wastewater are based on the water and wastewater demand rates provided by Webb Associates. Existing development is assumed to be primarily on septic systems, but infrastructure

associated with the Valley Corridor Specific Plan could result in 100 percent tertiary-treated wastewater at buildout conditions. Although it is likely that only new development would connect to the wastewater system, the assumption that buildout of the project would be on wastewater system represents a worst case assumption.

- **Area Sources:** GHG emissions are from use of fireplaces and landscaping equipment used for property maintenance. Industrial sources of emissions that require a permit from SCAQMD are not included in the plan-level inventory. Single-family residential units and townhomes are assumed to have natural gas fireplaces.

- **Energy:** GHG emissions from use of electricity and natural gas by residential and nonresidential land uses. For purposes of this analysis, the average age of the existing building stock is assumed to be pre-2005 Building Energy Efficiency Standards; therefore, the historical energy rates in CalEEMod are applied for these uses. New buildings are assumed to comply with the 2016 Building and Energy Efficiency. Standards.

- **Construction:** GHG emissions are from construction-related vehicle and equipment use and are based on CalEEMod defaults for the construction equipment mix and worker, vendor, and haul trips. Emissions are amortized over a 30-year period and included as part of the overall inventory.

Life cycle (consumption-based) emissions are also not included in this analysis because not enough information is available for the proposed project, and therefore life cycle GHG emissions would be speculative.[12] GHG modeling is included in Appendix B of this DEIR.

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.5-1	Buildout of the Valley Corridor Specific Plan would generate a substantial increase in GHG emissions compared to existing conditions and would have a significant impact on the environment. [GHG-1]

Impact Analysis: Development under the project would contribute to global climate change through direct and indirect emissions of GHG from land uses within the Valley Corridor Specific Plan. Buildout of the project is not linked to a specific development time frame. For the purpose of this EIR, buildout is assumed over a 20-year project horizon. GHG emissions from construction activities are amortized into the operational phase GHG emissions inventory to account for one-time emissions from construction in accordance with SCAQMD methodology. The community GHG emissions inventory for the Valley Corridor

[12] Life cycle emissions include indirect emissions associated with materials manufacture. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions, found that life-cycle analyses were not warranted for project-specific CEQA analysis in most situations, for a variety of reasons, including lack of control over some sources and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). Because the amount of materials consumed during the operation or construction of the proposed project is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials are also not known, calculation of life cycle emissions would be speculative. A life-cycle analysis is not warranted (OPR 2008).

Specific Plan at buildout compared to existing conditions is in Table 5.5-5, *Valley Corridor Specific Plan GHG Emissions Inventory*.

As shown in Table 5.5-5, the net increase in GHG emissions of 28,845 $MTCO_2e$ annually from project-related operational activities would exceed SCAQMD's draft bright-line screening threshold of 3,000 $MTCO_2e$ for all land use types. The increase in overall land uses within the Valley Corridor Specific Plan boundary is the primary factor for the increase in overall GHG emissions. Under the Valley Corridor Specific Plan, increase in land use development would result in a 121 percent increase in the total service population. Although the Valley Corridor Specific Plan would result in a substantial increase in GHG emissions in the County of San Bernardino, it would also result in a 19 percent decrease in GHG emissions per person. As shown in Table 5.5-5, the GHG emissions per capita rate would decrease from 13.3 $MTCO_2e$/year/SP to 10.8 $MTCO_2e$/year/SP.

Table 5.5-5 Valley Corridor Specific Plan GHG Emissions Inventory

Sector	GHG Emissions $MTCO_2e$/Year			
	Existing	Specific Plan Buildout	Percent of Total Emissions	Change from Existing
Area	74	185	0.4%	112
Energy[1]	6,412	12,903	23%	6,491
On-Road Transportation[2]	26,208	47,312	75%	21,104
Solid Waste Disposal	1,628	2,683	4%	1,055
Water/Wastewater[3]	1,406	958	-2%	-447
Amortized Construction[4]		530	2%	530
Total	35,727	64,572	100%	28,845
Service Population (SP)[5]	2,692	5,962	—	3,270
$MTCO_2e$/SP	13.3	10.8	—	-2.5
2035 Per Capita Threshold[6]	—	2.2	—	—
Exceed Threshold?	—	Yes	—	—

Source: CalEEMod 2013.2.2.
Notes: Totals may not add to 100 percent due to rounding.
[1] Assumes the average age of the existing building stock is pre-2005 and new buildings would achieve the 2016 Building and Energy Efficiency Standards.
[2] Transportation emissions are based on trip generation provided by Webb Associates.
[3] Water use is based on the water demand rates provided by Webb Associates.
[4] Short-term (one time) total construction emissions during the 20-year buildout are amortized over a 30-year project lifetime in accordance with SCAQMD guidance and incorporated into the operational emissions analysis.
[5] Existing based on a service population of 2,215 people and 477 employees. Valley Corridor Specific Plan buildout based on a service population of 4,072 people and 1,890 employees.
[6] Based on the SCAQMD 2020 per capita target of 4.8 $MTCO_2e$ per service population and extrapolating it for the long term GHG reduction goals of Executive Order S-03-05 for 2050 and Executive Order B-30-15 for 2030.

The improvement in per capita efficiency would be attributable to the overall land use plan and development standards of the Valley Corridor Specific Plan. Placement of land uses that complement each other in addition to improvements in access to alternative transportation options contribute to reducing per capita VMT. Aside from the policies and strategies to reduce per capita VMT, new buildings under the Valley Corridor Specific Plan would be more energy efficient than existing buildings throughout the Valley Corridor Specific Plan area. Likewise, plumbing fixtures and landscaping installed as part of the Valley Corridor

Specific Plan would result in a decrease in water use on a per capita basis. These aspects of the Valley Corridor Specific Plan would contribute to the overall reduction of per capita GHG emissions.

However, although implementation of the Valley Corridor Specific Plan would result in a slight decrease in GHG emissions per capita, it would not meet the SCAQMD Year 2035 Target efficiency metric of 2.2 $MTCO_2e$/year/SP based on the long-term GHG reduction goals of Executive Order S-03-05 and Executive Order B-30-15. Additional state and local actions are necessary to achieve the post-2020 GHG reduction goals for the state. CARB has released the 2014 Scoping Plan Update to identify a path for the date to achieve additional GHG reductions. The new Executive Order B-30-15 requires CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. However, at this time, no additional GHG reductions programs have been outlined that get the state to the post-2020 targets identified in Executive Order S-03-05, which are an 80 percent reduction in 1990 emissions by 2050, or the Executive Order B-30-15, which are a 40 percent reduction in 1990 emissions by 2035. As identified by the California Council on Science and Technology, the state cannot meet the 2050 goal without major advances in technology (CCST 2012). Therefore, the Valley Corridor Specific Plan's cumulative contribution to the long-term GHG emissions in the state would be considered potentially significant.

Impact 5.5-2	Future development projects in the Valley Corridor Specific Plan that exceed 3,000 $MTCO_2e$ would be required to implement additional GHG reduction measures to ensure consistency with the County of San Bernardino's GHG Reduction Plan. [GHG-2]

Impact Analysis: The following plans have been adopted and are applicable for development in the Valley Corridor Specific Plan.

CARB Scoping Plan

The CARB Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts. A separate discussion of consistency with the County's GHG Reduction Plan is identified below.

On the state level, state agencies have adopted GHG reduction programs, and the legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the LCFS and changes in the corporate average fuel economy standards (e.g., Pavley I and California Advanced Clean Cars program). Future projects in the Valley Corridor Specific Plan would be required to adhere to the programs and regulations identified by the Scoping Plan and implemented by state, regional, and local agencies to achieve the statewide GHG reduction goals of AB 32. However, the Scoping Plan itself is not directly applicable to the proposed project. The County has adopted a local GHG reduction Plan to reduce GHG emissions. The project would not conflict with the statewide programs adopted to achieve the statewide GHG reduction targets outlined in the Scoping Plan.

County of San Bernardino's GHG Reduction Plan

The County's GHG Reduction Plan includes existing and proposed state, regional, county, and other local measures that will result in GHG emissions reductions in the County's external (communitywide) and internal (municipal) GHG inventories. As identified in the GHG Reduction Plan, measurable reductions of GHG emissions are achieved through the County's GHG Development Review Process by applying a uniformly applicable set of performance standards as part of the discretionary approval of new development projects.

Discretionary projects are required to implement the County's GHG Reduction Plan Performance Standards, which are Conditions of Approval for new projects. The measures listed in Table 5.5-6, *County of San Bernardino GHG Reduction Plan Performance Standards for Projects*, are the Conditions of Approval for project in the County, which include projects within the Valley Corridor Specific Plan. These measures have been integrated throughout the Valley Corridor Specific Plan to reduce emissions from transportation, energy use, water use, solid waste, and other sources consistent with the measures in the County's GHG Reduction Plan.

Table 5.5-6 County of San Bernardino GHG Reduction Plan Performance Standards for Projects

Standard	GHG Reduction Plan Requirements
Operational Standards	The developer shall implement the following as GHG mitigation during the operation of the approved project:
Waste Stream Reduction	The "developer" shall provide to all tenants and project employees County-approved informational materials about methods and need to reduce the solid waste stream and listing available recycling services.
Vehicle Trip Reduction	The "developer" shall provide to all tenants and homeowners County-approved informational materials about the need to reduce vehicle trips and the program elements this project is implementing. Such elements may include: participation in established ride-sharing programs, creating a new ride-share employee vanpool, and/or providing a web site or message board for coordinating rides.
Provide Educational Materials	The developer shall provide to all tenants and staff education materials and other publicity about reducing waste and available recycling services. The education and publicity materials/program shall be submitted to County Planning for review and approval. Non-Residential: The developer shall also provide to all tenants and require that the tenants shall display in their stores current transit route information for the project area in a visible and convenient location for employees and customers. The specific transit routes displayed shall include Omni Trans Route 8, San Bernardino-Mentone-Yucaipa.
Landscape Equipment	The developer shall require in the landscape maintenance contract and/or in onsite procedures that a minimum of 20% of the landscape maintenance equipment shall be electric-powered.
GHG – Design Standards.	The developer shall submit for review and obtain approval from County Planning that the following measures have been incorporated into the design of the project. These are intended to reduce potential project greenhouse gas (GHGs) emissions. Proper installation of the approved design features and equipment shall be confirmed by County Building and Safety prior to final inspection of each structure.
Title 24 Energy Efficiency	The Developer shall document that the design of the proposed structures meets the current Title 24 energy-efficiency requirements. County Planning shall coordinate this review with the County Building and Safety. Any combination of the following design features may be used to fulfill this requirement, provided that the total increase in efficiency meets or exceeds the cumulative goal (100%+ of Title 24) for the entire project: • Incorporate dual paned or other energy efficient windows, • Incorporate energy efficient space heating and cooling equipment, • Incorporate energy efficient light fixtures, photocells, and motion detectors, • Incorporate energy efficient appliances,

Table 5.5-6 County of San Bernardino GHG Reduction Plan Performance Standards for Projects

Standard	GHG Reduction Plan Requirements
	• Incorporate energy efficient domestic hot water systems, • Incorporate solar panels into the electrical system, • Incorporate cool roofs/light colored roofing, • Incorporate other measures that will increase energy efficiency. • Increase insulation to reduce heat transfer and thermal bridging. • Limit air leakage throughout the structure and within the heating and cooling distribution system to minimize energy consumption.
Plumbing Water Efficiency	All plumbing shall incorporate the following: • All showerheads, lavatory faucets, and sink faucets shall comply with the California Energy Conservation flow rate standards. • Low flush toilets shall be installed where applicable as specified in California State Health and Safety Code Section 17921.3. • All hot water piping and storage tanks shall be insulated. Energy efficient boilers shall be used. • Residential: If possible, utilize grey water systems and dual plumbing for recycled water.
Lighting Design	Lighting design for building interiors shall support the use of: • Compact fluorescent light bulbs or equivalently efficient lighting. • Natural day lighting through site orientation and the use of reflected light. • Skylight/roof window systems. • Light colored building materials and finishes shall be used to reflect natural and artificial light with greater efficiency and less glare. • A multi-zone programmable dimming system shall be used to control lighting to maximize the energy efficiency of lighting requirements at various times of the day. • Provide a minimum of 2.5 percent of the project's electricity needs by on-site solar panels.
Building Design	Building design and construction shall incorporate the following elements: • Orient building locations to best utilize natural cooling/heating with respect to the sun and prevailing winds/natural convection to take advantage of shade, day lighting and natural cooling opportunities. • Utilize natural, low maintenance building materials that do not require finishes and regular maintenance. • Roofing materials shall have a solar reflectance index of 78 or greater. • All supply duct work shall be sealed and leak-tested. Oval or round ducts shall be used for at least 75 percent of the supply duct work, excluding risers. • Energy Star or equivalent appliances shall be installed. • A building automation system including outdoor temperature/humidity sensors will control public area heating, vent, and air conditioning units
Landscaping	The developer shall submit for review and obtain approval from County Planning of landscape and irrigation plans that are designed to include drought tolerant and smog tolerant trees, shrubs, and groundcover to ensure the long-term viability and to conserve water and energy. The landscape plans shall include shade trees around main buildings, particularly along southern and western elevations, where practical.
Irrigation Water Efficiency	The developer shall submit irrigation plans that are designed, so that all common area irrigation areas shall be capable of being operated by a computerized irrigation system, which includes either an on-site weather station, ET gauge or ET-based controller capable of reading current weather data and making automatic adjustments to independent run times for each irrigation valve based on changes in temperature, solar radiation, relative humidity, rain and wind. In addition, the computerized irrigation system shall be equipped with flow sensing capabilities, thus automatically shutting down the irrigation system in the event of a mainline break or broken head. These features will assist in conserving water, eliminating the potential of slope failure due to mainline breaks and eliminating over-watering and flooding due to pipe and/or head breaks.

Table 5.5-6 County of San Bernardino GHG Reduction Plan Performance Standards for Projects

Standard	GHG Reduction Plan Requirements
Recycling	Exterior storage areas for recyclables and green waste shall be provided. Where recycling pickup is available, adequate recycling containers shall be located in public areas. Construction and operation waste shall be collected for reuse and recycling.
Transportation Demand Management (TDM) Program	The project shall include adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. Residential: If available, mass transit facilities shall be provided (e.g. bus stop bench/shelter). The developer shall publish ride-sharing information for ride-sharing vehicles and provide a website or message board for coordinating rides. The Program shall ensure that appropriate bus route information is available to tenants and homeowners Non-Residential: Preferred carpool/vanpool spaces shall be provided and, if available, mass transit facilities shall be provided (e.g. bus stop bench/shelter). The developer shall demonstrate that the TDM program has been instituted for the project or that the buildings will join an existing program located within a quarter mile radius from the project site that provides a cumulative 20% reduction in unmitigated employee commute trips. The TDM Program shall publish ride-sharing information for ride-sharing vehicles and provide a website or message board for coordinating rides. The Program shall ensure that appropriate bus route information is placed in each building.
GHG Installation/Implementation	The developer shall submit for review and obtain approval from County Planning of evidence that all applicable GHG performance standards have been installed, implemented properly and that specified performance objectives are being met to the satisfaction of County Planning and County Building and Safety. These installations/ procedures include the following:
Exceeding Title 24	Design features and/or equipment that cumulatively increases the overall compliance of the project to exceed Title 24 minimum standards by five percent.
Energy-Efficiency Lighting	Interior building lighting shall support the use of fluorescent light bulbs or equivalent energy-efficient lighting.
Installation of Design Features	Installation of the identified mandatory and optional design features or equipment that have been constructed and incorporated into the facility/structure.
Verification	Installation of the identified mandatory and optional design features or equipment that have been constructed and incorporated into the facility/structure.
Construction Requirements	The "developer" shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce GHG emissions and submitting documentation of compliance. The developer/construction contractors shall do the following:
Painting	Implement the approved Coating Restriction Plans.
Equipment	Select construction equipment based on low GHG emissions factors and high-energy efficiency. All diesel/gasoline-powered construction equipment shall be replaced, where possible, with equivalent electric or compressed natural gas (CNG) equipment.
Contractor Requirements	Non-Residential: Grading contractor shall provide the implement the following when possible: • Training operators to use equipment more efficiently. • Identifying the proper size equipment for a task can also provide fuel savings and associated reductions in GHG emissions • Replacing older, less fuel-efficient equipment with newer models • Use GPS for grading to maximize efficiency
Grading Plans	Grading plans shall include the following statements: • "All construction equipment engines shall be properly tuned and maintained in accordance with the manufacturers specifications prior to arriving on site and throughout construction duration." • "All construction equipment (including electric generators) shall be shut off by work crews when not in use and shall not idle for more than 5 minutes."

Table 5.5-6 County of San Bernardino GHG Reduction Plan Performance Standards for Projects

Standard	GHG Reduction Plan Requirements
Construction Traffic	Schedule construction traffic ingress/egress to not interfere with peak-hour traffic and to minimize traffic obstructions. Queuing of trucks on and off site shall be firmly discouraged and not scheduled. A flagperson shall be retained to maintain efficient traffic flow and safety adjacent to existing roadways.
Construction & Demolition Debris	Recycle and reuse construction and demolition waste (e.g. soil, vegetation, concrete, lumber, metal, and cardboard) per County Solid Waste procedures.
Educational Materials/Incentive	The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew and educate all construction workers about the required waste reduction and the availability of recycling services.

Source: San Bernardino County 2015.

Projects that generate 3,000 $MTCO_2e$ or greater have the potential to generate a substantial increase in GHG emissions and result in significant impact. Future discretionary projects within the Valley Corridor Specific Plan that generate GHG emissions that exceed 3,000 $MTCO_2e$ are required to assess whether or not they are consistent with the latest screening tables in the County's GHG Development Review Process (i.e., implement measures that achieve a minimum of 100 points) or quantify GHG reductions that are equivalent to 100 points or greater (which is approximately a 31 percent reduction of new development GHG emissions compared to the unmitigated condition) in order to be consistent with the County's GHG Reduction Plan. The County has incorporated the GHG Development Review Processes (Appendix F of the GHG Reduction Plan) into the County Code, Section 83.40.030, *GHG Performance Standards*. As outlined above, all projects, regardless of size are required to implement the Performance Standards listed in Table 5.5-6 and projects that exceed the screening threshold of 3,000 $MTCO_2e$ would be required to implement additional actions to reduce GHG emissions to ensure consistency with the County's GHG Reduction Plan. With adherence to the County's GHG Development Review Processes, impacts would be less than significant.

SCAG's 2016-2040 RTP/SCS

SCAG adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) in April 2016 pursuant to the requirements of SB 375. SCAG's RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The overarching strategy in the 2016 RTP/SCS is to provide for a plan that allows the southern California region to grow in more compact communities in existing urban areas; provide neighborhoods with efficient and plentiful public transit, abundant and safe opportunities to walk, bike and pursue other forms of active transportation; and preserve more of the region's remaining natural lands (SCAG 2016). The 2016 RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as a forecast development that is generally consistent with regional-level general plan data. The projected regional development pattern, when integrated with the proposed regional transportation network identified in the RTP/SCS, would reduce per capita vehicular travel–related GHG emissions and achieve the GHG reduction per capita targets for the SCAG region. The RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the RTP/SCS,

but provides incentives for consistency for governments and developers. Because the 2016 RTP/SCS identifies portions of the Specific Plan area as a high-quality transit area, incentives for new development and redevelopment in the Specific Plan area include CEQA streamlining for future projects. The 2016 RTP/SCS SCAG anticipates lowering GHG emissions below 2005 levels by 8 percent by 2020, 18 percent by 2035, and 22 percent by 2040 (SCAG 2016). Key strategies in the SCAG's RTP/SCS are identified in Table 5.8-1, *Consistency with SCAG's 2016-2040 RTP/SCS Goals*, in Section 5.8, *Land Use and Planning*.

The Valley Corridor Specific Plan would increase the residential and nonresidential land use intensities consistent with the SCS scenario plan, which envisions accommodating the vast majority of new growth in infill areas. Infill areas identified in SCAG's SCS include high-quality transit corridors, existing main streets, downtowns, and commercial corridors. The purpose of concentrating new development in these infill areas is to improve jobs-housing balance and provide more opportunity for transit-oriented development. The Valley Corridor currently accommodates low-density development and supports limited existing infrastructure, yet is bounded by suburban development in Rialto and Fontana. The Specific Plan is a corridor plan for Valley Boulevard and would align with the overarching goal of the SCS to improve the jobs-housing balance and provide for transient oriented development. One of the key planning principles throughout the Valley Corridor Specific Plan is mobility. The Specific Plan creates safe spaces for pedestrians, cyclists, transit, and motor vehicles along Valley Boulevard and between surrounding neighborhoods. Building upon the recommendations of the RTP/SCS, the Specific Plan incorporates a Mixed Use District that mixes commercial and residential uses to enable local residents to live, play, work, and shop in a connected community. Consequently, the impacts from consistency with SCAG's 2012 RTP/SCS are less than significant.

5.5.4 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 impact.

The recommended mitigation measures would ensure that GHG emissions from buildout of the proposed project would be minimized. However, additional federal, state, and local measures would be necessary to reduce GHG emissions under the proposed project to meet the long-term GHG reduction goals under Executive Order S-03-05 and Executive Order B-30-15. Based on SCAQMD's 2020 efficiency target, this would equate to 2.2 $MTCO_2e$/SP at the project buildout year. The buildout GHG emissions inventory for the proposed project could potentially generate 10.7 $MTCO_2e$/SP, which would exceed the efficiency target of 2.2 $MTCO_2e$/SP. At this time, there is no plan past 2020 that achieves the long-term GHG reduction goals; however, CARB is currently updating the Scoping Plan to identify state strategies to achieve the new 2030 target established under Executive Order B-30-15. Since no additional statewide measures are currently available, cumulative GHG emissions impacts would remain significant and unavoidable.

5.5.5 Existing Regulations and Standard Conditions

State

- California Global Warming Solutions Act (AB 32)
- Sustainable Communities and Climate Protection Act (SB 375)
- Greenhouse Gas Emission Reduction Targets (Executive Order S-03-05)
- Greenhouse Gas Emission Reduction Target for 2030 (Executive Order B-30-15)
- Clean Car Standards – Pavley (AB 1493)
- Renewable Portfolio Standards (SB 1078)
- Statewide Retail Provider Emissions Performance Standards (SB 1368)
- Clean Energy and Pollution Reduction Act of 2015 (SB 350)
- California Integrated Waste Management Act of 1989 (AB 939)
- California Mandatory Commercial Recycling Law (AB 341)
- California Advanced Clean Cars – LEV III (Title 13 CCR)
- Heavy-Duty Vehicle Greenhouse Gas Emissions Reduction Measure (Title 17 CCR)
- Low Carbon Fuel Standard (Title 17 CCR)
- California Water Conservation in Landscaping Act of 2006 (AB 1881)
- California Water Conservation Act of 2009 (SBX7-7)
- Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools (13 CCR 2480)
- Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling (13 CCR 2485)
- In-Use Off-Road Diesel Idling Restriction (13 CCR 2449)
- Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Code (Title 24, Part 11)
- Appliance Energy Efficiency Standards (Title 20)

Local

- San Bernardino County Greenhouse Gas Emissions Development Review Processes, SBCDC, Section 84.30.030, GHG Performance Standards.

5.5.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: Impact 5.5-2 (consistency with the County's GHG Reduction Plan).

Without mitigation, the following impacts would be **potentially significant**:

Impact 5.5-1 Buildout of the Valley Corridor Specific Plan would generate a substantial increase in GHG emissions compared to existing conditions and would have a significant impact on the environment.

5.5.7 Mitigation Measures

Impact 5.5-1

Mitigation Measures AQ-4 through AQ-6 from Section 5.2, *Air Quality*, apply here and would reduce GHG emissions of the proposed project.

AQ-4 Prior to issuance of a building permit for new development projects within the Valley Corridor Specific Plan area, the property owner/developer shall show on the building plans that all major appliances (dishwashers, refrigerators, clothes washers, and dryers) to be provided/installed are Energy Star appliances. Installation of Energy Star appliances shall be verified by the County prior to issuance of a certificate of occupancy.

AQ-5 Prior to issuance of building permits for residential development projects within the Valley Corridor Specific Plan area, the property owner/developer shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of San Bernardino prior to issuance of a certificate of occupancy.

- For multifamily dwellings, electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the CALGreen Code.
- Bicycle parking shall be provided as specified in Section A4.106.9 (Residential Voluntary Measures) of the CALGreen Code.

AQ-6 Prior to issuance of building permits for non-residential development projects within the Valley Corridor Specific Plan area, the property owner/developer shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of San Bernardino prior to issuance of a certificate of occupancy.

- For buildings with more than ten tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3 (Nonresidential Voluntary Measures) of the CALGreen Code.
- Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code.

- Facilities shall be installed to support future electric vehicle charging at each non-residential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code.

5.5.8 Level of Significance After Mitigation

Impact 5.5-1

Mitigation Measures AQ-4 through AQ-6 would encourage and accommodate use of alternative-fueled vehicles and nonmotorized transportation and ensure that GHG emissions from the buildout of the proposed project would be minimized. However, additional federal, state, and local measures would be necessary to reduce GHG emissions under the proposed project to meet the long-term GHG reduction goals under Executive Order S-03-05 and Executive Order B-30-15. Based on SCAQMD's 2020 efficiency target, this would equate to 2.2 $MTCO_2e$/SP at the project buildout year. The buildout GHG emissions inventory for the proposed project could potentially generate up to 10.7 $MTCO_2e$/SP, which would exceed the efficiency target of 2.2 $MTCO_2e$/SP for year 2035. The new Executive Order B-30-15 requires CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. At this time, there is no plan past 2020 that achieves the long-term GHG reduction goal established under Executive Order S-03-05 or the new Executive Order B-30-15. As identified by the California Council on Science and Technology, the state cannot meet the 2050 goal without major advancements in technology (CCST 2012). Since no additional statewide measures are currently available, Impact 5.5-1 would remain significant and unavoidable.

5.5.9 References

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5.6 HAZARDS AND HAZARDOUS MATERIALS

This section evaluates the potential impacts of the proposed project on human health and the environment due to exposure to hazardous materials or conditions associated with the Specific Plan area, construction, and operations. Potential project impacts and appropriate mitigation measures or standard conditions are included as necessary. The analysis in this section is based, in part, upon the following source:

- *Phase 0 Site Assessment, Valley Corridor Specific Plan, for County of San Bernardino*, September, 2015.

A complete copy of this study is included Appendix E of this DEIR.

5.6.1 Environmental Setting

5.6.1.1 REGULATORY SETTING

Hazardous materials and wastes can pose a significant actual or potential hazard to human health and the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Many federal, state, regional, and local programs that regulate the use, storage, and transportation of hazardous materials and hazardous waste are in place to prevent these unwanted consequences. These regulatory programs are designed to reduce the danger that hazardous substances may pose to people and businesses under normal daily circumstances and as a result of emergencies and disasters.

Federal

Resource Conservation and Recovery Act (RCRA) of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984

Federal hazardous waste laws are generally promulgated under RCRA. These laws provide for the "cradle to grave" regulation of hazardous wastes. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed. The California Department of Toxic Substances Control (DTSC) is responsible for implementing the RCRA program as well as California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law. Under the Certified Unified Program Agency (CUPA) program, the California Environmental Protection Agency has delegated enforcement authority to San Bernardino County for state law regulating hazardous waste producers or generators.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) of 1986

Congress enacted CERCLA, commonly known as Superfund, on December 11, 1980. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified. SARA amended the CERCLA on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites; required Superfund actions to consider the standards and requirements

found in other state and federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased state involvement in every phase of the Superfund program; increased the focus on human health problems posed by hazardous waste sites; encouraged greater citizen participation in making decisions on how sites should be cleaned up; and increased the size of the trust fund to $8.5 billion.

Emergency Planning Community Right-to-Know Act (EPCRA)

The EPCRA, also known as SARA Title III, was enacted in October 1986. This law requires any infrastructure at the state and local levels to plan for chemical emergencies. Reported information is then made publicly available so that interested parties may become informed about potentially dangerous chemicals in their community. EPCRA Sections 301 through 312 are administered by the US Environmental Protection Agency's (EPA's) Office of Emergency Management. The EPA's Office of Information Analysis and Access implements the EPCRA Section 313 program. In California, SARA Title III is implemented through the California Accidental Release Prevention Program.

Hazardous Materials Transportation Act

The United States Department of Transportation regulates hazardous materials transportation under Title 49 (Transportation) of the Code of Federal Regulations, which reflects laws passed by Congress as of January 2, 2006. State agencies that have primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. These agencies also govern permitting for hazardous materials transportation.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that: 1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; 2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act as well as individual agency statutory authorities; and 3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a Presidential declaration of a major disaster or emergency.

State

California Health and Safety Code and Code of Regulations

California Health and Safety Code Chapter 6.95 (Hazardous Materials Release Response Plans and Inventory) and California Code of Regulations, Title 19, Section 2729, set out the minimum requirements for business emergency plans and chemical inventory reporting. These regulations require businesses to provide emergency response plans and procedures; training program information; and a hazardous material chemical inventory disclosing hazardous materials stored, used, or handled onsite. A business that uses hazardous

materials or a mixture containing hazardous materials in certain quantities must establish and implement a business plan.

California Building Code

The State of California provides a minimum standard for building design through the California Building Code (CBC), which is in Title 24, Part 2, of the California Code of Regulations. The most recent (2013) CBC is based on the 2012 International Building Code, but has been modified for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential building plans are checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC include: the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Fire Code

The California Code of Regulations, Title 24, also known as the California Building Standards Code, contains the California Fire Code, included as Part 9 of that title. Updated every three years, the fire code includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. The San Bernardino County Fire Department (SBCFD) provides fire protection services for the Community of Bloomington and enforces the fire code in the community.

Asbestos-Containing Material (ACM) Regulations

State-level agencies, in conjunction with the EPA and California Occupational Safety and Health Administration, regulate removal, abatement, and transport procedures for ACMs. Releases of asbestos from industrial, demolition, or construction activities are prohibited by these regulations, and medical evaluation and monitoring are 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. For example, Title 8 of the California Code of Regulations, Section 1529 (Asbestos), provides for exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to asbestos. Finally, federal, state, and local agencies must be notified prior to the onset of demolition or construction activities with the potential to release asbestos.

Polychlorinated Biphenyls (PCBs)

The EPA prohibited the use of PCBs in the majority of new electrical equipment starting in 1979, and initiated a phase-out for much of the existing PCB-containing equipment. The inclusion and handling of PCBs in electrical equipment are regulated by the provisions of the Toxic Substances Control Act (15 US Code §§ 2601 et seq.). Relevant regulations include labeling and periodic inspection requirements for certain types of PCB-containing equipment and outline highly specific safety procedures for their disposal. The state

likewise regulates PCB-laden electrical equipment and materials contaminated above a certain threshold as hazardous waste; these regulations require that such materials be treated, transported, and disposed accordingly. At lower concentrations for nonliquids, regional water quality control boards may exercise discretion over the classification of such wastes.

Lead-Based Paint

The California Occupational Safety and Health Administration's Lead in Construction Standard is in Title 8, Section 1532.1 (Lead) of the California Code of Regulations. The regulations address all of the following areas: permissible exposure limits; exposure assessment; compliance methods; respiratory protection; protective clothing and equipment; housekeeping; medical surveillance; medical removal protection; employee information, training, and certification; signage; record keeping; monitoring; and agency notification.

Regional

South Coast Air Quality Management District Rule 1403

South Coast Air Quality Management District 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. The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and cleanup procedures, storage, and disposal requirements for asbestos-containing waste materials. If ACMs are identified, Rule 1403 requires that they be safely removed and disposed of, if possible. If it is not possible to safely remove ACMs, Rule 1403 requires that safe procedures be used to demolish the building with asbestos in place without resulting in a significant release of asbestos.

San Bernardino County Fire Department: Certified Unified Program Agency

The SBCFD's Hazardous Materials Division is the CUPA for the County of San Bernardino, which focuses the management of specific environmental programs at the local government level. The CUPA is charged with the responsibility of conducting compliance inspections for over 7,000 regulated facilities in San Bernardino County that handle hazardous material, generate or treat hazardous waste, and/or operate an underground storage tank. The CUPA provides a comprehensive environmental management approach to resolve environmental issues. This balanced approach utilizes education and effective enforcement procedures to minimize the potential risk to human health and the environment and establish an atmosphere to promote fair business practices.

As CUPA, SBCFD manages six hazardous material and hazardous waste programs, described below. The CUPA program is designed to consolidate, coordinate, and uniformly and consistently administer permits, inspection activities, and enforcement activities throughout San Bernardino County (with the exception of the city of Victorville). This approach strives to reduce overlapping and sometimes conflicting requirements of different governmental agencies independently managing these programs.

Hazardous Materials Release Response Plans and Inventory (Business Plan)

This CUPA program provides information to emergency responders and the general public regarding hazardous materials at certain facilities, and coordinates reporting of releases and spill response among businesses and local, state, and federal government authorities. Businesses are required to disclose all hazardous materials and wastes above certain quantities that are used, stored, or handled at their facility. They are also required to train their employees to safely handle chemicals and to take appropriate emergency response actions. Inspections are conducted periodically to verify the inventory and other information on the business emergency/contingency plan.

California Accidental Release Prevention Program

This program aims to reduce risks involving regulated substances through the evaluation of hazards and consequences and the development of risk management plans and prevention programs. The program requires certain facilities (referred to as "stationary sources") that handle specified chemicals (termed "regulated substances") to take specified actions to prevent and prepare for chemical accidents.

Underground Storage Tank Program

The Hazardous Materials Division oversees the Underground Storage Tank (UST) Program throughout San Bernardino County, with the exception of the city of Victorville. The purpose of this program is to ensure that hazardous substances are not released into the groundwater and/or the environment from UST systems. Specialists annually inspect tank system components, associated monitoring equipment, and inventory records to ensure that the UST systems comply with applicable laws and regulations.

Aboveground Petroleum Storage Act /Spill Prevention, Control, and Countermeasure Plan

Facilities that have cumulative aboveground storage capacities of petroleum products at or exceeding 1,320 gallons are subject to the Aboveground Petroleum Storage Act. Facilities that are subject to this act must prepare a Spill Prevention, Control, and Countermeasure Plan. Facilities handling petroleum or any other hazardous material require a business emergency/contingency plan. Both petroleum and nonpetroleum aboveground storage tanks are subject to the fire code requirements of the authority having fire code jurisdiction.

Hazardous Waste Generation and Onsite Treatment

The Hazardous Waste Inspection Program works to ensure that all hazardous wastes generated by San Bernardino County facilities are properly managed. Specialists in this program inspect facilities that generate hazardous waste, investigate complaints of unlawful hazardous waste disposal, and participate in public education. These programs are designed to provide information about laws and regulations relating to safe management of hazardous waste.

Hazardous Materials Management Plans (HMMPs) and Hazardous Materials Inventory Statements (HMISs)

The Uniform Fire Code has a provision for the local fire agency to collect information regarding hazardous materials at facilities for purposes of fire code implementation. A fire chief may require additional information to a Business Plan to meet the California Fire Code HMMP/HMIS requirements.

5.6.1.2 EXISTING CONDITIONS

Existing Land Uses

Major land uses onsite include single-family detached residential (267 units on 126 acres); retail, services, and storage (72 acres); and industrial (39 acres). Most of the industrial land uses are in the west half of the site, that is, west of Linden Avenue.

Schools

No schools are onsite. There are four schools within 0.25 mile of the project area; all are in the Colton Joint Unified School District.

- Lewis Elementary School, 18040 San Bernardino Avenue, Bloomington
- Smith Elementary School, 9551 Linden Avenue, Bloomington
- Grimes Elementary School, 1609 Spruce Avenue, Bloomington
- Baca Middle School, 1640 S. Lilac Avenue, Bloomington

Historical Land Uses

Historical land uses were investigated using historic topographic maps from the US Geological Survey and historical aerial photographs from Environmental Data Resources Inc.

Historical Topographic Maps

- **1896:** The Southern Pacific Railroad (now Union Pacific) is present next to the southern site boundary. A few scattered buildings and a network of roadways at approximately 0.25-mile intervals are present in the east half of the site. The west half of the site is completely vacant. No roadway is shown in the west half of the site where Valley Boulevard is now.[1]

- **1943:** The Ocean to Ocean Highway (US 70/US 99, now Valley Boulevard) passes east-west through the center of the site. A Pacific Electric railroad track passes northeast-southwest through the eastern part of

[1] The dates, names, and scales of the topographic maps referenced are listed below; the maps were obtained from the US Geological Survey's *Topoview* website. http://ngmdb.usgs.gov/maps/TopoView/.
- 1896; San Bernardino Quadrangle; 1:100,000
- 1943; Fontana Quadrangle; 1:31,680
- 1953; Fontana Quadrangle; 1:24,000
- 1967; Fontana Quadrangle; 1:24,000

the site. Several dozen buildings are shown in the Community of Bloomington centered on US 70/99 between Larch Avenue on the east and Magnolia Street on the west. A few dozen buildings are shown in the west half of the site—most along US 70/99 and a few along Marygold Avenue and Taylor Avenue. The Southern Pacific Railroad is next to the southern site boundary, but the West Colton Railyard is not shown.

- **1953:** US 70/99 is now a four-lane highway along the southern site boundary. The Ocean to Ocean Highway on the 1943 map is now Valley Boulevard. Portions of the site are shown in orchard use—especially the part west of Locust Avenue and the southeast corner of the site. The Community of Bloomington has expanded west two blocks to Linden Avenue, and the density of structures in the community has increased somewhat compared to the 1943 map. The number of structures in the west half of the site has increased somewhat since 1943; most structures are still along Valley Boulevard, Marygold Avenue, and Taylor Avenue. The Pacific Electric railroad track shown on the 1943 map is absent. Otherwise, conditions are similar to those shown on the 1943 map.

- **1967:** The former US 70/99 is now I-10 and has been widened to eight lanes. Much of the northwest quadrant of the site (northwest of Locust Avenue and Valley Boulevard) and part of the southeast corner of the site remain in orchard use. The Community of Bloomington is now urbanized from Spruce Avenue on the east to near Linden Avenue on the west. Mobile homes are shown south of Valley Boulevard between Linden Avenue and Locust Avenue. Otherwise, conditions are similar to those on the 1953 map.

Historical Aerial Photographs

- **1938:** A railroad track passes next to the southern site boundary. Most of the site is in agricultural use, including rural residential uses on agricultural lots. Agricultural uses include orchards, row crops, and possibly grass crops. The Community of Bloomington between Larch Avenue on the east and Magnolia Street on the west is mostly developed with nonagricultural land uses. A railroad track passes northeast-southwest through the community.

- **1948:** A limited-access highway next to the north side of railroad tracks passes next to the southern site boundary. The urbanized Community of Bloomington has expanded east to Spruce Avenue and west to Linden Avenue. Most of the site west of Magnolia Street (south of Valley Boulevard) and Linden Avenue (north of Valley Boulevard) remains in agricultural use (orchards and row crops). A few scattered industrial or commercial uses are shown along the portion of Valley Boulevard west of Linden Avenue.

- **1966:** Agricultural land uses have been supplanted by residential and commercial/industrial uses and are mostly limited to the western part of the site (west of Locust Avenue) and the southeast corner of the site. A railyard is visible offsite south of the I-10 south of the central and western parts of the site (the West Colton Railyard is visible in a 1976 photograph south of the eastern part of the site). A neighborhood shopping center is at the southeast corner of Linden Avenue and Valley Boulevard. An enlarged replacement bridge is under construction on Cedar Avenue over the I-10 and Southern Pacific Railroad.

- **1976:** No agricultural uses remain. The site is largely built out with urban uses. However, many parcels in the west half of the site contain one to a few buildings on parcels of several acres each; thus, there is a substantial amount of vacant land on developed parcels. There are several mobile home communities south of Valley Boulevard. The West Colton Railyard is present south of the eastern part of the site. Two large buildings—one commercial and one industrial—are just north of the east end of the site along the south side of Bloomington Avenue.

- **1994:** Conditions are similar to those shown in the 1976 photographs.

Environmental Database Search Findings

Environmental Data Resources (EDR) conducted a search of environmental databases for the Specific Plan area and a one-mile radius around it on August 5, 2015.[2] A summary of the search findings are listed in Table 5.6-1, onsite findings are listed in Table 5.6-2, and offsite findings are listed in Table 6.6-3.

Table 5.6-1 Summary, Environmental Database Listings

Type of Site	Onsite Listings	Offsite Listings (1-Mile Radius)
Leaking Underground Storage Tanks (LUST)	3	1
EnviroStor (cleanup sites)	0	2
Emergency Response Notification System (ERNS)	1	0
EMI: Toxic and criteria air pollutant emissions	3	1
Clandestine Drug Labs (CDL)	8	0
Registered Underground Storage Tanks (USTs):	6	1
Historical Underground Storage Tanks (Hist USTs):	5	9
Aboveground Storage Tanks	2	3
Hazardous Waste Handlers and Generators:	52	14
Haznet (Hazardous Waste Shipment Manifests)	72	3
Landfills and Recycling Facilities	3	3
National Pollution Control Elimination System (NPDES): Water Quality Treatment Requirement	5	3
School Investigation Sites	0	4
Dry Cleaners	3	0
Historical Auto Stations	53	14
Historical Cleaners	1	1

Source: EDR 2015.

[2] Search radii varied from 0.25 mile to one mile from the site boundary based on the type of site. Search radii are generally 0.25 mile from the site boundary for sites documenting the presence of hazardous materials in a container—such as an underground storage tank—and either 0.5 mile or one mile for hazardous materials release sites.

Table 5.6-2 Environmental Database Listings Onsite

Map ID No.	Site Name Address	Database	Reason for Listing and Regulatory Status
11	18127 Marygold Ave	EDR Historical Auto Station	
15	Intown Properties 9982 Linden Ave	Haznet	2 shipments of hazardous wastes, 1997
16	Intown Properties 18594 Grove Pl	Haznet	1 shipment of hazardous wastes, 1999
17	9987 Locust St	CDL	
	9981 Locust St	CDL	
	Carlos A Carrillo 9963 Locust Ave	RCRA Non-Gen	Does not presently generate hazardous waste
	Carlos Carrillo Trucking 9963 Locust Ave	HWT: hazardous waste transporter	
	Overstreet Trucking 9951 Locust Ave	RCRA Non-Gen	Does not presently generate hazardous waste
21	Shur Gard Storage 10047 Linden Ave	CDL	
22	10038 Locust Ave	EDR Historical Auto Station	
24	Los Compadres Transmission 17866 Valley Blvd #A-3	Haznet	3 shipments of hazardous wastes, 2006 through 2010
	Palomera's Auto Body Shop 17866 Valley Blvd #A-3	Haznet	1 shipment of hazardous waste, 1993
25	Merit Oil Co. 10065 Alder Ave.	Leaking Underground Storage Tank (LUST)	Release of gasoline and MTBE/TBA/other fuel oxygenates in 1999 affected soil. Case closed 2004.
		Historical Cortese Historical Underground Storage Tank (Hist UST) Statewide Environmental Evaluation and Planning System (SWEEPS UST)	Seven historic underground storage tanks (USTs) contained gasoline and diesel fuel.
		Haznet	One shipment of oil/water separation sludge to a recycler in 1999.
27	10056 Orchard St	CDL	
28	18689 Valley Blvd	EDR Historical Auto Station	
	Alzahran Gas and Mart 18689 Valley Blvd	Hist UST, SWEEPS UST	
	Valley Gas and Mart 18689 Valley Blvd	AST (Aboveground storage tank)	
	Lifeboat Mobil 18689 Valley Blvd	UST	
	Peace Valley Inc DBA Mobil Gassmart 18689 Valley Blvd	Haznet	2 shipments of hazardous wastes, 1998-2013
	Lifeboat Mobil/RIA Investments Corp	Haznet	1 shipment of hazardous wastes, 1998

Table 5.6-2 Environmental Database Listings Onsite

Map ID No.	Site Name Address	Database	Reason for Listing and Regulatory Status
	18689 Valley Blvd		
	Havadjia Holding Inc 18694 Valley Blvd	Haznet	1 shipment of hazardous wastes, 2000
	Bloomington Oil Inc 18762 Valley Blvd	Haznet	2 shipments of hazardous wastes, 2011
	Arco Products Co 18762 Valley Blvd	Haznet	1 shipment of hazardous wastes, 1998
	Arco # 83021 18762 Valley Blvd	UST	
	Arco AM/PM #5997 18762 Valley Blvd	UST	
		RCRA Non-Gen	
	BP West Coast Products LLC 5997 18762 Valley Blvd	Haznet	15 shipments of hazardous wastes, 2002-2008
	O&R 4 Wheel Drive Ctr 10076 Cedar Ave	SQG, County permit	
		EDR Historical Auto Station	
		Haznet	2 shipments of hazardous wastes, 2000-2002
29	Benson's Transmissions 19059 Valley Blvd	SQG, County permit	
		Haznet	1 hazardous waste shipment, 1996
	18919 Valley Blvd	EDR Historical Auto Station	
	Chavez Mechanic & Electric 993 W Valley Blvd	SQG, County permit	
	993 W Valley Blvd	EDR Historical Auto Station	
	Arturo's Tailor Shop 19059 Valley Blvd #112	Haznet	15 hazardous waste shipments, 1993-1997
		EMI	Toxic and criteria air pollutant emissions
		SQG, County permit	
		Drycleaners	
	ABR Graphics 19059 Valley Blvd #118	Haznet	5 hazardous waste shipments, 2008-2013
	Valley Animal Hospital	Haznet	2 hazardous waste shipments, 1997-1998
	Mission Plaza 19059 Valley Blvd	Haznet	6 hazardous waste shipments, 1997-1998
	Precision Turnadge Charger Co. 19059 Valley Blvd	Haznet	1 hazardous waste shipment, 2002
	CSCO Screw Products 19059 Valley Blvd #205	SQG, County permit	
		Haznet	1 hazardous waste shipment, 2008
	Tandy Service Center 19059 Valley Blvd #220	Haznet	2 hazardous waste shipments, 1997
	Total Printing 19059 Valley Blvd	Haznet	2 hazardous waste shipments, 1993-1996
	19059 Valley Blvd	EDR Historical Auto Station	
	Japanese Engine Masters 19059 Valley Blvd	Hazardous waste handler and generator, County permits	
	Accent Business Forms	19059 Valley Blvd	8 hazardous waste shipments, 1995-2003

Table 5.6-2 Environmental Database Listings Onsite

Map ID No.	Site Name Address	Database	Reason for Listing and Regulatory Status
	Import & Domestic Convert 19059 Valley Blvd #204	SQG, County permit	
	Precision Turbo Charge 19059 Valley Blvd #212	SQG, County permit	
	Argel's auto works 19059 Valley Blvd #301	SQG, County permit	
	19003 Valley Blvd	EDR Historical Auto Station	
	Lucky Radiator LLC 19003 Valley Blvd	SQG, County permit	
	Secure RV Storage 18949 Valley Blvd	NPDES: Water Quality Treatment Requirement (construction)	
	Bloomington Carburator 18966 Valley Blvd	SQG- RCRA	
	Capital Commercial Management Co. 19060 Valley Blvd	Haznet	1 hazardous waste shipment, 1998
	Circle K Store #219 19060 Valley Blvd	RCRA NonGen	
		Hist UST	2 historic USTs, gasoline
		SWEEPS UST	
	19030 Valley Blvd	EDR Historical Auto Station	
	Express Carburetor 19030 Valley Blvd	Haznet	3 hazardous waste shipments, 2001-2009
	18992 Valley Blvd	EDR Historical Auto Station	
	18918 Valley Blvd	EDR Historical Auto Station	
	18908 Valley Blvd Toyota & Mazda Specialists	Haznet	2 hazardous waste shipments, 1994
	Toy Tech 2 18908 Valley Blvd	Haznet	13 hazardous waste shipments, 2003-2006
		SQG, County permit	
	18982 Valley Blvd	EDR Historical Auto Station	
	Holy Union Auto Body and Paint 18982 Valley Blvd		
	Unique Auto Body & Paint 18982 Valley Blvd	SQG, County permit	
	Prado's Body Shop 18966 Valley Blvd	Haznet	2 hazardous waste shipments, 2000-2002
	Beto's Transmissions 18966 Valley Blvd	Haznet	3 hazardous waste shipments, 2006
		SQG, County permit	
	18966 Valley Blvd	EDR Historical Auto Station	
	Toyota Auto Repair 18966 Valley Blvd	Haznet	3 hazardous waste shipments, 1999-2000
	Mr. Mechanic 18966 Valley Blvd	SQG, County permit	
30	Candy-Man Cylinder Heads 19098 Valley Blvd	SQG, County permit	

Table 5.6-2 Environmental Database Listings Onsite

Map ID No.	Site Name Address	Database	Reason for Listing and Regulatory Status
	Beto's Transmission 19098 Valley Blvd	SQG, County permit	
31	18869 Valley Blvd	EDR Historical Auto Station	
	18855 Valley Blvd	Emergency Response Notification System (ERNS)	Waste oil release affected soil, 1993.
	Bros. Auto Performance Repair 18839 Valley Blvd	SQG, County permit	
		Haznet	3 hazardous waste shipments, 2002 - 2004
	18839 Valley Blvd	EDR Historical Auto Station	
	Alvidrez Tire Shop 18854 Valley Blvd	RGA LF: Historic landfill	
	TWL Hauler 18854 Valley Blvd	Haulers: hazardous waste generator and hazardous waste hauler	
	18854 Valley Blvd	EDR Historical Auto Station	
	Raymond's Repair 18830 Valley Blvd	SQG, County permit	
	Raymond's Lawnmower 18830 Valley Blvd	Haznet	1 hazardous waste shipment, 1998
	Suzan Moren 18830 Valley Blvd	Haznet	1 hazardous waste shipment, 2001
	18830 Valley Blvd	EDR Historical Auto Station	
32	Advanced Auto Body 18648 Valley Blvd	SQG: County permit	
34	Valley Cleaners 18571 Valley Blvd	Haznet	2 shipments of hazardous wastes, 2005 - 2006
		Drycleaners	
		EDR Historical Cleaners	
		Hazardous waste handler and generator, County permits	
	Bloomington Dental Clinic 18601 Valley Blvd	Haznet	29 shipments of hazardous wastes, 2002-2013
	18610 Valley Blvd	EDR Historical Auto Station	
	Valley Cleaners 18610 Valley Blvd	Haznet	9 shipments of hazardous wastes, 1995-2001
		SQG: RCRA	
		Drycleaners	
		EMI: Toxic and criteria air pollutant emissions	
35	18219 Valley Blvd	EDR Historical Auto Station	
	18259 Valley Blvd	EDR Historical Auto Station	
	J & R Fleet Services 18244 Valley Blvd	APSA: aboveground storage tank	
		SQG: County permit	
		Haznet	5 shipments of hazardous wastes, 2008 - 2013
	Polos Complete Auto Repair 18256 Valley Blvd	Hazardous waste handler and generator (County permits)	

Table 5.6-2 Environmental Database Listings Onsite

Map ID No.	Site Name Address	Database	Reason for Listing and Regulatory Status
	Murillo's Auto Repair 18288 Valley Blvd	Haznet	1 shipment of hazardous wastes, 2008
		EDR Historical Auto Station	
		SQG: County permit	
36	18376 Valley Blvd	EDR Historical Auto Station	
37	18412 Valley Blvd	EDR Historical Auto Station	
38	Max Equipment Rental 18324 Valley Blvd #5	Haznet	1 shipment of hazardous wastes, 2004
	Trans American Express 18324 Valley Blvd	SQG: RCRA	
	Inland Valley Truck Repair 18324 Valley Blvd #6	Haznet	3 shipments of hazardous wastes, 2006-2007
	Business Banks of California 18324 Valley Blvd	Haznet	2 shipments of hazardous wastes, 1998
	Inland Valley Diesel Repair & Tires 18324 Valley Blvd #6	Haznet	1 shipment of hazardous wastes, 2008
	18324 Valley Blvd	EDR Historical Auto Station	
	Wallace Concrete Inc 18322 Valley Blvd	SWEEPS UST	Historic USTs (2 tanks)
39	18181 Valley Blvd #212	CDL	
	18181 Valley Blvd #8083	CDL	
	Gordon Gutebier 18181 Valley Blvd #803	Haznet	3 shipments of hazardous wastes, 1996
	Superior Recycling 18184 Valley Blvd	SWRCY: Recycler database	
40	Best Golf Carts Inc 18041 Valley Blvd	Haznet	3 shipments of hazardous wastes, 2008-2011
	Express Muffler & Auto Repair 18069 Valley Blvd #B	Haznet	2 shipments of hazardous wastes, 2011-2012
	18069 Valley Blvd	EDR Historical Auto Station	
	Los Compadres Auto Center 18069 Valley Blvd	Haznet	2 shipments of hazardous wastes, 2009
		Hazardous waste generator and handler (County permits)	
	United Semi Truck 18069 Valley Blvd	Haznet	2 shipments of hazardous wastes, 2012-2013
	The Iron Horse Inn 18017 Valley Blvd	EMI: Toxic and criteria air pollutant emissions	
	Accu Honda Auto Repair & Sales 18003 Valley Blvd	SQG: County permit	
		Haznet	1 shipment of hazardous wastes, 2010
	Sonora Tire 17977 Valley Blvd	RGA LF: Historic landfill	
		EDR Historical Auto Station	
	Bloomington Mixed Use Project 18010 Valley Blvd	NPDES: Water Quality Treatment Requirement	

Table 5.6-2 Environmental Database Listings Onsite

Map ID No.	Site Name Address	Database	Reason for Listing and Regulatory Status
		Haznet	1 shipment of hazardous wastes, 2013
	18010 Valley Blvd	EDR Historical Auto Station	
	Colich & Sons Inc 17970 Valley Blvd	Haznet	1 shipment of hazardous wastes, 2012
41	Ontario Wrought Iron Work 17827 Valley Blvd	Hazmat handler (County permit)	
	[Multiple business names] 17847 Valley Blvd	EDR Historical Auto Station	
	Laguna Equipment 17847 Valley Blvd	SQG: RCRA	
	Hortas Body Shop 17863 Valley Blvd	EDR Historical Auto Station	
	17887 Valley Blvd	EDR Historical Auto Station	
	Collett's Auto & Brake 17903 Valley Blvd	Haznet	4 shipments of hazardous wastes, 1995 through 2002
		EDR Historical Auto Station	
	Precision Automotive Services 17903 Valley Blvd	SQG and hazardous waste handler (County permits)	
	17868 Valley Blvd	EDR Historical Auto Station	
	Precision Automotive Services 17866 Valley Blvd	Haznet	8 shipments of hazardous wastes, 1999 through 2007
		EDR Historical Auto Station	
	All Tune and Lube 17866 Valley Blvd	SQG: RCRA	
	Brian's General Auto Repair 17866 Valley Blvd #1-C	SQG: County permit	
	Custom & Commercial Wheel Co 17866 Valley Blvd # 1	Haznet	2 shipments of hazardous wastes, 2011
	Candy-man Cylinder Heads 17866 Valley Blvd #2A	SQG: County permit	
		Haznet	
	17846 Valley Blvd	EDR Historical Auto Station	
	Partain's Transmissions 17890 Valley Blvd	Haznet	1 shipment of hazardous wastes, 1996
	Lazer Truck Lines, Inc 17890 Valley Blvd	SQG and hazardous materials handler: County permits	
		Haznet	1 shipment of hazardous wastes, 2000
	Smitty's 17890 Valley Blvd #B	Haznet	1 shipment of hazardous wastes, 2005
		EDR Historical Auto Station	
		EDR Historical Auto Station	
	17886 Valley Blvd	EDR Historical Auto Station	
	Reif Family Trust 17906 Valley Blvd	UST permit (County)	
		Haznet	1 shipment of hazardous wastes, 2013
43	SR Motors Inc. 17781 Valley Blvd # F	Haznet	1 shipment of hazardous wastes, 2006

Table 5.6-2 Environmental Database Listings Onsite

Map ID No.	Site Name Address	Database	Reason for Listing and Regulatory Status
	JG Collision Center 17763 Valley Blvd # C	Small Quantity Generator of Hazardous Wastes (SQG) (San Bernardino County Permit)	
		EDR Historical Auto Station	
	CA Muffler 17763 Valley Blvd # H	SQG	
	All Transmission & Engine 17763 Valley Blvd # E	Special Generator and Special Handler of Hazardous Wastes (San Bernardino County permits)	
	Best Collision Service 17763 Valley Blvd # C	Haznet	2 shipments of hazardous wastes: one 2011, one 2013
	Performance Smog & Repair 17763 Valley Blvd # D	Special Generator and Special Handler of Hazardous Wastes (San Bernardino County permits)	
	17733 Valley Boulevard	EDR Historical Auto Station	
		Clandestine drug lab (CDL)	
	Unique Auto Sales 17725 Valley Boulevard	SQG	
		EDR Historical Auto Station	
	Jonathan Kim 17770 Valley Boulevard	Haznet	1 shipment of hazardous waste in 2009
	Los Compadres Auto Sales 17770 Valley Boulevard	Special Generator and Handler of hazardous wastes (San Bernardino County permits)	
	17770 Valley Boulevard	EDR Historical Auto Station	
	Unique Auto Sales 17746 Valley Boulevard	Hazmat Handler (San Bernardino County permit)	
47	18509 Valley Blvd	EDR Historical Auto Station	
	Bloomington Texaco/Hossein A 18509 Valley Blvd	UST: underground storage tank	
		SWEEPS UST	
	Bobber 12kV Valley Blvd and Linden Ave and Palmetto Ave	NPDES:	Storm Water Pollution Prevention Plan (construction; 2012-2013)
49	Nick Nazari 10148 Church St	Haznet	1 shipment of hazardous wastes, 2012
	Chevron Station 98646 18745 Valley Blvd	RCRA Non-Gen	
		Haznet	4 shipments of hazardous wastes, 2003-2004
	18745 Valley Blvd	EDR Historical Auto Station	
	Chevron 98646 18745 Valley Blvd	LUST	Gasoline release affected soil, case closed 1997
		HIST UST, SWEEPS UST, HIST Cortese	
		UST	
		Haznet	5 shipments of hazardous wastes, 1993-2002
	Baker's Drive Through #116 18775 Valley Blvd	Bulk CO_2 at retail food facility- permit	

Table 5.6-2 Environmental Database Listings Onsite

Map ID No.	Site Name Address	Database	Reason for Listing and Regulatory Status
50	Advance Automotive 18111 Valley Blvd	Hazardous waste handler and generator (County permits)	
	18111 Valley Blvd	EDR Historical Auto Station	
	Canales & Sayda Body & Paint 18111 Valley Blvd #B	SQG: County permit	
	Danny's Auto Repair 18131 Valley Blvd	Hazardous waste handler and generator (County permits)	
	18131 Valley Blvd	EDR Historical Auto Station	
52	M & W Wrecker Repair Inc 10163 Magnolia St	Hazardous waste handler and generator, County permits	
	San Bernardino County Fire Dept. Station 76 10174 Magnolia St	LUST	Diesel fuel release affected soil, case closed 1997
		Hazardous materials handler, County permit	
		Haznet	1 shipment of hazardous wastes, 1997
	Partain's Transmission 10163 Magnolia St	Haznet	4 shipments of hazardous wastes, 2005-2009
	10163 Magnolia St	EDR Historical Auto Station	
	Express Mufflers & Radiators 10153 Magnolia St	Haznet	2 shipments of hazardous wastes, 2010
	L B Swift Mfg Inc 10150 Magnolia St	Haznet	28 shipments of hazardous wastes, 2000-2012
		NPDES: Water Quality Treatment Requirement	
53	JG Collision Center 17763 Valley Blvd # C	Haznet	3 shipments of hazardous wastes, 2004 through 2006
54	10138 Locust Ave	EDR Historical Auto Station	
	10133 Locust Ave	EDR Historical Auto Station	
55	Movil LLantera Torres 18058 Taylor Ave	Haulers	waste tire haulers
	18083 Taylor Ave	EDR Historical Auto Station	
56	17930 Taylor Ave	EDR Historical Auto Station	
	Quinonez Mobil Service & Repair 17930 Taylor Ave	Haznet	3 shipments of hazardous wastes, 2010-2012
		SQG: County permit	
57	Aldwin Transportation 17783 Taylor Ave	Haznet	1 shipment of hazardous wastes, 2005
	Gordon's Auto Sales 17805 Taylor Ave	SQG: County permit	
	Felipe's Truck Repair 17863 Taylor Ave	EDR Historical Auto Station	
		SQG: RCRA and County permit	Small quantity generator of hazardous wastes. Permits pursuant to the Resource Conservation and Recovery Act (RCRA) are issued by the US Environmental Protection Agency.

Table 5.6-2 Environmental Database Listings Onsite

Map ID No.	Site Name Address	Database	Reason for Listing and Regulatory Status
		Hazardous materials (County permit)	
		Haznet	1 shipment of hazardous wastes, 2002
	Toledo's Home & Auto Repair 17832 Taylor Ave	EDR Historical Auto Station	
	17876 Taylor St	CDL	
58	US Postal Service 10191 Linden Ave	Haznet	6 shipments of hazardous wastes, 1996-2004
	10192 Linden Ave	CDL	
	Verizon Wireless (Marygold) 10192 Linden Ave #F17	Hazardous materials handler, County permit	

Source: EDR 2015

Table 5.6-3 Environmental Database Listings Offsite (1-Mile Radius)

Map ID No.	Site Name Address Distance from Site	Database	Reason for Listing and Regulatory Status
1	Marygold Mutual Water Co. 9735 Alder Ave 1 mile north	Hazardous materials handler and hazardous waste generator, County permits	
	Grider's Mobile 17682 San Bernardino Ave 1 mile north	Hist UST	4 tanks: 3 gasoline, 1 waste oil
	17682 San Bernardino Ave	EDR Historical Auto Station	
	Ramy's Mufflers 17682 San Bernardino Ave 1 mile north	Historic UST (CA FID UST and SWEEPS UST)	4 tanks: 3 gasoline, 1 waste oil
		Hazardous materials handler and hazardous waste generator, County permits	
2	Marygold Mutual Water Co. 9715 Alder Ave 1 mile north	Hist UST, SWEEPS UST	1 tank, diesel
3	9742 Cedar Ave 1 mile north	EDR Historical Auto Station	
4	American Motorcycle Shop 9783 Alder Ave 0.8 mile north	hazardous waste generator, County permit	
	9783 Alder Ave	EDR Historical Auto Station	
5	Merit Oil 1020 Bloomington Av 0.3 mile northeast	Hist UST	
		LUST	Gasoline release affected soil, case closed 2001
6	9811 Church St 0.2 mile northeast	EDR Historical Auto Station	

Table 5.6-3 Environmental Database Listings Offsite (1-Mile Radius)

Map ID No.	Site Name Address Distance from Site	Database	Reason for Listing and Regulatory Status
7	Autozone #5608 1097 Bloomington Ave 0.25 mile northeast	Hazardous materials handler and hazardous waste generator, County permits	
	1075 Bloomington Ave 0.25 mile northeast	EDR Historical Cleaners	
	Replanet LLC 1055 Bloomington Ave 0.25 mile northeast	SWRCY: Recycling Facility	
8	Mary Gold Project 18352 Marygold Ave Abuts North Boundary	NPDES: Water Quality Treatment Requirement	
9	17837 Marygold Ave North Site Boundary	EDR Historical Auto Station	
	Intown Properties Inc 17862 Marygold Ave Abuts North Site Boundary	Haznet	1 shipment of hazardous waste, 1998
10	Safe Guard Properties LLC 17802 Marygold Ave Abuts North Site Boundary	Haznet	1 shipment of hazardous waste, 2012
12	17494 Marygold Ave 0.25 mile west	EDR Historical Auto Station	
13	9913 Bloomington Ave 0.15 mile northeast	EDR Historical Auto Station	
14	812 W Grovewood Ave 0.2 mile north	EDR Historical Auto Station	
18	9970 Portola Ave 0.15 mile north	EDR Historical Auto Station	
19	Pirate Trucking Rafael Perez 17552 Iris Dr 0.2 mile west	RCRA Non-Gen	
20	Kaiser Foundation Hospital 9961 Sierra Ave. 1 mile west	NPDES: Water Quality Treatment Requirement (construction)	
		UST	
		HIST UST	3 historic USTs; 2 diesel, 1 gasoline
		California Hazardous Material Incident Reporting System (CHMIRS)	Mercury release in demolition site. 2014. Soil remediation.
		Aboveground storage tank	
		Hazardous waste generator	
		Haznet	1 shipment of hazardous wastes, 2013
		EMI: Toxic and criteria air pollutant emissions	
		EnviroStor	Tiered Permit. Needs evaluation.

Table 5.6-3 Environmental Database Listings Offsite (1-Mile Radius)

Map ID No.	Site Name Address Distance from Site	Database	Reason for Listing and Regulatory Status
23	Cactus Elementary School 10050 Cactus Ave 0.2 mile east	School Site Investigation	No Further Action Determination 2003
26	10060 Portola Ave 85 feet north	EDR Historical Auto Station	
33	838 W Valley Blvd 0.15 mile east	EDR Historical Auto Station	
42	17694 Valley Blvd 150 feet west	EDR Historical Auto Station	
	Carey's Valley Texaco 17694 Valley Blvd 150 feet west	Hist UST	3 tanks: 2 gasoline, 1 waste oil
	17678 Valley Blvd 150 feet west	EDR Historical Auto Station	
44	Streicher Mobile Fueling, Inc. 17630 Valley Blvd 0.1 mile west	Hazardous waste handler and generator, County permits	
	Continental Express Inc 17630 Valley Blvd 0.1 mile west	Hist UST	
		Hazardous materials handler and hazardous waste generator, County permits	
45	Steelco Inc 17507 Valley Blvd 0.25 mile west	RCRA Non-Gen	
	Ahern Rental Inc. 17538 Valley Blvd 0.25 mile west	Aboveground storage tank (AST)	
		Hazardous materials handler and hazardous waste generator, County permits	
46	Three Brothers Auto and Truck Recycle 17565 Valley Blvd 0.2 mile west	SQG (RCRA)	
	Riggio, Robert 17565 Valley Blvd 0.2 mile west	Historic UST (SWEEPS UST)	2 tanks
	Bimbo Bakeries USA 17580 Valley Blvd 0.2 mile west	Hazardous materials handler and hazardous waste generator, County permits	
48	Cactus Middle School Valley Boulevard/Cactus Ave Rialto 0.25 mile east	School site investigation	No Further Action determination 2002

Table 5.6-3 Environmental Database Listings Offsite (1-Mile Radius)

Map ID No.	Site Name Address Distance from Site	Database	Reason for Listing and Regulatory Status
59	Solvay Fluorides, LLC 10030 Alder Ave 0.1 mile south	Large quantity generator of hazardous wastes (RCRA-LQG)	
60	California Bio-Mass 10397 Alder Ave 0.2 mile south	Land disposal site (LDS)	
	Gene Belk Fruit Packers 10380 Alder Ave 0.2 mile south	Waste Discharge System (WDS)	Waste discharge [water quality] requirements issued for site
		NPDES	Water Quality Treatment Requirement
		Land disposal site (LDS)	
		DEED: Deed Restriction	Case closed. Salt-affected brine pond capped.
		ENF: Water board enforcement action	
		Aboveground storage tank	
		Hazardous materials handler and hazardous waste generator, County permits	
		Waste Management Unit Database (WMUDS/SWAT)	
		Hist UST	3 tanks, gasoline and diesel
61	10450 Locust Ave 0.25 mile south	EDR Historical Auto Station	
62	Union Pacific Railroad [West Colton Railyard] 19100 Slover Ave 0.4 mile south	California Hazardous Material Incident Reporting System (CHMIRS)	Multiple incidents 2012 – 2015. Substances released: crude oil, asphalt, vapor, dicyclopentadiene, alcohol, lubricating oil, diesel fuel. Released liquids were contained. 3 incidents involved derailments.
		Large quantity generator, hazardous wastes, County permit	
		Envirostor	Releases of oil and grease affected soil. Remediation 1981; case closed 1985.
	Southern Pacific Trans Co. [West Colton Railyard] 19100 Slover Ave 0.4 mile south	Comprehensive Environmental Response, Compensation and Liability Information System: No Further Remedial Action Planned (CERCLIS-NFRAP)	
		Large quantity generator, hazardous wastes (RCRA-LQG)	
63	High School- Cedar Ave Santa Ana Ave/Cedar Ave 0.9 mile south	School Site Investigation	No Further Action Determination 2002
64	Sycamore Hills Elementary School Tamarind Ave/Santa Ana Ave 0.85 mile south	School site investigation	No Further Action Determination 2002

Source: EDR 2015.

Existing Hazardous Materials in the Project Area

Asbestos-Containing Materials

Asbestos is the name of a group of silicate minerals that are heat resistant, and thus were commonly used as insulation and fire retardant. Inhaling asbestos fibers has been shown to cause lung disease (asbestosis) and lung cancer (mesothelioma) (DTSC 2010). Beginning in the early 1970s, a series of bans on the use of certain ACMs in construction were established by the EPA and the Consumer Product Safety Commission. Most US manufacturers voluntarily discontinued the use of asbestos in certain building products during the 1980s. Requirements for limiting asbestos emissions from building demolition and renovation activities are specified in South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). Due to the age of many of the buildings in the project area, they have a high potential for containing ACMs.

Lead

Lead was formerly used as an ingredient in paint (before 1978) and as a gasoline additive; both of these uses have been banned. Lead is listed as a reproductive toxin and a cancer-causing substance; it also impairs the development of the nervous system and blood cells in children (DTSC 2010). Those demolishing pre-1978 structures may presume the buildings contain lead-based paint without inspecting for it. Due to the age of many of the buildings in the project area, they have a high potential for containing lead-based paint.

Potential Hazardous Materials on the Project Site

Much of the project area is shown in agricultural use (orchards, row crops, and possibly grass crops) in a 1938 aerial photograph; agricultural uses declined through 1966 and are not observed on a 1976 aerial photograph (NETR 2015). Therefore, project site soils may be contaminated with chemicals from past agricultural uses, including pesticides and fertilizers.

Airports

The nearest public-use airport to the site is Rialto Municipal Airport, 3.5 miles to the north. The site is not in an area near Rialto Municipal Airport where land uses are regulated to minimize hazards to people on the ground from aircraft crashes (Vidal 1991).

Ontario International Airport is about 10 miles west of the project area. This site is not within Ontario's safety zones (Ontario 2011)

Heliports

Two heliports are within one mile of the project site:

- Fontana Police Heliport, 17005 Upland Avenue, Fontana, 0.9 mile to the west
- Kaiser Hospital Heliport, 9961 Sierra Avenue, Fontana, 0.8 mile to the west (Airnav.com 2015)

Wildfire Hazard Zones

The site is not in a wildfire hazard zone. The nearest Very High Fire Hazard Severity Zone is 2.8 miles to the southwest in the City of Fontana (CAL FIRE 2008).

Emergency Planning

The SBCFD Office of Emergency Services is responsible for disaster planning and emergency management coordination throughout the San Bernardino County Operational Area, which includes the County and all incorporated cities therein. The San Bernardino County Emergency Operations Plan was issued by the Office of Emergency Services on February 26, 2013. The emergency operations plan sets forth the responsibilities of various agencies and officials in emergency preparation, response, and disaster recovery. Hazard assessments and hazard mitigation strategies are set forth in the Multi-jurisdictional Hazard Mitigation Plan Update approved by the Federal Emergency Management Agency on October 11, 2011.

5.6.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

H-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

H-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.

H-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.

H-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.

H-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would result in a safety hazard for people residing or working in the project area.

H-6 For a project in the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.

H-7 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

H-8 Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to the urbanized areas or where residences are intermixed with wildlands.

5.6.3 Environmental Impacts

The following impact analysis addresses thresholds of significance for potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.6.1: Project construction and operations in accordance with the Specific Plan would involve the transport, use, and/or disposal of hazardous materials. [Thresholds H-1, H-2, and H-3]

Impact Analysis:

Hazardous Materials Use

Construction

Construction activities of individual redevelopment/development projects pursuant to the Valley Corridor Specific Plan would use larger amounts of hazardous materials such as fuels, lubricants, and greases in construction equipment and coatings used in construction than would project operation. 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.

Additionally, the use, 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, and transportation 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. 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 SBCFD emergency response plan requirements would be required throughout the duration of the construction of each individual development project. Therefore, no hazards to the public or the environment would arise from the routine use of hazardous materials during project construction, and no impacts would occur.

Operation

Proposed nonresidential land uses that would be permitted under the Specific Plan include commercial, office, light industrial, dining, hotel, and medical offices.

The nonresidential uses that would likely use the greatest amounts of hazardous materials would be light industrial uses in the Bloomington Enterprise district and auto-oriented commercial uses in the Commercial district. The types of hazardous materials used by light-industrial land uses would depend on the specific type of land use; auto-oriented commercial land uses use hazardous materials including oils and other lubricants, solvents, and degreasers.

Operation of other residential and commercial redevelopment/development projects pursuant to the Valley Corridor Specific Plan would involve the use of small quantities of hazardous materials for cleaning and maintenance purposes, such as paints, solvents/cleaners, fuels/greases, and landscaping products. Hazardous materials typically used in residences and commercial uses would not be used or disposed of in large enough quantities to pose a hazard. Project implementation would not result in a substantial net increase in the use of hazardous materials or generation of hazardous waste. Additionally, when used correctly, these cleaning and maintenance materials would not result in a significant hazard to residents in the project area. Project residents and commercial businesses would also have access to the City's various hazardous waste and recycling programs, including the Universal Waste Program. Through this program, residents are provided with collection of universal waste, such as electronics, batteries, and fluorescent tubes. Residents can also take their universal waste to the Household Hazardous Waste Collection centers at the county landfills. The County of San Bernardino also offers free disposal for hazardous waste materials at locations throughout the county.

Additionally, the use, storage, transport, and disposal of hazardous materials by residents and commercial businesses of the proposed project would be required to comply with existing regulations of several agencies, including the DTSC, EPA, California Occupational Safety & Health Administration, and the SBCFD Hazardous Materials Division. Compliance with applicable laws and regulations governing the use, storage, and transportation 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. Impacts would be less than significant.

Accidental Release of Hazardous Materials

During construction of projects pursuant to the Specific Plan and during operation of nonresidential projects, workers would be trained in containment and cleanup of spills of hazardous materials that they could safely contain and clean. Businesses and construction contractors would keep hazardous material spill containment and cleanup supplies on their project sites. Businesses and construction contractors would notify the SBCFD and/or other appropriate emergency response agencies in the event of a hazardous materials release whose amount and/or toxicity onsite workers could not safely contain and clean up. Compliance with various regulations, including hazardous materials release response plans and inventories and the California Accidental Release Prevention Program, would reduce hazards from accidental releases. Impacts would be less than significant.

Impact 5.6-2: The Specific Plan area is on a list of hazardous materials sites. [Threshold H-4]

Impact Analysis: Environmental database listings in the project area and within one mile of it are shown above in Tables 5.6-2 and 5.6-3. Databases documented 15 hazardous materials releases in the Specific Plan area: 3 leaking underground storage tank cases, 1 Emergency Response Notification System listing, 3 Emissions Inventory (EMI) listings of toxic and criteria air pollutant emissions, and 8 clandestine drug lab sites. Four additional listings were documented within one mile of the site: 1 LUST case, 2 EnviroStor cleanup sites, and 1 EMI air pollutant emissions listing.

Apart from the four EMI listings on and within one mile of the site, one offsite listing documents further required action: a tiered permit listing for the Kaiser Foundation Hospital at 9961 Sierra Avenue, one mile west of the site. The substance(s) released and media affected are not specified in the tiered permit listing. A separate California Hazardous Material Incident Reporting System (CHMIRS) listing at the same hospital documents a release of mercury from a broken pipe in a demolition site in 2014; soil remediation was conducted for that release.

Since there are multiple environmental database listing in the project area, redevelopment and development projects pursuant to the Specific Plan would require site specific Phase I Environmental Site Assessments to identify environmental conditions and determine whether contamination is present. This is a significant impact.

Properties contaminated by hazardous substance are regulated at the federal, state, and local level and subject to compliance with stringent laws and regulations for investigation and remediation. For example, compliance with the CERCLA, RCRA, Title 22 of the California Code of Regulations, and related requirements would remedy any potential impacts caused by hazardous substance contamination. Future development would be required to comply with these existing laws and regulations. In addition, mitigation has been incorporated to ensure that contaminated sites are remediated prior to construction.

Impact 5.6-3:	The Specific Plan area is outside of safety zones surrounding Rialto Municipal Airport. Specific Plan buildout would not cause hazards to people living or working onsite. [Thresholds H-5 and H-6]

Impact Analysis: The nearest public use airport to the site is Rialto Municipal Airport about 3.5 miles to the north; the nearest safety zone surrounding Rialto Municipal Airport to the site, in which land uses are regulated to minimize hazards to people on the ground from aircraft crashes, is about 1.6 miles north of the project area. The project area is not within an airport safety zone, and Specific Plan buildout would not cause hazards to people living or working onsite. Impacts would be less than significant.

Impact 5.6-4:	Project development would not affect the implementation of an emergency responder or evacuation plan. [Threshold H-7]

Impact Analysis: Specific Plan buildout would not impair implementation of the San Bernardino County Emergency Operations Plan. Implementation of the Specific Plan buildout would not create a hazard by blocking roadways. It would not interfere with emergency access to the site or surrounding communities. Impacts would be less than significant.

Impact 5.6-5:	The project site is not in a designated fire hazard zone and would not expose structures and/or residences to wildfire danger. [Threshold H-8]

Impact Analysis: Specific Plan implementation would not expose people or structures to wildfire hazards. The nearest Very High Fire Hazard Severity Zone is 2.8 miles to the southwest in the city of Fontana. The project site and surrounding land are almost completely built out with urban uses. The few vacant lots onsite

support sparse ruderal vegetation, such as grasses, and do not support vegetation that could provide substantial fuel for a wildfire—such as forest, chaparral, or coastal sage scrub. No impact would occur.

5.6.4 Cumulative Impacts

The area considered for cumulative hazardous materials impacts is a one-mile radius surrounding the Specific Plan area.

Hazardous Materials

Selected hazardous materials sites within one mile of the project site are listed in Table 5.6-3, above. The construction and operation of other projects in the Community of Bloomington would involve the use, transport, storage, and disposal of hazardous materials. Such uses and handling of hazardous materials would be subject to the same regulations as would projects developed pursuant to the Specific Plan. Therefore, hazards to the public or the environment arising from use of hazardous materials by other projects, or disturbances of existing hazardous materials on the sites of other projects, would be less than significant, and project impacts would not be cumulatively considerable.

Other Hazards (Airport-Related Hazards and Wildfires)

The entire Community of Bloomington is outside of the safety zone surrounding Rialto Municipal Airport; thus, development of related projects would not expose people on the ground to substantial hazards from aircraft crashes. No significant cumulative impact would occur.

About 150 acres in the southwest corner of the Community of Bloomington—that is, about 3.5 percent of the area of the Community—is mapped as Moderate and High Fire Hazard Severity Zones by the California Department of Forestry and Fire Prevention (CAL FIRE 2008). The current land use designation in this part of Bloomington is Rural Living, with maximum permitted densities from 0.5 to 2 residential units per acre. Other projects proposed in this part of Bloomington would be required to comply with existing state and County laws and regulations governing construction materials and methods and clearance and thinning of vegetation surrounding buildings in fire hazard severity zones. Thus, cumulative wildfire hazard impacts would be less than significant, and project impacts would not be cumulatively considerable.

5.6.5 Existing Regulations and Standard Conditions

Federal

- United States Code Title 42, Sections 6901 et seq.: Resource Conservation and Recovery Act
- United States Code Title 42 Sections 9601 et seq.: Comprehensive Environmental Response, Compensation and Liability Act and Superfund Amendments and Reauthorization Act
- United States Code Title 42 Sections 11001 et seq: Emergency Planning & Community Right to Know Act

- United States Code Title 49 Sections 5101 et seq.: Hazardous Materials Transportation Act
- United States Code Title 15 Sections 2601 et seq.: Toxic Substances Control Act
- Federal Response Plan (authorized under United States Code Title 49 Sections 5101 et seq.)

State

- California Health and Safety Code Chapter 6.95 (Hazardous Materials Release Response Plans and Inventory)
- California Code of Regulations, Title 19, Section 2729: Business Emergency Plans
- California Building Code (California Code of Regulations, Title 24, Part 2)
- California Fire Code (California Code of Regulations, Title 24, Part 9)
- California Code of Regulations, Title 8, Section 1529: Worker Safety Standards (Asbestos)
- California Code of Regulations, Title 8, Section 1532.1: Lead

Regional

- South Coast Air Quality Management District Rule 1403

Local

- SBCDC, Section 83.01.060, Fire Hazards

5.6.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.6-1 (transport, use, and/or disposal of hazardous materials), 5.6-3 (airport safety zones), 5.6-4 (emergency evacuation plans), and 5.6-5 (fire hazards).

Without mitigation, this impact would be **potentially significant**:

- **Impact 5.6-2** Multiple hazardous materials sites are listed on environmental databases in and within one mile of the project site.

5.6.7 Mitigation Measures

Impact 5.6-2

HAZ-1 Prior to the issuance of grading permits for new development within the Valley Corridor, the project applicant shall submit a Phase I Environmental Site Assessment (ESA) to identify environmental conditions and determine whether contamination is present. The Phase I ESA shall be prepared by a Registered Professional Engineer and in accordance with the American Society for Testing and Materials (ASTM) Standard E 1527.13, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process." If recognized environmental conditions related to soils are identified in the Phase I ESA, the project applicant shall perform soil sampling as a part of a Phase II ESA. If contamination is found at significant levels, the project applicant shall remediate all contaminated soils in accordance with state and local agency requirements (DTSC, RWQCB, San Bernardino County Fire Department, etc.). All contaminated soils and/or material encountered shall be disposed of at a regulated site and in accordance with applicable laws and regulations prior to the completion of grading. Prior to the issuance of building permits, a report documenting the completion, results, and any follow-up remediation on the recommendations, if any, shall be provided to the Building Official and the San Bernardino County Planning Section evidencing that all site remediation activities have been completed.

5.6.8 Level of Significance After Mitigation

Impacts would be less than significant after implementation of Mitigation Measure HAZ-1.

5.6.9 References

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Ontario, City of. 2011, April 19. LA/Ontario International Airport Land Use Compatibility Plan. http://www.ontarioplan.org/alucp-for-ontario-international-airport/.

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5.7 HYDROLOGY AND WATER QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts of the proposed Specific Plan 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 hydrology analysis relies, in part, on hydrology calculations prepared by Webb Associates included as Appendix J to this DEIR.

5.7.1 Environmental Setting

5.7.1.1 REGULATORY FRAMEWORK

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 US Environmental Protection Agency (EPA) authority to implement pollution control programs. 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 the dredging and filling of 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 discharges (from a discernible, confined, and discrete conveyance, such as a pipe, ditch, or channel) 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, industrial facilities, and urban runoff. Direct sources discharge directly to receiving waters, and indirect sources discharge to publicly owned treatment works, 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 publicly owned treatment works 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, Non-process 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 construction sites one acre or more in size, 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 [BMPs], 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 the land disturbance of greater than or equal to one acre. The current MS4 permit for the portion of San Bernardino County in the Santa Ana Watershed, Order No. R8-2010-0036, was issued by the Santa Ana Regional Water Quality Control Board in 2010. The San Bernardino County Public Works Department is the local enforcing agency of the MS4 NPDES permit.

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act (Water Code §§ 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 issue NPDES permits to the SWRCB. The state is divided into nine regions related to water quality and quantity characteristics. The SWRCB, through its nine Regional Water Quality Control Boards (RWQCBs), carries out the regulation, protection, and administration of water quality in each region. Each RWQCB 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 Bloomington is in the Santa Ana River Basin, Region 8, in the Middle Santa Ana River Watershed. The water quality control plan for the Santa Ana River Basin was updated in 2008. 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 those standards.

Applicable Plans and Programs

Rialto Master Drainage Plan

The City of Rialto has included the Bloomington area in its master drainage plan. The City of Rialto Draft Master Drainage Plan (2010) recommended a network of underground storm drain pipes sized from 36 to 78 inches throughout the project area, with the capacity range between a 25- and 100-year storm event.

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 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 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.

San Bernardino County Stormwater Program

The Technical Guidance Document (TGD) for Water Quality Management Plans issued by the San Bernardino County Stormwater Program took effect in September 2013. The TGD provides guidance on developing water quality management plans for projects and selecting BMPs for a project, including low-impact development (LID) BMPs, alternatives to LID BMPs in case LID BMPs are impracticable on a site, and source control BMPs.

Low-impact development is defined in the TGD as a stormwater management and land development strategy that combines a hydrologically functional site design with pollution prevention measures to compensate for land development impacts on hydrology and water quality. LID techniques mimic the site predevelopment site hydrology by using site design techniques that store, infiltrate, evapotranspire, biofilter, or detain runoff close to its source. LID BMPs are grouped in two general categories:

- **Preventive measures** are site planning, design and construction practices that focus on minimizing the amount of land disturbed and retaining, to the maximum extent practicable, the natural drainage characteristics of the site.
  - Preserve natural infiltration capacity
  - Preserve existing drainage patterns
  - Protect existing vegetation and sensitive areas
  - Minimize impervious areas
  - Disconnect impervious areas
  - Minimize construction footprint
  - Minimize unnecessary compaction
  - Minimize removal of native vegetation

- **Mitigative measures**, if required, are structural BMPs that manage impacts from stormwater runoff and provide pollutant reduction.
  - Infiltration
  - Stormwater harvest and use
  - Bioretention and biofiltration (CDM Smith 2013)

Alternatives to LID BMPs include onsite and off-site treatment BMPs.

Priority projects are required to infiltrate stormwater to the maximum extent practicable and to use biotreatment and harvest and BMPs for the remainder of the design capture volume—that is, approximately the stormwater volume from a 24-hour, 85th-percentile (or two-year) storm.[1]

Priority projects include the following categories of projects:

- Redevelopment projects adding or replacing 5,000 square feet or more of impervious area
- New development projects creating 10,000 square feet or more of impervious area
- New development or redevelopment of auto repair shops of 5,000 or more square feet
- New development or redevelopment of restaurants of 5,000 or more square feet
- Developments of 5,000 square feet or more on hillsides of 25 percent or more natural slope
- Parking lots of 5,000 square feet or more exposed to stormwater
- New development or redevelopment of gas stations of 5,000 square feet or more (CDM Smith 2013)

Source control BMPs reduce the potential for pollutants to enter runoff and are classified in two categories—structural and nonstructural. Structural source control BMPs have a physical or structural component, such as inlet trash racks, trash bin covers, and an efficient irrigation system, to prevent pollutants from contacting stormwater runoff. Nonstructural source control BMPs are procedures or practices used in project operation, such as stormwater training or trash management and litter control practices.

San Bernardino County Development Code

The San Bernardino County Development Code (SBCDC) provides an additional layer of requirements to protect people and structures from flood hazards and water quality.

- **Chapter 83.15, Conditional Compliance for Water Quality Management Plans:** The purpose of this chapter is to ensure compliance with conditions of approval on projects involving Water Quality Management Plan features.

- **Chapter 85.11, Pre-Construction Flood Hazard and Soil Erosion Pollution Prevention Inspection:** The purpose of this chapter is to control soil erosion pollution and regulate construction of proposed structures that are subject to flood hazards due to storm events within local flood hazard areas that are

[1] A 24-hour, 85th percentile storm is a storm of 24 hours duration that is more severe than 85 percent of the storms in that area; it is approximately equivalent to a two-year storm.

not within a designated Flood Plain Safety (FP) Overlay District or Floodway (FW) Land Use Zoning District.

- **Chapter 89.01, Drainage Facilities Financing:** The purpose of this Chapter is to require the payment of drainage fees for most new construction that is within an adopted Local Area Drainage Plan. The fees shall be paid prior to the issuance of Building Permits for the purposes of defraying the actual or estimated costs of constructing planned drainage facilities.

5.7.1.2 EXISTING CONDITIONS

Regional Drainage

The project area is in the Middle Santa Ana River Hydrologic Unit of the Santa Ana Watershed (see Figure 5.7-1, *Santa Ana Watershed*). The Santa Ana Watershed spans nearly 2,800 square miles from the San Gabriel and San Bernardino mountains on the north, to the San Jacinto Mountains on the east, to the Pacific Ocean on the southwest. The Santa Ana River extends 96 miles from the San Bernardino Mountains in San Bernardino County to the Pacific Ocean at the boundary between Huntington Beach and Newport Beach. The Santa Ana River passes 2.6 miles southeast of the site.

The Middle Santa Ana River Hydrologic Unit spans 292 square miles, encompassing much of the central part of the Upper Santa Ana River Valley and extending north into the southeast corner of the San Gabriel Mountains (see Figure 5.7-1). The Santa Ana River extends northeast-southwest through the central part of the Middle Santa Ana River Hydrologic Unit. Drainage from the San Gabriel Mountains moves southward toward the Santa Ana River. Several tributaries to the Santa Ana River have been channelized in the western part of the hydrologic unit, including Etiwanda Creek and Day Creek. East Etiwanda Creek passes six miles northwest of the site. Lytle Creek, east of the hydrologic unit, passes 4.1 miles northeast of the site.

Local Surface Waters and Drainage

The project area is in Zone 2 of San Bernardino County Flood Control District (SBCFCD), in the Fontana-Rialto Drainage Area. Currently, neither interim nor ultimate SBCFCD flood control facilities are identified within the project boundary. The project area has a gentle south-southeast slope. Elevations onsite range from about 1,075 feet above mean sea level at the southeast corner of the site to about 1,130 feet at the northwest corner of the site.

The regional flood control facilities within the project's watershed include the East Fontana Storm Drain Channel, which is 1.5 miles north of the project boundary and midway between Merrill Avenue and Arrow Boulevard and intercepts storm runoff north of the channel. The runoff from the East Fontana Channel discharges into Merrill Basin and Linden Basin, outlets into the Rialto Channel, and ultimately discharges south to Santa Ana River. The Rialto Channel, an engineered concrete drainage channel, passes about 0.5 mile northeast of the site and discharges into the Santa Ana River about 2.7 miles southeast of the site. Rialto maintains storm drain pipes along Merrill Avenue and Randall Avenue from Linden Avenue to the east that discharge into the Rialto Channel.

Currently, the storm runoff sheet flows from north to south through the project area to the Caltrans Channel along the north side of I-10; runoff from the entire project area drains into the Caltrans Channel. The Caltrans Channel mostly consists of a concrete-lined open channel, except for a portion of underground culvert along the Cedar Avenue ramp. The Caltrans Channel discharges to the Rialto Channel, which outlets to the Santa Ana River.

Existing project area drainage facilities are listed below:

- A Caltrans storm drain extends east-west in the I-10 right-of-way along the south site boundary.
- A 60-inch County storm drain extends north-south in Linden Avenue between Valley Boulevard and the south site boundary.
- A 72-inch County storm drain extends north-south in Cedar Avenue between Bloomington Avenue and the south site boundary.
- A 48-inch City of Rialto storm drain extends north-south in Spruce Avenue between Valley Boulevard and the south site boundary. (Hall and Foreman 2009).
- Storm drain culverts exist along Valley Boulevard at the intersections of Alder, Locust, Linden, and Cedar.
- Storm drain inlets exist along Valley Boulevard, Linden Avenue, Cedar Avenue, and Spruce.

Surface Water Quality

The nearest water body to the project area listed on the CWA Section 303(d) List of Water Quality Limited Segments is Reach 4 of the Santa Ana River 2.6 miles to the southeast. Reach 4 is listed for pathogens; a total maximum daily load for pathogens in Reach 4 is scheduled for completion in 2019 (SWRCB 2013).

Groundwater

The project area is located northeast and upstream of the Chino Subbasin of the Upper Santa Ana Groundwater Basin; the 240-square-mile Chino Subbasin underlies most of the west and central Upper Santa Ana River Valley (see Figure 5.7-2, *Upper Santa Ana Groundwater Basin*).

Groundwater Quality

No groundwater contamination sites have been identified for the project area on the GeoTracker database maintained by the SWRCB (SWRCB 2015).

Figure 5.7-1 - Santa Ana Watershed

Santa Ana Watershed

0 10
Scale (Miles)

Base Map Source: ESRI, USGS, NOAA, 2016

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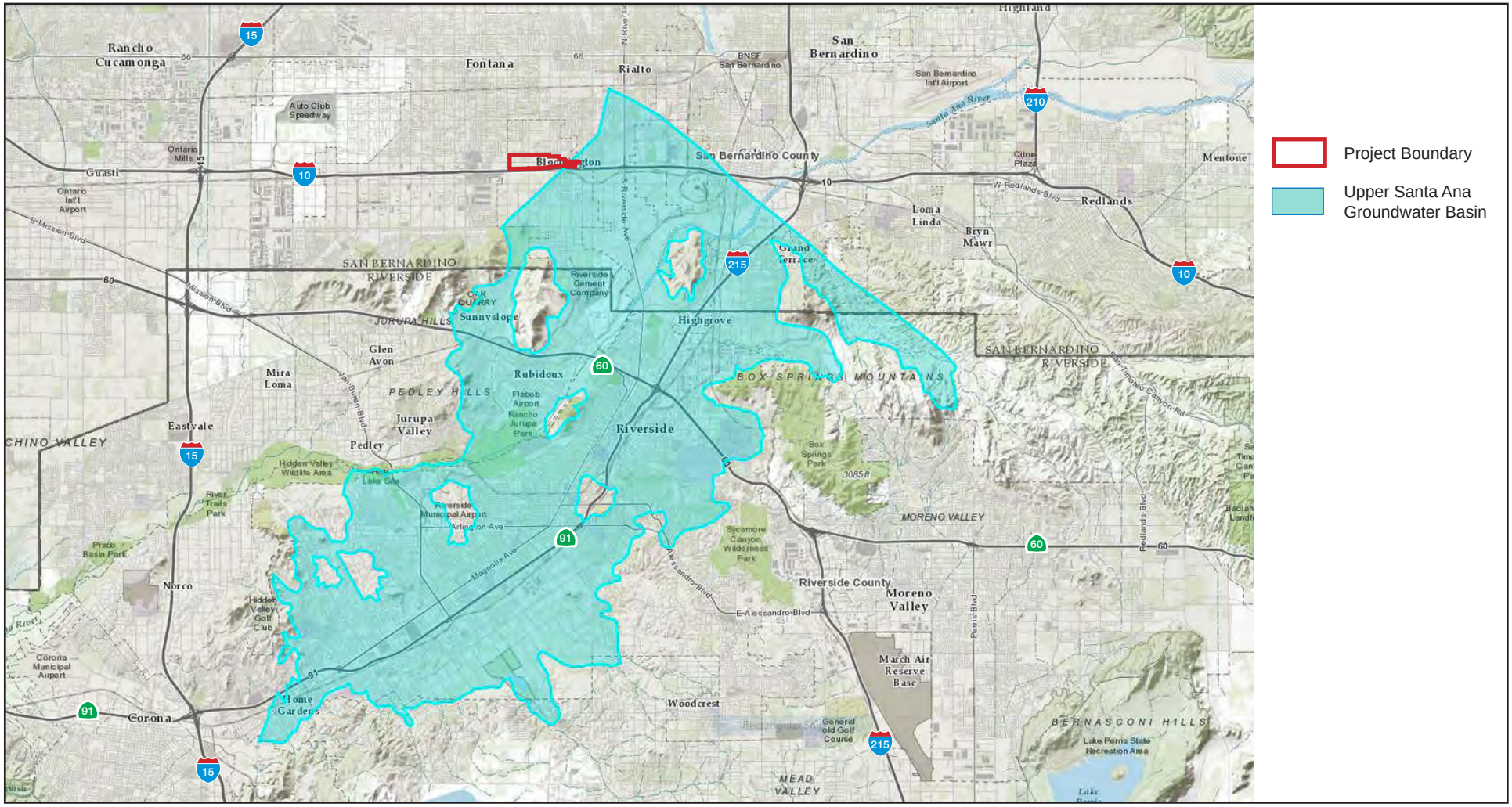
Figure 5.7-2 - Upper Santa Ana Groundwater Basin

5. Environmental Analysis



Base Map Source: ESRI, USGS, NOAA, 2016

5. Environmental Analysis
HYDROLOGY AND WATER QUALITY

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Flood Hazards

Designated Flood Zones

The project area is mapped in flood zone X by the Federal Emergency Management Agency, meaning that it is outside of 100-year and 500-year flood zones (FEMA 2014).

Seismically Induced Dam Inundation

There are no dams upstream from the site on Cajon Creek or Lytle Creek that could pose a dam inundation hazard. The project area is outside of the dam inundation zone for Seven Oaks Dam, which is upstream from the site on the Santa Ana River (Cal/EMA 2007).

Seiche

A seiche is a surface wave created when an inland water body is shaken, usually by an earthquake. There are no inland water bodies close enough to the area to pose a flood hazard at the site due to a seiche.

Tsunami

A tsunami is a sea wave caused by a sudden displacement of the ocean floor, most often due to earthquakes. There is no tsunami flood hazard onsite, since the site is approximately 40 miles inland from the Pacific Ocean and at an elevation of at least 1,130 feet above mean sea level.

Mudflows

A mudflow is a landslide composed of saturated rock debris and soil with a consistency of wet cement. The site is flat with a very slight south-southeast slope, and there are no slopes on or next to the site that could generate a mudflow.

5.7.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, 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.

HYD-2 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted.

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, in a manner which would result in a substantial erosion or siltation on- or off-site.

HYD-4 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

HYD-5 Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

HYD-6 Otherwise substantially degrade water quality.

HYD-7 Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

HYD-8 Place within a 100-year flood hazard area structures which would impede or redirect flood flows.

HYD-9 Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

HYD-10 Be subject to inundation by seiche, tsunami, or mudflow.

U-3 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. [This threshold was moved from Section 5.14, *Utilities and Service Systems*.]

5.7.3 Environmental Impacts

The applicable impact thresholds are identified in brackets after the impact statement.

Impact 5.7-1: Development pursuant to the proposed Specific Plan would increase the amount of impervious surfaces on the site and would increase surface water flows into drainage systems in the watershed requiring system upgrades. [Thresholds HYD-4, HYD-5, and U-3]

Impact Analysis: Although the project area is mostly developed, much of the site (especially in the northwest quadrant) consists of large parcels (i.e., a few acres each) with one to a few buildings per parcel. Thus, Specific Plan buildout would increase the impervious area onsite.

Post-project Hydrology

Each development or redevelopment project carried out pursuant to the Specific Plan would be mandated to meet requirements of the San Bernardino County Stormwater Program and the MS4 Permit.

The Specific Plan area is in an area with mostly well-drained sand and gravel soils that provide opportunities for infiltration, bio-filtration, and bio-retention. Project-specific water quality management plans would determine whether infiltration was feasible on each project site.

Each priority project would be required to infiltrate stormwater to the maximum extent practicable and to use biotreatment and harvest and BMPs for the remainder of the design capture volume—that is, approximately

the stormwater volume from a 24-hour, 85th-percentile (or two-year) storm. Therefore, Specific Plan buildout is not expected to cause a substantial increase in runoff from the site.

Proposed Drainage

Full buildout of the Specific Plan would include construction of the proposed drainage facilities listed in Table 5.7-1 and shown on Figure 5.7-3, *Proposed Drainage*. These improvements are identified in Rialto's Master Plan of Drainage. Storm drains are proposed under all the arterial roadways within and bordering the site in sizes ranging from a 9-foot by 10-foot reinforced concrete box to 36-inch reinforced concrete pipes (RCPs). Proposed storm drains would have capacity for maximum runoff rates from storms ranging from a 25-year storm to a 100-year storm.

Table 5.7-1 Proposed Drainage Facilities Onsite

Roadway	Segment Location and Length (feet)	Size/Diameter and Type of Facility	Name or Reference
Alder Avenue	Marygold Avenue to Valley Boulevard	78-inch RCP	Rialto MDP
	Valley Boulevard to I-10	9-foot by 10-foot reinforced concrete box	Rialto MDP
Locust Avenue	Marygold Avenue to Valley Boulevard	66-inch RCP	Rialto MDP
	Valley Boulevard to I-10	60-inch to 78-inch RCP	Line A
Linden Avenue	Marygold Avenue to Valley Boulevard	54-inch RCP	Rialto MDP
	Valley Boulevard to I-10	48-inch RCP to 60-inch RCP	Line B
Cedar Avenue	Grove Place to Valley Boulevard	54-inch RCP	Rialto RCP
	Valley Boulevard to I-10	72-inch RCP	Rialto MDP
Larch Avenue	Valley Boulevard to I-10	36-inch RCP	Rialto MDP
Spruce Avenue	North of Valley Boulevard	36-inch RCP[1]	Rialto MDP
Bloomington Avenue	From Cedar Avenue to site boundary	42-inch RCP	Rialto MDP
Marygold Avenue	Extending west from Locust Avenue about 1,650 feet	60-inch reinforced concrete pipe (RCP)	Rialto MDP
	Extending west from Linden Avenue about 1,650 feet	60-inch RCP	Rialto MDP
Valley Boulevard	Extending west from Locust Avenue about 1,650 feet	48-inch to 54-inch RCP	Line A
	Extending west from Linden Avenue about 1,120 feet	36-inch to 48-inch RCP	Line B
	Extending west from Cedar Avenue about 920 feet	42-inch RCP	Rialto MDP
	Extending west from Larch Avenue about 550 feet	36-inch RCP	
	Extending west from Spruce Avenue about 980 feet	42-inch RCP	Rialto MDP

Source: Albert A. Webb 2015.
Note: MDP = Master Drainage Plan
[1] An existing 48-inch RCP extends under Spruce Avenue from Valley Boulevard to the I-10 drainage channel.

Implementation of the Specific Plan would require two segments of the storm drain system to be upsized to facilitate future Rialto Master Drainage Plan connections, Line A and B. However, it should be noted that the proposed Specific Plan does not need to connect to Rialto's upstream facilities in order to convey stormwater flows from the project area. Storm Drain Line A on Locust Avenue between Valley Boulevard and the Caltrans Channel would be increased from a 60-inch to a 78-inch RCP. Storm Drain Line B on Linden Avenue between Valley Boulevard and Caltrans Channel would be increased from a 48-inch to a 60-inch RCP. These upgrades would be required to offset stormwater impacts created by the proposed Specific Plan (see Specific Plan Section 3.5.2, Drainage Plan). Line A and Line B upgrades are needed to convey future project flows from implementation of the Specific Plan at buildout.

Buildout of the Specific Plan, including infrastructure improvements, has been considered throughout this DEIR. The proposed storm drains, as with all utilities, would be built within public roadway rights-of-way in soils previously disturbed by construction of the roadways and existing utilities. New projects creating 10,000 square feet or more of impervious surface or redevelopment projects that would add or replace 5,000 square feet or more of impervious surface require an MS4 permit, which requires stormwater treatment measures. Under the permit, project must temporarily retain the volume of runoff produced by a 24-hour, 85th percentile storm event or maximum flow rate from a rainfall intensity of 0.2 inches of rainfall per hour. Compliance with the MS4 permit would reduce impacts related to stormwater runoff to the Caltrans Channel. In addition, an encroachment permit from Caltrans is required to discharge into Caltrans facilities. In accordance with the Specific Plan, future site-specific drainage analysis is required to protect the Caltrans Channel (see Specific Plan Section 3.5.2, Drainage Plan, Additional Requirements). Mitigation has been provided to ensure that future projects conduct a site-specific drainage analysis and ensure that any net increase of stormwater flows are adequately conveyed.

Impact 5.7-2: Development pursuant to the proposed Specific Plan would increase the amount of impervious surfaces on the site and would therefore impact opportunities for groundwater recharge. [Threshold HYD-2]

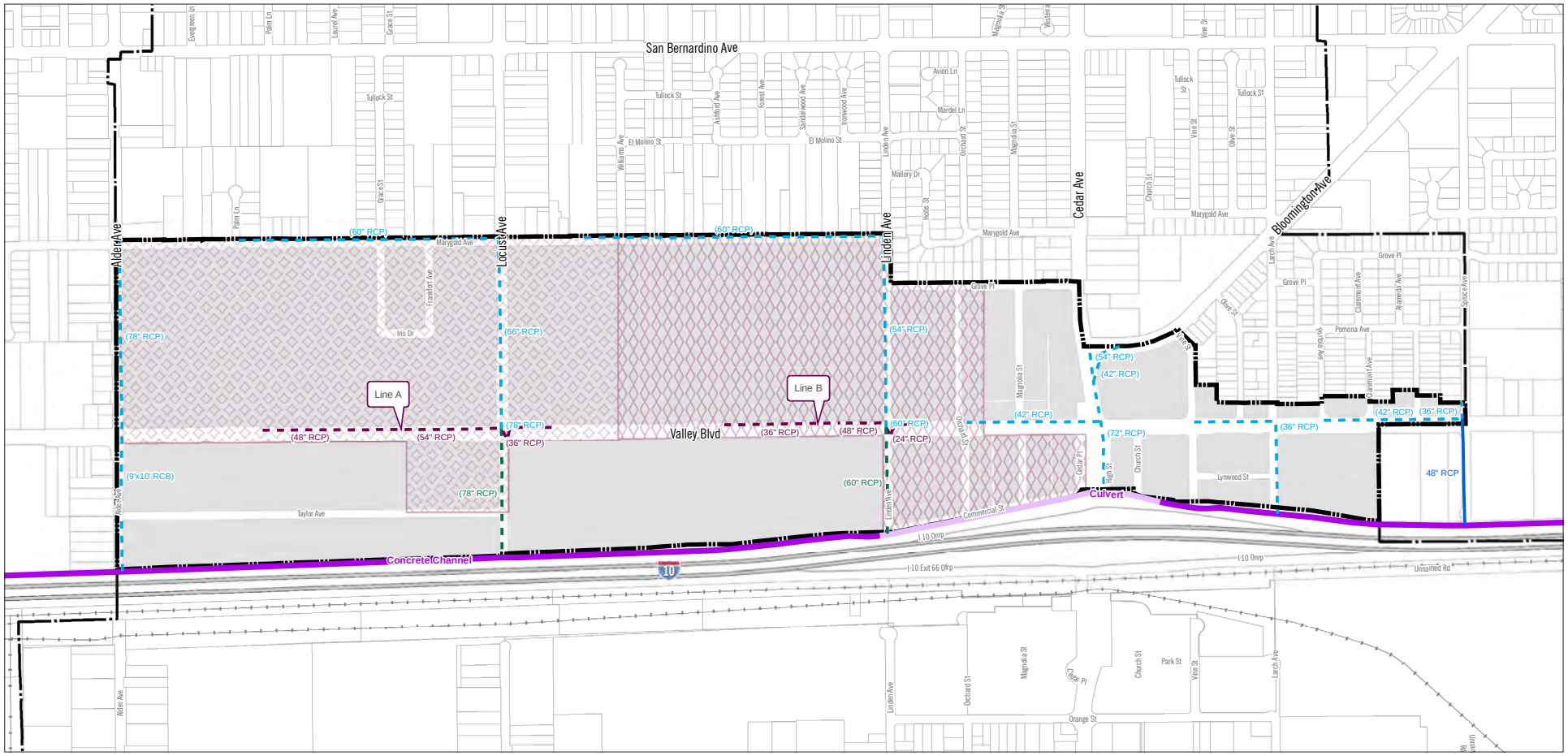
Impact Analysis: Specific Plan buildout would result in some increases in impervious surfaces in the project area. However, priority projects, as described above under the San Bernardino County Stormwater System, developed or redeveloped pursuant to the Specific Plan would infiltrate stormwater to the maximum extent practicable. Infiltration is expected to be feasible onsite, because site soils are well-drained sand and gravel. Standard performance measures for Low Impact Development BMPs, such as enhanced landscaping, self-treating areas for water quality treatment, and permeable pavement for water infiltration are some examples of features that are required with new developments and would increase would increase groundwater recharge capacity. Therefore, Specific Plan buildout is not anticipated to substantially reduce groundwater recharge. Impacts would be less than significant.

Impact 5.7-3: The project area is outside of 100-year flood hazard areas. [Thresholds HYD-7 and HYD-8]

Impact Analysis: The project site is outside of 100-year and 500-year flood hazard zones. Specific Plan buildout would not subject people or structures to 100-year flood hazards and would not place structures in a 100-year flood hazard zone that would redirect flood flows. No impact would occur.

Figure 5.7-3 - Proposed Drainage

5. Environmental Analysis



Existing Storm Drain Lines
- Caltrans Concrete Channel
- Caltrans Culvert
- Rialto Master Drainage Plan

Proposed Storm Drain Lines
- Specific Plan Facility Drainage
- Rialto Master Drainage Plan
- Future Rialto Master Drainage Plan

- Line A Watershed
- Line B Watershed
- Valley Corridor Specific Plan Boundary
- Bloomington Community Boundary

Existing Storm Drain Label
60" RCP
Material Type
Size of Line

Proposed Storm Drain Label
(60" RCP)
Material Type
Size of Line

Storm Drain Material Types
RCP (reinforced concrete pipe)
RCB (reinforced concrete box culvert)

0 700
Scale (Feet)

Base Map Source: ESRI, 2016; WEBB

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Impact 5.7-4:	During the construction phase of the proposed project, there is a potential for short-term unquantifiable increases in pollutant concentrations from the site. After project development, the quality of storm runoff (sediment, nutrients, metals, pesticides, pathogens, and hydrocarbons) may be altered. [Thresholds HYD-1, HYD-3, and HYD-6]

Impact Analysis:

Construction Phase

Construction activities related to the buildout of the Specific Plan would potentially result in soil erosion and temporary adverse impacts to surface water quality from construction materials and wastes. Construction would produce typical pollutants such as metals, nutrients, pesticides, organic compounds, sediments, trash and debris, oxygen-demanding substances, and oil and grease. Clearing, grading, excavation, and other construction activities may impact water quality due to sheet erosion of exposed soils and subsequent depositing of sediment in local drainages. Grading activities in particular lead to exposed areas of loose soil and sediment stockpiles that are susceptible to uncontrolled sheet flow. Although erosion occurs naturally in the environment, primarily from weathering by water and wind, improperly managed construction activities can substantially accelerate erosion, which is detrimental to the environment.

Construction General Permit

Prior to the issuance of grading permits, project applicants are required to provide evidence that the development of projects with one acre or greater of soil disturbance comply with the most current NPDES Construction General Permit. In accordance with the updated permit, the following permit registration documents are required to be submitted to the SWRCB prior to commencement of construction activities:

- Notice of intent
- Risk assessment (standard or site specific)
- Particle size analysis (if site-specific risk assessment is performed)
- Site map
- SWPPP
- Postconstruction water balance calculator (unless covered under MS4 permit)
- Active treatment system design documentation (if treatment system is necessary)
- Annual fee and certification

Best Management Practices

In accordance with the existing and updated Construction General Permit, a construction SWPPP must be prepared and implemented at all construction projects with one acre or greater of soil disturbance, and revised as necessary as administrative or physical conditions change. The SWPPP must be made available for review upon request. It must describe construction BMPs that address pollutant source reduction and provide measures/controls necessary to mitigate potential pollutant sources. These measures/controls include, but are not limited to erosion controls, sediment controls, tracking controls, nonstormwater management, materials

and waste management, and good housekeeping practices. The BMPs for construction activities are briefly discussed below. Construction BMPs are summarized in Table 5.7-2 below.

Table 5.7-2 Construction Best Management Practices

Category	Purpose	Examples
Erosion Controls and Wind Erosion Controls	Cover and/or bind soil surface, to prevent soil particles from being detached and transported by water or wind	Mulch, geotextiles, mats, hydroseeding, earth dikes, swales
Sediment Controls	Filter out soil particles that have been detached and transported in water.	Barriers such as straw bales, sandbags, fiber rolls, and gravel bag berms; desilting basin; cleaning measures such as street sweeping
Tracking Controls	Minimize the tracking of soil offsite by vehicles	Stabilized construction roadways and construction entrances/exits; 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.	BMPs specifying methods for: paving and grinding operations; cleaning, fueling, and maintenance of vehicles and equipment; concrete curing; concrete finishing.
Waste Management and Controls (i.e., good housekeeping practices)	Management of materials and wastes to avoid contamination of stormwater.	Spill prevention and control, stockpile management, and management of solid wastes and hazardous wastes.

Source: CASQA 2003.

Prior to commencement of construction activities within the Specific Plan area, the project-specific SWPPP(s) would be prepared in accordance with the site-specific sediment risk analyses based on the grading plans, with erosion and sediment controls proposed for each phase of construction for the individual project. The phases of construction would define the maximum amount of soil disturbed, the appropriate size for sediment basins, and other control measures to accommodate all active soil disturbance areas and the appropriate monitoring and sampling plans.

SWPPPs would require projects to plan BMPs for four general phases of construction: (1) grading and land development (e.g., mass grade & rough grade), (2) utility and road installation, (3) vertical construction, and (4) final stabilization and landscaping. Therefore, BMP implementation for new construction can be evaluated in this general context. Site-specific details on individual BMPs would be dependent on the scope and breadth of each future project, which are not known at this time.

Both state and local regulations would effectively mitigate construction stormwater runoff impacts from the buildout of the proposed Specific Plan. The San Bernardino County Development Code (SBCDC) Section 85.11.030 requires standard erosion control practices to be implemented for all construction. Additionally, construction sites are required to prepare and implement a SWPPP in accordance with the requirements of the statewide Construction General Permit and are subject to the oversight of the Santa Ana RWQCB. The

SWPPP must include BMPs to reduce or eliminate erosion and sedimentation from soil-disturbing activities, as well as proper materials and waste management. Implementation of these state and local requirements would effectively protect projects from violating any water quality standards or waste discharge requirements from construction activities.

Operations Phase

Project buildout may create new sources for runoff contamination through changing land uses. As a consequence, the implementation of the Specific Plan may have the potential to increase the post-construction pollutant loadings of certain constituent pollutants associated with the proposed land uses and their associated features. Some common pollutants associated with office, commercial, and residential developments include bacteria/pathogens, metals, nutrients, oil/grease, sediment, organic compounds, trash/debris, oxygen-demanding substances, and pesticides.

Best Management Practices

Proposed developments in the Specific Plan area that discharge urban runoff to the Santa Ana River Watershed must comply with the requirements of the MS4 Permit (Permit Order No. R8-2010-0036). Priority projects must implement LID BMPs to the maximum extent practicable in order to reduce the discharge of pollutants to receiving waters. They are required to implement site design/LID and source control BMPs applicable to their specific priority project categories, as well as implement treatment control BMPs where necessary. Selection of LID and additional treatment control BMPs is based on the pollutants of concern for the specific project and the BMPs' ability to effectively treat those pollutants, in consideration of site conditions and constraints. Further, projects must develop a project-specific LID design plan that describes the menu of BMPs chosen for the project as well as operation and maintenance requirements for all structural and any treatment control BMPs. The benefits of implementing LID may include groundwater recharge through infiltration of runoff, reduction of downstream drainage facilities, lower maintenance and operation costs, and improved aesthetic appeal.

Since the proposed Specific Plan does not include a specific or detailed development plan, project-specific BMPs would be developed at the time of the proposed development. However, site soils consist mostly of sand and gravel and are well drained; thus, infiltration, biofiltration, and bioretention are expected to be feasible onsite. Priority projects would use biofiltration and/or bioretention as needed for any remainder of the design capture volume for each respective project. Project-specific water quality management plans may include, but not be limited to, the following measures:

- Preventive Measures
  - Front yard landscaping for residential developments
  - Building setback area landscaping for commercial developments
  - Street landscaping
  - Permeable pavement for parking lot areas

- Mitigative Measures
  - Slope planting
  - Infiltration basin and trench
  - Bioretention facilities and extended detention basins

- Structural Source Control BMPs
  - Catch basin stenciling

- Nonstructural Source Control BMPs
  - Public education programs
  - Scheduled street sweeping

Implementation of project-specific water quality management plans for projects developed or redeveloped pursuant to the Specific Plan would not result in operational water quality impacts. Individual projects under the Specific Plan would be required to effectively retain or treat the 85th percentile 24-hour stormwater runoff for pollutants prior to discharge off their property. As more and more properties in the Specific Plan area undergo redevelopment as part of buildout, properties without water quality BMPs would be replaced by projects incorporating LID BMPs. Therefore, long-term surface water quality of runoff from the Specific Plan area would be expected to improve over existing conditions as more LID BMPs are implemented with redevelopment projects. Additionally, SBCDC Chapter 83.15 provides requirements to ensure compliance with projects subject to water quality management plans. This would be considered an overall beneficial effect of the proposed Specific Plan.

Impact 5.7-5: The project site is not in the inundation area of any dam. [Threshold HYD-9]

Impact Analysis: The project area is not in a dam inundation area (Cal/EMA 2007), and Specific Plan buildout would not expose people or structures to flood hazards arising from dam failure. No impact would occur.

Impact 5.7-6: The site would not be subject to inundation by seiche, tsunami, or mudflow. [Threshold HYD-10]

Impact Analysis: Specific Plan implementation would not expose people or structures to flood hazards from a seiche, tsunami, or mudflow. There are no inland water bodies close enough to the site to pose a flood hazard to the site due to a seiche. There is no tsunami flood hazard onsite because the site is approximately 40 miles inland from the Pacific Ocean and at an elevation of at least 1,130 feet. The site is flat with a very slight south-southeast slope, and there are no slopes on or next to the site that could generate a mudflow. No impact would occur.

5.7.4 Cumulative Impacts

The area considered for cumulative impacts to hydrology and water quality is the Middle Santa Ana River and Chino Creek hydrologic units of the Santa Ana River Watershed, totaling about 523 square miles. The Chino Subbasin of the Upper Santa Ana River Groundwater Basin is within these two hydrologic units. The two hydrologic units combined span much of the southwest corner of San Bernardino County and small portions of eastern Los Angeles County and northwestern Riverside County.

Hydrology

Projects outside and upstream of the Specific Plan area would increase the amount of impermeable surfaces in the SBCFCD's Zone 2. Priority projects are required under the San Bernardino County Stormwater Program to infiltrate, biotreat, and/or harvest and use the design capture volume—that is, approximately the stormwater volume from a 24-hour, 85th percentile (or two-year) storm. Since each project within the drainage watershed would be required to adequately treat stormwater runoff the proposed project would not cumulatively contribute to stormwater impacts. Thus, impacts of related projects on municipal drainage system capacity are expected to be less than significant, and project impacts on drainage capacity would not be cumulatively considerable.

Water Quality

Projects outside of the Specific Plan boundary would increase the amount of impervious areas in the region and thus could increase runoff within the watershed. Such projects would also be required to prepare and implement water quality management plans that specify LID BMPs, thus mimicking predevelopment hydrology and reducing pollutant concentrations in stormwater. Source control BMPs would also reduce the potential for pollutants to enter stormwater runoff. These projects would also be required to implement SWPPPs that specify BMPs to be used during project construction to minimize stormwater pollution.

Cumulative hydrology and water quality impacts would be less than significant, and project impacts would not be cumulatively considerable.

5.7.5 Existing Regulations and Standard Conditions

Federal

- United States Code, Title 33, Sections 1251 et seq.: Clean Water Act
- Code of Federal Regulations Title 40 Parts 122 et seq.: National Pollutant Discharge Elimination System (NPDES)
- Code of Federal Regulations Title 33 Parts 320–332: Regulatory Program Regulations

State

- California Water Code Sections 13000 et seq.: Porter-Cologne Water Quality Act

- Order No. 2012-0006-DWQ, Statewide General Construction Permit, State Water Resources Control Board

Regional

- Order No. R8-2010-0036: MS4 Permit for the portion of San Bernardino County in the Santa Ana Watershed

Local

- SBCDC, Chapter 83.15, Conditional Compliance for Water Quality Management Plans
- SBCDC, Section 85.11.015 (flood hazard inspection)
- SBCDC, Section 85.11.030 (erosion control)
- SBCDC, Chapter 89.01, Drainage Facilities Financing

5.7.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.7-2 (groundwater recharge), 5.7-3 (flood hazards), 5.7-4 (water quality), 5.7-5 (dam inundation), and 5.7-6 (seiche, tsunami, mudflow).

Without mitigation, the following impacts would be potentially significant:

- **Impact 5.7-1** Development pursuant to the proposed Specific Plan would require storm drain upgrades.

5.7.7 Mitigation Measures

HYD-1 Prior to project approval for future development projects in the Valley Corridor Specific Plan, applicants shall submit site-specific hydrology and hydraulic studies to the Public Works Department for review and approval. If existing facilities including the Caltrans Channel are not adequate to handle runoff generated by the proposed development, then the applicant shall construct storm drain improvements. If necessary storm drain upgrades cannot be implemented prior to issuance of occupancy permits, the applicant shall provide onsite detention facilities, or other methods to ensure that post-construction runoff does not exceed pre-development quantities.

5.7.8 Level of Significance After Mitigation

The mitigation measures identified above would reduce potential impacts associated with hydrology to a level that is less than significant. Therefore, no significant unavoidable adverse impacts relating to hydrology and water quality would remain.

5.7.9 References

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5.8 LAND USE AND PLANNING

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts to land use in the community of Bloomington and San Bernardino County from implementation of the Valley Corridor Specific Plan (proposed project). This section is based on the proposed land use designations described in detail in Chapter 3, *Project Description*, and shown in Figure 3-4, *Proposed Land Use Districts and Zoning Designations*. The proposed project has been evaluated for its consistency with relevant goals and policies in the San Bernardino County General Plan; the County's zoning code; the Bloomington Community Plan, and the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

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.

5.8.1 Environmental Setting

5.8.1.1 REGULATORY BACKGROUND

Regional laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

Regional Plans

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 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. As the southern California region's MPO, SCAG cooperates with the South Coast Air Quality Management District (SCAQMD), the California Department of Transportation (Caltrans), and other agencies in preparing regional planning documents. SCAG has developed regional plans to achieve specific regional objectives, as discussed below.

The Specific Plan is considered a project of "regionwide significance" pursuant to the criteria outlined in SCAG's Intergovernmental Review Procedures Handbook (November 1995) and Section 15206 of the CEQA Guidelines. Therefore, this section addresses the proposed project's consistency with the applicable SCAG regional planning guidelines and policies.

Regional Transportation Plan/Sustainable Communities Strategy

On April 7, 2016, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016–2040 RTP/SCS), a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2016 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the National Ambient Air Quality Standards. This long-range plan, required by the state of California and the federal government, is updated by SCAG every four years as demographic, economic, and policy circumstances change. The 2016 RTP/SCS is a living, evolving blueprint for the region's future (SCAG 2016).

Unique to the SCAG region is the option for subregions to create their own SCS. However, the San Bernardino Associated Governments (SANBAG), of which the County of San Bernardino is a member jurisdiction, has not chosen to do this. Instead, SANBAG relies on SCAG's 2016–2040 RTP/SCS.

High Quality Transit Areas

The 2016-2040 RTP/SCS designates high quality transit areas (HQTA), which are generally walkable transit villages or corridors within a half mile of a well-serviced transit stop or transit corridor with 15-minute or less service frequency during peak commute hours. The overall land use pattern of the 2016–2040 RTP/SCS focuses jobs and housing in the region's designated HQTAs (SCAG 2016). Valley corridor is located within an HQTA (see Figure 3-5).

Local Plans

San Bernardino County General Plan

The County of San Bernardino 2007 General Plan is the County's blueprint for growth and development within the unincorporated County. The General Plan was adopted on March 13, 2007, and is amended periodically. The Land Use Element is amended annually up to 4 times per year. The plan's goals and policies are organized into eight chapters or elements: land use, circulation and infrastructure, housing, conservation, open space, noise, safety, and economic development. The first seven of these are required elements under state law.

The land use diagram associated with the land use element was developed using the "one map approach" where land uses designations and zoning classifications are the same. As shown in Figure 4-2, *Current General Plan Land Uses/Zoning Designation*s, the land use diagram currently maps six designations within the Specific Plan area.

- **Single Residential (RS-1).** This designation is intended to provide areas for single-family homes on individual lots; to provide for accessory and nonresidential uses that complement single-family residential neighborhoods; and to discourage incompatible nonresidential uses in single-family residential neighborhoods. Lots are required to have a minimum area of 7,200 square feet.

  This designation applies to a small residential area along Marygold Avenue in the western portion of the corridor. It is also applied to most of the northeast quadrant of the Specific Plan area (e.g., along Grove

Place and Pomona Avenue). This area primarily consists of existing single-family residential uses but also includes Bloomington Christian School and the Church of the Nazarene.

- **Single Residential - 20,000 square feet minimum (RS-20M).** This designation is the same as RS-1, above, except that the minimum lot size is 20,000 square feet. In the Specific Plan area, this designation currently applies to a number of deep lots along Marygold Avenue, Locust Avenue, and the west side of Linden Avenue that currently feature single-family homes.

- **Neighborhood Commercial (CN).** The purpose of this designation is to provide suitable locations for retail and service commercial establishments to meet daily convenience needs of a residential area. In the Specific Plan area, this designation only applies to the small shopping center on the northeast side of the Cedar Avenue/Bloomington Avenue intersection.

- **General Commercial (CG).** This designation is intended to appropriately locate areas for stores, offices, service establishments, and amusements, offering a wide range of commodities and services scaled to meet neighborhood and community needs.

  In the Specific Plan area, this designation applies to almost all the parcels fronting on Valley Boulevard in the eastern half of the corridor. These parcels currently contain a wide range of uses, including retail uses, restaurants, self-storage facilities, mobile home parks, and single-family residences.

- **Service Commercial (CS).** This designation is intended to provide suitable areas for a mixture of commercial and industrial uses, including manufacturing uses, where they will not adversely affect surrounding properties.

  Nearly the entire southwest quadrant of the site and most of the parcels on the north side of Valley Boulevard in the west half of the site are designated Service Commercial.

- **Institutional (IN).** This designation is intended to identify existing lands and structures committed to public facilities and public agency uses and proposed public facilities. In the Specific Plan area, this designation is applied to Ayala Park and the United States Post Office at 10191 Linden.

The County has recently begun the multi-year process of updating its General Plan. The new plan will be called the San Bernardino Countywide Plan. Once completed, it will serve as a comprehensive policy document guiding the County's role as both a municipal government in the county's unincorporated areas and a regional government for the county as a whole.

Bloomington Community Plan

Adopted in 2007, the Bloomington Community Plan is the County's long-range planning document for the community of Bloomington. The plan establishes goals and policies for the community related to a variety of issues, including land use, circulation, infrastructure, housing, and economic development.

The Bloomington Community Plan states that the community's prevailing goal is to "preserve the unique character of the community." To that end, the plan establishes the following priorities.

- Protect and preserve the rural character of the community by maintaining areas of low-density residential development while also providing adequate opportunities for residential and commercial development to meet the needs of a diverse and growing population.
- Key features of the rural lifestyle that should be maintained are spaciousness, an equestrian-friendly environment and agricultural and animal-raising opportunities.
- Maintain the character of the community through a network of public and private open space, trail corridors and facilities for active and passive recreation.
- Provide adequate infrastructure commensurate with meeting the community needs.

The Bloomington Community Plan will be updated as part of the County of San Bernardino's General Plan Update. For an evaluation of the proposed Specific Plan's compliance with goals and policies in the adopted Community Plan, see analysis under Impact 5.8-2.

Ontario International Airport ALUCP

The Ontario International Airport Land Use Compatibility Plan (ONT ALUCP) was adopted by the Ontario City Council on April 19, 2011. The basic function of the ONT ALUCP is to ensure compatibility between ONT and the land uses that surround it. As required by state law, the ALUCP provides guidance to affected local jurisdictions with regard to airport land use compatibility matters involving ONT. The ALUCP seeks to avoid future compatibility conflicts rather than remedy existing incompatibilities. Rather than restricting activities at the airport itself, provisions of the ALUCP are aimed at addressing future land uses and development.

5.8.1.2 EXISTING SETTING

The Specific Plan area consists of 355 acres oriented along a 1.25-mile corridor of Valley Boulevard between Bloomington's western boundary with Fontana (Alder Avenue) and eastern boundary with Rialto (Spruce Avenue). The planning area includes properties fronting Valley Boulevard but also extends north to Marygold Avenue and south to Interstate 10 (I-10).

The Specific Plan area contains a diverse collection of land uses that are often interspersed. Major land use categories include residential (525 units, consisting of 267 detached single-family units, 80 multifamily units, and 178 mobile home units, on 126 acres); retail, services, and storage (72 acres); and industrial (39 acres). Existing land uses are shown in Figure 4-1, *Existing Land Uses*.

5.8.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

LU-1 Physically divide an established community.

LU-2 Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

LU-3 Conflict with any applicable habitat conservation plan or natural community conservation plan.

5.8.3 Environmental Impacts

The following impact analysis addresses the thresholds of significance listed above. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.8-1: Implementation of the proposed Specific Plan would not divide an established community. [Threshold LU-1]

Impact Analysis: Buildout of the Valley Corridor Specific Plan could ultimately support a total of 1,093 residential dwelling units, 4,073 residents, 1,882,428 square feet of nonresidential buildings space, and 1,890 jobs in the plan area. This would represent an additional 568 dwelling units, 1,857 new residents, 907,319 square feet of additional nonresidential building space, and approximately 1,413 new jobs in the plan area compared to existing conditions. Although this growth would represent a substantial transformation of the neighborhood, it would largely occur using the existing street network, organization of blocks, and overall land use pattern. Buildout would not involve any large infrastructure or development project that would divide the community.

Land Use Pattern

A comparison of Figure 4-1, *Existing Land Uses*, and Figure 3-4, *Proposed Land Use Districts and Zoning Designations*, illustrates that implementation of the proposed Specific Plan would involve changes to the planning area's land use pattern. Nonresidential land uses would still generally be oriented to Valley Boulevard, and the northern portion of the Specific Plan area would remain dominated by lower density residential uses. However, upon buildout of the Specific Plan, many existing residential uses would transition to nonresidential uses, most notably in three locations:

- Single-family homes along Taylor Avenue in the southwest corner of the Specific Plan area would be expected to transition to nonresidential uses as part of the Bloomington Enterprise District.

- Mobile-home communities along Valley Boulevard in the central portion of the Specific Plan area would also be expected to transition to nonresidential uses in the Bloomington Enterprise District.

- The cluster of single-family homes in the southeast portion of the project site (e.g., along Church, Vine, and Lynwood Streets) would be in the Commercial district and expected to transition to commercial uses.

The gradual transition of residential uses to nonresidential uses could result in visual and psychological divisions of the existing community. However, the existing street network would still serve both residential and nonresidential uses, preventing any physical division or barrier between different uses and areas. Furthermore, areas between Valley Boulevard and I-10 are already designated for nonresidential uses. Therefore, changes in land use pattern under the proposed Specific Plan would not result in a significant impact related to division of an existing community.

Other Infrastructure Projects

The proposed Specific Plan is intended to provide a policy framework for future infrastructure projects such as proposed improvements to the Valley Boulevard street section (see Section 3 of the Specific Plan). Such projects represent upgrades to existing infrastructure—rather than new streets, power lines, etc.—and would not introduce physical elements in the Specific Plan area that would divide the community. Valley Boulevard's travel lanes may be realigned to accommodate a bike lane within the existing right-of-way, but the existing four lanes of traffic will not change.

Conclusion

As discussed above, no element of the proposed Specific Plan would divide the existing community. Proposed land use changes, economic diversification, and infrastructure improvements would all occur within the existing physical fabric of the neighborhood. No significant adverse impact would occur and no mitigation is necessary.

Impact 5.8-2: Implementation of the proposed Specific Plan would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect. [Threshold LU-2]

Impact Analysis: As described in Chapter 3 of this DEIR, land use changes under the Valley Corridor Specific Plan would involve replacing the County's current zoning districts with five Specific Plan Land Use Districts: Mixed Use, Bloomington Enterprise, Commercial, Low & Medium Residential, and Medium & High Residential. Each district has its own development standards and strategies to individually and collectively contribute to the Specific Plan's overarching planning principles. The proposed project's consistency with adopted land use plans is evaluated in the following subsections.

2016–2040 SCAG RTP/SCS

Table 5.8-1 provides an assessment of the proposed project's relationship to pertinent 2016–2040 SCAG RTP/SCS goals. The RTP/SCS goals are directed toward transit, transportation and mobility, and protection of the environment and health of residents. Consistency with SCAG population growth projections is

addressed separately in Section 5.10, *Population and Housing*. The consistency analysis in Table 5.8-1 focuses on the broad, policy-oriented goals of the 2016–2040 RTP/SCS to determine consistency between the two plans.

Table 5.8-1 Consistency with SCAG's 2016–2040 RTP/SCS Goals

RTP/SCS Goal	Project Compliance with Goal
RTP/SCS G1: Align the plan investments and policies with improving regional economic development and competitiveness.	Not Applicable: This is not a project-specific goal and is therefore not applicable.
RTP/SCS G2: Maximize mobility and accessibility for all people and goods in the region. RTP/SCS G3: Ensure travel safety and reliability for all people and goods in the region. RTP/SCS G4: Preserve and ensure a sustainable regional transportation system. RTP/SCS G5: Maximize the productivity of our transportation system.	Consistent: Project implementation would maximize mobility accessibility, travel safety, and reliability for people and goods. The vehicular and pedestrian circulation improvements called for in the proposed Specific Plan would be designed, developed, and maintained to meet the needs of local and regional transportation and to ensure efficient mobility and accessibility. A number of regional and local plans and programs (e.g., San Bernardino County Congestion Management Program, Caltrans Traffic Impact Studies Guidelines, the California Complete Streets Act, and the Bloomington Community Plan) would be used to guide development and maintenance of traffic and circulation improvements along the corridor and its surrounding roadway network. All modes of public and commercial transit throughout the Specific Plan area would be required to follow safety standards set by corresponding state, regional, and local regulatory documents. For example, pedestrian walkways and bicycle routes must follow safety precautions and standards established by local (e.g., County of San Bernardino) and regional (e.g., SCAG, Caltrans) agencies. Roadways for motorists must follow safety standards established for the local and regional plans noted above. All new roadway developments and improvements to the existing transportation network in the Specific Plan area would be assessed with some level of traffic analysis (e.g., traffic assessments, traffic impact studies) to determine how individual development projects accommodated by the proposed project would impact existing traffic capacities and to determine the needs for improving future traffic capacities. Additionally, the regional plans mentioned above would be applicable to the design and development of any proposed roadway improvements. One of the Specific Plan's planning principles (see Chapter 3 of this DEIR) is to "Create safe spaces for pedestrians, cyclists, transit, and motor vehicles along Valley Boulevard and between surrounding neighborhoods while maintaining Valley Boulevard as a four-lane facility." This multimodal approach to mobility planning is embodied in the proposed street section for Valley Boulevard (see Figure 3-6), which dedicates additional space for pedestrian and bicycle travel while maintaining the number of lanes available for automobile and truck traffic. Consistent with the County of San Bernardino's Greenhouse Gas Emission Reduction Plan (see Section 5.5, *Greenhouse Gas Emissions*, the proposed Specific Plan requires developers to implement a variety of transportation management programs and features as part of their projects. These include the provision of bicycle parking near building

Table 5.8-1 Consistency with SCAG's 2016–2040 RTP/SCS Goals

RTP/SCS Goal	Project Compliance with Goal
	entrances, publishing of transit information to new residents, and provision of carpool/vanpool spaces at job centers to encourage ride sharing.
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: See response to RTP/SCS Goals G2 through G5. For more information about air quality impacts of the proposed project, see Section 5.2, *Air Quality*, of this DEIR.
RTP/SCS G7: Actively encourage and create incentives for energy efficiency, where possible.	Not Applicable: This is a countywide goal, not a project-specific goal, and is therefore not applicable.
RTP/SCS G8: Encourage land use and growth patterns that facilitate transit and active transportation.	Consistent: The land use plan and mobility plan in the proposed Specific Plan are aimed at creating a mixed-use district that encourages walking and biking. By increasing the amount of job-generating commercial and light industrial uses in the area, existing and future residents would have expanded opportunities to live closer to work, which encourages commuting by foot and bicycle. In addition, proposed improvements to Valley Boulevard would facilitate nonmotorized transportation by dedicating more of the roadway for pedestrian and bicycle travel (see Figure 3-6). Lastly, the proposed Specific Plan requires that mass transit facilities (e.g. bus stop benches and/or shelters) be constructed by developers as appropriate.
RTP/SCS G9: Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	Not Applicable: This is not a project-specific goal and is therefore not applicable.

Source: 2016-2040 SCAG Regional Transportation Plan/Sustainable Communities Strategy.

The analysis in Table 5.8-1 demonstrates that the Specific Plan 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 2016–2040 RTP/SCS goals.

The proposed Specific Plan's consistency with the Draft 2016 RTP/SCS's land use policies and key land use strategies provided in Table 5.8-2.

Table 5.8-2 Consistency with SCAG's 2016 RTP/SCS Land Use Policies

RTP/SCS Policy	Project Compliance with Policy
RTP/SCS P1: Identify regional strategic areas for infill and investment.	Not Applicable: This is a policy intended to be implemented at a regional level, not at the project level. However, the intent of the proposed Specific Plan is precisely to identify the corridor as a strategic area for infill and investment. Specific Plan Objective 1 (see Chapter 3 of this DEIR) states the plan is aimed at leveraging "recent County investments in infrastructure and community facilities to attract investment and stimulate new partnerships in the Specific Plan area." As an alternative to greenfield growth at the region's periphery, the proposed Specific Plan intends to incentivize the growth of economic opportunities and jobs in a portion of Bloomington that is adjacent to major transportation facilities (i.e., Valley Boulevard, I-10, and the Union Pacific Railroad) and centrally located within the urbanized area of the San Bernardino Valley.
RTP/SCS P2: Identify strategic centers based on a three-tiered system of existing, planned, and potential relative to transportation infrastructure.	Consistent: The proposed Specific Plan identifies pedestrian activity nodes to be enhanced and expanded upon, including the Commercial District and Old Town Bloomington.
RTP/SCS P3: Develop "Complete Communities."	Consistent: Buildout of the proposed Specific Plan would permit the development of a variety of land uses, including residential, commercial, light industrial, and public uses. Buildout of the plan would create a "complete" community in which residents would have expanded opportunities to work, shop, and access public amenities close to home.
RTP/SCS P4: Develop nodes on a corridor.	Consistent: See response to RTP/SCS Policy P2.
RTP/SCS P5: Plan for additional housing and jobs near transit.	Consistent: The Specific Plan area is currently served by OmniTrans Route 29. Buildout of the proposed Specific Plan could ultimately support a total of 1,093 residential dwelling units, 4,073 residents, 1,882,428 square feet of nonresidential buildings space, and 1,890 jobs in the plan area. This would represent an additional 568 dwelling units, 1,857 new residents, 907,319 square feet of additional nonresidential building space, and approximately 1,413 new jobs in the transit corridor compared to existing conditions.
RTP/SCS P6: Plan for changing demand in types of housing.	Consistent: The Specific Plan includes three land use districts that would allow housing units at a variety of densities (0-40 units/acre). The plan's development standards and design guidelines also allow flexibility in the configuration and style of future residential development.
RTP/SCS P7: Continue to protect stable, existing single-family areas.	Consistent: The Low & Medium Residential District (see Figure 3-4) is designed to allow the northern portion of the Specific Plan area to remain dominated by single-family residential uses. Nonresidential uses are largely segregated within areas adjacent to or south of Valley Boulevard.
RTP/SCS P8: Ensure adequate access to open space and preservation of habitat.	Consistent: Implementation of the proposed Specific Plan would result in the relocation of Ayala Park in order for that amenity to better serve the community. The plan also promotes the development of a network of open space and exercise nodes or paths.
RTP/SCS P9: Incorporate local input and feedback on future growth.	Consistent: The proposed Specific Plan is the result of a collaborative process that included a community fair, developer roundtable, town hall meeting, and numerous community stakeholder interviews. Also, local input regarding the plan and future growth in Bloomington was collected via an online survey.

Source: Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy.

A demonstrated above, the proposed Specific Plan is consistent with relevant policies and principles identified in SCAG's 2016-2040 RTP/SCS. The plan is also consistent with the RTP/SCS's other overarching land use and mobility strategies. For example, the very of premise of the Specific Plan is consistent with SCAG's Livable Corridors strategy, which is intended to increase emphasize on the revitalization of "commercial strips through integrated transportation and land use planning." The Specific Plan's proposed creation of activity nodes along the corridor and proposed improvements to the street section of Valley Boulevard—which would include additional space for pedestrian and bicycle travel—are examples of "complete street" measures as discussed under the RTP/SCS's description of Livable Corridors. Similarly, because the above measures would promote non-automobile travel for short trips, the proposed Specific Plan is consistent with the RTP/SCS's Neighborhood Mobility Area strategy. For more information about complete streets-style improvements to Valley Boulevard, see the responses to RTP/SCS Goals G2 through G5 and G8 in Table 5.8-1.

San Bernardino County General Plan

As described above, Bloomington is located in an unincorporated area of San Bernardino County. Therefore, the relevant long-range planning document for the community is the County's General Plan. Consistency with the adopted General Plan is evaluated in Table 5.8-3.

Although the General Plan contains numerous additional goals and policies beyond those discussed in Table 5.8-3, those goals and policies are not related to the "purpose of avoiding or mitigating an environmental effect" and therefore are not analyzed in the table. Such goals and policies include those related to economic development. Furthermore, consistency with the housing, conservation, open space, noise, and safety elements is evaluated in other sections of this DEIR (see references in Table 5.8-3).

Table 5.8-3 Consistency with the San Bernardino County General Plan

General Plan Goal	Project Compliance with Goal
Land Use Element	
Goal LU 1: The County will have a compatible and harmonious arrangement of land uses by providing a type and mix of functionally well-integrated land uses that are fiscally viable and meet general social and economic needs of the residents.	Consistent: The proposed land use pattern is aimed at attracting business investment in the corridor along I-10 and the Union Pacific Railroad while creating a gradual transition to lower intensity development away from Valley Boulevard. Growth in nonresidential uses has been planned based on a demonstrated need for office space, light industrial uses, and entrepreneurial business space.
Goal LU 2: Residential land uses will be provided in a range of styles, densities, and affordability and in a variety of areas to live, ranging from traditional urban neighborhoods to more "rural" neighborhoods.	Consistent: The Specific Plan includes three land use districts that would allow housing units at a variety of densities (0–40 units/acre). The plan's development standards and design guidelines also allow flexibility in the configuration and style of future residential development.
Goal LU 3: The unincorporated communities within the County will be sufficiently served by commercial land uses through a combination of commercial development within cities and unincorporated communities.	Consistent: Buildout of the proposed Specific Plan would result in 907,319 square feet of additional nonresidential building space in the Specific Plan area compared to existing conditions.

Table 5.8-3 Consistency with the San Bernardino County General Plan

General Plan Goal	Project Compliance with Goal
Goal LU 4: The unincorporated communities within the County will be sufficiently served by industrial land uses.	Consistent: The Valley Corridor/Bloomington Enterprise District (see Figure 3-4) is designed to accommodate new and expanded light industrial uses.
Goal LU 5: Reduce traffic congestion and air pollution and improve the quality of life for County residents by providing employment and housing opportunities in close proximity to each other.	Consistent: Implementation of the proposed Specific Plan would result in residential and nonresidential growth in the Specific Plan area (see Chapter 3, *Project Description*). Anticipated job growth would allow existing and future residents opportunities to work closer to home.
Goal LU 6: Promote, where applicable, compact land use development by mixing land uses, creating walkable communities, and strengthening and directing development towards existing communities.	Consistent: The Specific Plan area is an existing community that contains a mix of residential and nonresidential land uses. Implementation of the proposed Specific Plan would result in infill development along the corridor on underutilized sites. The Specific Plan would also maintain the area's existing street networks and includes a mixed-use district (see Figure 3-4).
Goal LU 7: The distribution of land uses will be consistent with the maintenance of environmental quality, conservation of natural resources, and the preservation of open spaces.	Consistent: The Specific Plan area is an urbanized area, and implementation of the proposed Specific Plan would not adversely affect natural resources or open space (see Section 5.3, *Biological Resources*, of this DEIR).
Goal LU 8: Beneficial facilities, such as schools, parks, medical facilities, sheriff and fire stations, libraries, and other public uses, as well as potentially hazardous sites, will be equitably distributed throughout the County.	Consistent: See Sections 5.11, *Public Services*, and 5.6, *Hazards and Hazardous Materials*.
Goal LU 9: Development will be in a contiguous manner as much as possible to minimize environmental impacts, minimize public infrastructure and service costs, and further countywide economic development goals.	Consistent: Implementation of the proposed Specific Plan would provide opportunities for development of vacant and underutilized sites in an area that is already urbanized and served by infrastructure. The Valley Corridor/Bloomington Enterprise District (see Figure 3-4) is aimed at meeting countywide economic development goals.
Goal LU 10: Encourage distinct communities with a sense of "place" and identity.	Consistent: The proposed Commercial District west of Cedar Street is envisioned as an interconnected sequence of plazas, paseos, walkable streets, and distinct building designs to create a pedestrian-friendly town center or mercado area that celebrates Bloomington's history while reinforcing a sense of community for residents and businesses. The area's identity will be reflected in the continued preservation of the historic Bloomington Garage and in new wayfinding signage.
Goal LU 11: Promote mutually beneficial uses of land to address regional problems through coordination and cooperation among the County, the incorporated cities, Southern California Association of Governments (SCAG), San Bernardino Associated Governments (SANBAG), the various special districts and other local, state, and federal agencies.	Consistent: Buildout of the proposed Valley Corridor/Bloomington Enterprise District, which is based on the idea of accommodating job-generating land uses, would help alleviate the Inland Empire's existing jobs-housing imbalance (see Section 5.10, *Population and Housing*). For this reason, the plan meets local needs, including the demand for neighborhood-scale commercial uses and public facilities, while balancing the needs of the surrounding region.

Table 5.8-3 Consistency with the San Bernardino County General Plan

General Plan Goal	Project Compliance with Goal
Goal LU 12: Promote the redevelopment of existing communities through application of state community redevelopment laws, relying on the County's redevelopment agency to assist in the implementation of the General Plan through projects within designated redevelopment project areas.	Consistent: Although redevelopment agencies (including the County of San Bernardino's) were dissolved by the state government, the proposed Specific Plan is a midrange plan aimed at redeveloping an existing community. Redevelopment and infill development in Bloomington are considered priorities in both the adopted Bloomington Community Plan and the adopted County General Plan.
Goal V/LU 1: Provide opportunities, where possible, for a rural lifestyle that preserves the unique character within suitable locations of the Valley Region.	Consistent: The Valley Corridor/Low & Medium Residential District (see Figure 3-4) is designed to allow the northern portion of the Specific Plan area to remain dominated by single-family residential uses and its existing semirural lifestyle.
Circulation and Infrastructure Element	
Goal CI 1: The County will provide a transportation system, including public transit, which is safe, functional, and convenient; meets the public's needs; and enhances the lifestyles of County residents.	Consistent: Roadway improvements to ensure adequate traffic flow have been evaluated as part of the Specific Plan and through Section 5.13, *Transportation and Traffic*, of this DEIR.
Goal CI 2: The County's comprehensive transportation system will operate at regional, countywide, community, and neighborhood scales to provide connectors between communities and mobility between jobs, residences, and recreational opportunities.	Consistent: The Specific Plan area is already an important transportation corridor for automobile, truck, and rail traffic. Planned improvements to Valley Boulevard are designed to balance the needs of regional truck traffic and commuters (e.g., maintaining the number of travel lanes) while also devoting attention to neighborhood-scale transportation amenities (e.g., sidewalks, bicycle lanes, signage).
Goal CI 3: The County will have a balance between different types of transportation modes, reducing dependency on the automobile and promoting public transit and alternate modes of transportation, in order to minimize the adverse impacts of automobile use on the environment.	Consistent: The proposed Specific Plan proposes that Valley Boulevard be redesigned to dedicate more space for pedestrian and bicycle travel.
Goal CI 4: The County will coordinate land use and transportation planning to ensure adequate transportation facilities to support planned land uses and ease congestion.	Consistent: See Section 5.13, *Transportation and Traffic*, of this DEIR.
Goal CI 5: The County's road standards for major thoroughfares will complement the surrounding environment appropriate to each geographic region.	Consistent: Roadway improvements to ensure adequate traffic flow have been evaluated as part of the Specific Plan and through Section 5.13, *Transportation and Traffic*, of this DEIR. Planned improvements to Valley Boulevard are intended to maintain its role as a four-lane arterial roadway while adding amenities (e.g., wider sidewalks, new bike lanes, wayfinding/signage) that will provide residents with a street that better serves their travel within the community.
Goal CI 6: The County will encourage and promote greater use of non-motorized means of personal transportation. The County will maintain and expand a system of trails for bicycles, pedestrians, and equestrians that will preserve and enhance the quality of life for residents and visitors.	Consistent: See response to response to Goal CI 3.

Table 5.8-3 Consistency with the San Bernardino County General Plan

General Plan Goal	Project Compliance with Goal
Goal CI 7: The County will encourage and pursue development of regional transportation facilities, including roads, railroad, and airports, to be a multi-modal transportation hub and promote economic development.	Consistent: The premise of the proposed Specific Plan is to capitalize on the corridor's function as a multimodal (automobile, truck and rail) corridor. In particular, land uses and development capacity allowed in the Bloomington Enterprise District have been established to promote economic development that is oriented to the corridor's transportation modes.
Goal CI 8: The County will have a network of local and regional airports to meet the aviation needs.	Not Applicable: As assessed in other portions of this DEIR, airports will not be affected by the Specific Plan and therefore this goal is not applicable.
Goal CI 9: The County will ensure the quality of life by pacing future growth with the availability of public infrastructures.	Consistent: Growth is planned for the Specific Plan area precisely because it is an infill area where public infrastructure is already available. Furthermore, the proposed Specific Plan outlines an infrastructure program that plans for future improvements to utility and transportation infrastructure in the area.
Goal CI 10: Ensure timely development of public facilities and the maintenance of adequate service levels for these facilities to meet the needs of current and future County residents.	Consistent: As assessed in this DEIR, the Specific Plan would contribute to the timely development of public facilities. Refer to Section 5.11, *Public Services*, related to fire and sheriff services, Section 5.12, *Recreation*, related to park facilities, Section 5.13, *Transportation and Traffic*, related to roadway improvements and mitigation, and Section 5.14, *Utilities and Service Systems*, related to infrastructure.
Goal CI 11: The County will coordinate and cooperate with governmental agencies at all levels to ensure safe, reliable, and high quality water supply for all residents and ensure prevention of surface and ground water pollution.	Consistent: As discussed in Section 5.14, *Utilities and Service Systems*, of this DEIR, there is adequate water supply to meet the project needs. Additionally, future development will be required to prepare SWPPPs and water quality management plans to ensure the prevention of surface and groundwater pollution (see Section 5.7, *Hydrology and Water Quality*, of this DEIR).
Goal CI 12: The County will ensure adequate wastewater collection, treatment, and disposal consistent with the protection of public health and water quality.	Consistent: The County works diligently with the wastewater treatment and conveyance provider to ensure adequate sewerage in the project area.
Goal CI 13: The County will minimize impacts to stormwater quality in a manner that contributes to improvement of water quality and enhances environmental quality.	Consistent: As discussed in Section 5.7, *Hydrology and Water Quality*, of this DEIR, projects are required to prepare SWPPPs and implement LID measures to protect water quality during construction and operation of the project.
Goal CI 14: The County will ensure a safe, efficient, economical, and integrated solid waste management system that considers all wastes generated within the County, including agricultural, residential, commercial, and industrial wastes, while recognizing the relationship between disposal issues and the conservation of natural resources.	Consistent: As discussed in Section 5.14, *Utilities and Service Systems*, of this DEIR, existing and proposed facilities would be able to accommodate project-generated solid waste and comply with related solid waste regulations. There is adequate construction and demolition debris processing and disposal capacity to serve the proposed project. The Specific Plan would provide storage spaces for recyclable materials and for organic wastes.

Table 5.8-3 Consistency with the San Bernardino County General Plan

General Plan Goal	Project Compliance with Goal
Goal CI 15: The County will improve its telecommunications infrastructure and expand access to communications technology and network resources to improve personal convenience, reduce dependency on non-renewable resources, take advantage of the ecological and financial efficiencies of new technologies, maintain the County's economic competitiveness, and develop a better-informed citizenry.	Consistent: Implementation of the proposed Specific Plan would allow for new development resulting in the expansion of communication infrastructure and technology. It would provide opportunities for economic growth along a key corridor in Bloomington.
Goal CI 16: The County will protect its residents and visitors from injury and loss of life and protect property from fires through the continued improvement of existing Fire Department facilities and the creation of new facilities, but also through the improvement of related infrastructure that is necessary for the provision of fire service delivery such as water systems and transportation networks.	Consistent: County of San Bernardino Fire Station 76 is in the Specific Plan area and would remain in its current location under the proposed Specific Plan. Also, the Specific Plan's comprehensive infrastructure program outlines future system needs for water and transportation infrastructure in the plan area.
Goal CI 17: The County will provide adequate law enforcement facilities to deliver services to deter crime and to meet the growing demand for services associated with increasing populations and commercial/industrial developments.	Consistent: As discussed in Section 5.11, *Public Services*, of this DEIR, buildout of the Specific Plan could be accommodated by the SBCSD.
Goal CI 18: The County will ensure efficient and cost effective utilities that serve the existing and future needs of people in the unincorporated areas are provided.	Consistent: See Section 5.14, *Utilities and Service Systems*, of this DEIR for analysis related to future infrastructure needs.
Goal CI 19: Prior to approving a General Plan Amendment that increases residential densities, the County will ensure that impacts to schools, libraries, and day-care facilities are adequately mitigated.	Consistent: See Section 5.11, *Public Services*, of this DEIR for analysis related to school and library impacts.
Goal CI 20: The County will work with appropriate agencies to provide for convenient access to K-12 and higher educational opportunities for all, activities for youth, and programs for residents of all ages.	Consistent: As discussed in Section 5.11, *Public Services*, of this DEIR, schools serving the project area have sufficient capacity to accommodate buildout of the Specific Plan in total and at each grade level.
Goal V/CI 1: Ensure a safe and effective transportation system that provides adequate traffic movement.	Consistent: The proposed Specific Plan includes planned improvements to Valley Boulevard, which would be redesigned to better accommodate pedestrian and bicycle travel while not diminishing the ability of automobile and truck traffic to travel through the corridor. For further analysis, see Section 5.13, *Transportation and Traffic*, of this DEIR.
Housing Element	
See Section 5.10, *Population and Housing*, of this DEIR for analysis related to the proposed Specific Plan's impacts related to housing, including consistency with the Housing Element.	
Conservation Element	
See Sections 5.2, *Air Quality*; 5.3, *Biological Resources*; and 5.4, *Cultural Resources*, for analysis related to the proposed Specific Plan's impacts related to conservation of natural and cultural resources, including consistency with the Conservation Element.	

Table 5.8-3 Consistency with the San Bernardino County General Plan

General Plan Goal	Project Compliance with Goal
Open Space Element	
See Section 5.12, *Recreation*, of this DEIR for analysis related to the proposed Specific Plan's impacts related to parks and open space, including consistency with the Open Space Element.	
Noise Element	
See Section 5.9, *Noise*, of this DEIR for analysis related to the proposed Specific Plan's impacts related to noise, including consistency with the Noise Element.	
Safety Element	
See Section 5.11, *Public Services*, of this DEIR for analysis related to the proposed Specific Plan's impacts related to safety and law enforcement, including consistency with the Safety Element.	
Economic Development Element	
Goals and policies in the economic development element are generally not related to avoiding or mitigating an environmental effect. However, improvements as designed in the Specific Plan are designed to result in improved economic benefit.	

Source: San Bernardino County 2007a.

Bloomington Community Plan

Table 5.8-4 demonstrates the proposed Specific Plan's consistency with the adopted Bloomington Community Plan.

Table 5.8-4 Consistency with the Bloomington Community Plan

General Plan Goal	Project Compliance with Goal
Goal BL/LU 1: Provide a mix of housing choices that support a range of lifestyles in the community, ranging from traditional urban neighborhoods to more "rural" neighborhoods.	Consistent: The Specific Plan includes three land use districts that would allow housing units at a variety of densities (0–40 units/acre). The plan's development standards and design guidelines also allow flexibility in the configuration and style of future residential development. Lower-density residential uses are designated along the northern edge of the Specific Plan area to reflect the more rural nature of adjacent neighborhoods.
Goal BL/LU 2: Provide opportunities for a rural lifestyle that preserves the unique character within suitable locations (i.e. "policy areas") of the Bloomington Community Plan.	Not Applicable: There are no parcels in the Specific Plan area that are designated for "Rural Living" in the Bloomington Community Plan (see Figure 2-1, Land Use Policy, of the Bloomington Community Plan). However, the proposed Specific Plan contains design guidelines aimed at ensuring that new development fits the community's existing character (see Chapter 4 of the proposed Specific Plan and Section 5.1, *Aesthetics*, of this DEIR for additional analysis).
Goal BL/LU 3: Ensure that commercial and industrial development within the plan area is compatible with surrounding uses and meets the needs of local residents.	Consistent: The proposed Specific Plan contains development standards and design guidelines aimed at ensuring that new nonresidential development is compatible with surrounding land uses (see Chapter 4 of the proposed Specific Plan and Section 5.1, *Aesthetics*, of this DEIR for additional analysis).
Goal BL/LU 4: Provide adequate sites for the production of new senior housing.	Consistent: The proposed Specific Plan has been developed, in part, to leverage existing investment in the "Affordable Bloomington" project, a development currently under construction in the Specific Plan area. The project will include a branch public library, approximately 70 units for low-income seniors, and other housing units. The three proposed land use districts in the Specific Plan area would allow housing units at

Table 5.8-4 Consistency with the Bloomington Community Plan

General Plan Goal	Project Compliance with Goal
	a variety of densities (0–40 units/acre), which would provide opportunities for additional senior housing.
Goal BL/LU 5: Provide for the joint use of utility easements to meet the land use and recreation needs of the community, subject to the limitations/ restrictions of the utility agency.	Not Applicable: There is no such utility easement in the Specific Plan area.
Goal BL/CI 1: Ensure a safe and effective transportation system that provides adequate traffic movement while preserving the rural character of the community.	Consistent: Under the proposed Specific Plan, as under existing conditions, truck and commuter traffic would primarily use major arterial roadways such as Valley Boulevard and Cedar Avenue. Roadway widths and land use patterns in areas with existing rural character, such as residential areas along Marygold Avenue and Grove Place, would generally remain the same as under existing conditions.
Goal BL/CI 2: Ensure safe and efficient non-motorized traffic circulation within the community.	Consistent: The proposed street section for Valley Boulevard (see Figure 3-6) dedicates additional space for pedestrian and bicycle travel while maintaining the number of lanes available for automobile and truck traffic. Implementation of the Specific Plan would also prioritize building segments of sidewalk where there are currently none.
Goal BL/CI 3: Ensure adequate water sources and associated infrastructure to serve the needs of existing and future water users in the Bloomington Community Plan area.	Consistent: As discussed in Section 5.14, *Utilities and Service Systems*, of this DEIR, there is adequate water supplies and infrastructure to meet water demand of Specific Plan buildout.
Goal BL/CI 4: Provide wastewater disposal facilities which will serve the Bloomington Community Plan area in a way that protects the public from any adverse water quality or health impacts.	Consistent: As discussed in Section 5.14, *Utilities and Service Systems*, of this DEIR, implementation of the project would result in new wastewater infrastructure to service the project area. Implementation of the Specific Plan would result in replacement of the existing septic system service with a sanitary sewer system which benefits the community and protects the public from water quality and health impacts.
Goal BL/CO 1: Preserve the significant historical sites and structures which contribute to the unique character of the Bloomington Community Plan area.	Consistent: The proposed Specific Plan proposes that a pedestrian-friendly node of businesses and public amenities be established near the community's existing historic structures, which include the Bloomington Garage, La Gue Family Home, and the Historic Bloomington Courthouse. The Specific Plan encourages preservation of these historic resources.
Goal BL/OS 1: Develop parks and recreation facilities to meet the recreational needs of the community.	Consistent: Buildout of the proposed Specific Plan would involve the relocation of Ayala Park to functionally complement the new community library, be more centrally located, and better serve the community need for safe and attractive recreational opportunities.
Goal BL/OS 2: Establish a community-wide trail system.	Consistent: As described in Chapter 3 of the proposed Specific Plan, the plan includes measures that promote the creation of an interconnected system of paths and open spaces.
Goal BL/S 1: Provide adequate fire safety measures to protect residents of the plan area.	Consistent: As described in Section 5.6, *Hazards and Hazardous Materials*, of this DEIR, Specific Plan implementation would not expose people or structures to wildfire hazards. The project area is not within a high fire hazard severity zone and is not expected to support vegetation or other uses that would provide fuel for wildfire. The project is required to comply with SBDC Section 83.01.060.
Goal BL/S 2: Ensure that emergency evacuation routes will adequately evacuate all residents and visitors in the event of a natural disaster.	Consistent: As described in Section 5.6, *Hazards and Hazardous Materials*, of this DEIR, implementation of the proposed Specific Plan would not conflict with adopted emergency plans or established evacuation routes. Implementation of the proposed Specific Plan would also preserve the existing street network, which provides a clear route of travel to area hospitals—Arrowhead Regional Medical Center to the

Table 5.8-4 Consistency with the Bloomington Community Plan

General Plan Goal	Project Compliance with Goal
	east in Colton and Kaiser Permanente Fontana Regional Medical Center to the west in Fontana.
Goal BL/S 3: Ensure a safe living and working environment for residents of Bloomington by providing adequate law enforcement and code enforcement services.	Consistent: As documented in Section 5.11, *Public Services*, of this DEIR, implementation of the Specific Plan could be accommodated by law enforcement and fire services and no significant impacts would occur.
Goal HV/ED 1: Promote economic development that is compatible with the character of the Bloomington community.	Consistent: More intense nonresidential land uses are largely limited to those areas adjacent to or south of Valley Boulevard. Development standards and design guidelines in the proposed Specific Plan are designed to ensure that all new development is compatible with the community's existing character (see Chapters 3 and 4 of the Specific Plan and Section 5.1, *Aesthetics*, of this DEIR).

Source: San Bernardino County 2007b.

Ontario International Airport ALUCP

Although the Specific Plan area is within the airport influence area of ONT, it is not within the airport's safety zones or height restriction area. Land uses and building heights allowed by the proposed Specific Plan are considered compatible for this portion of the airport influence area, which is approximately 12 miles east of the airport itself. Implementation of the proposed Specific Plan would not conflict with the ALUCP and no mitigation is required.

Conclusion

As demonstrated in Tables 5.8-1 through 5.8-4, the proposed Specific Plan embodies the goals and policies in the applicable long-range planning documents. Implementation of the proposed Specific Plan would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect and no mitigation is necessary.

Impact 5.8-3: Implementation of the Valley Corridor Specific Plan would not conflict with an adopted habitat conservation plan. [Threshold LU-3]

Impact Analysis: The Specific Plan area is not in the plan area of an adopted habitat conservation plan. The City of Colton, directly to the east of Bloomington, adopted a habitat conservation plan (HCP) for the Delhi sands flower-loving fly in February 2015. The species is endemic to the Colton Dunes and is listed as federally endangered (Colton 2014). The plan area for the HCP is approximately one mile to the east of the Specific Plan Area. Riverside County also implements the Western Riverside County Multiple Species Habitat Conservation Plan in the portion of the County directly south of Bloomington, two miles to the south of the Specific Plan area. Because neither HCP applies to the planning area, implementation of the proposed project would not conflict with their provisions. Land use impacts of the proposed project related to consistency with adopted conservation plans would be less than significant and no mitigation is necessary.

5.8.4 Cumulative Impacts

Implementation of the Specific Plan, in conjunction with other cumulative development in accordance with the Countywide General Plan and the Bloomington Community Plan (see Section 4.4, *Assumptions Regarding Cumulative Impacts*, in Chapter 4 of this DEIR), could cause communitywide land use and planning impacts. However, the Valley Corridor Specific Plan is consistent with applicable goals, policies, and regulations of the San Bernardino County General Plan, Bloomington Community Plan, County zoning code, Ontario International Airport ALUCP, and SCAG's RTP/SCS, as detailed in Impact 5.8-2, above. In accordance with the County's objectives for Bloomington and the Valley Corridor in particular, development pursuant to the proposed Specific Plan would allow for a wide range of residential, commercial, retail, business development/office, and light industrial uses in six land use designations: VC/Mixed Use, VC/Bloomington Enterprise, VC/Commercial, VC/ Low & Medium Density Residential, VC/Medium & High Density Residential, and VC/Open Space. The Specific Plan outlines the permitted uses, development standards, design guidelines, preferred building and frontage types, landscape guidelines, and strategies to promote integration between new development and existing uses. In addition, upon buildout of the Specific Plan, new jobs, commercial uses, and public space (i.e., a reconfigured or relocated Ayala Park) would be within walking distance of many of the existing and future residential uses. Therefore, implementation of the proposed project would have a positive impact on the land use pattern of Bloomington when combined with new growth or investment elsewhere in the community.

As with the proposed Specific Plan, cumulative projects would be subject to compliance with the regional and local plans reviewed in this section. Therefore, implementation of cumulative development in accordance with the San Bernardino County General Plan and Bloomington Community Plan would not combine with the Valley Corridor Specific Plan to result in cumulatively considerable land use impacts.

5.8.5 Existing Regulations and Standard Conditions

- San Bernardino County Code and Development Code

5.8.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, Impacts 5.8-1 (divide an established community), 5.8-2 (consistency with applicable plans), and 5.8-3 (habitat conservation plans) would be less than significant.

5.8.7 Mitigation Measures

Project-level and cumulative impacts to land use and planning would be less than significant. No mitigation measures are required.

5.8.8 Level of Significance After Mitigation

No significant unavoidable adverse impacts relating to land use and planning would result on a project-specific or cumulative basis.

5.8.9 References

California Department of Transportation (Caltrans). 2012, July. Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment for the Interstate 10/Cedar Avenue Interchange Improvement Project.

Colton, City of. 2014, June. West Valley Habitat Conservation Plan for the Issuance of an Incidental Take Permit Under Section 10(A)(1)(B) of the Endangered Species Act for the Federally Endangered Delhi Sands Flower-loving Fly Projects within Colton, California of San Bernardino County. Prepared by RBF Consulting. http://www.ci.colton.ca.us/index.aspx?NID=778.

Ontario, City of. 2011, April 19. LA/Ontario International Airport Land Use Compatibility Plan. http://www.ontarioplan.org/alucp-for-ontario-international-airport/.

San Bernardino, County of. 2007a, March 13. County of San Bernardino 2007 General Plan (as amended). Prepared by URS Corporation. http://cms.sbcounty.gov/lus/planning/generalplan.aspx.

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Southern California Association of Governments (SCAG). 2016, April 7, 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future. http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx.

5. Environmental Analysis
LAND USE AND PLANNING

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5.9 NOISE

This section of the draft environmental impact report (DEIR) evaluates the fundamentals of sound; examines federal, state, and local noise guidelines, policies, and standards; identifies noise levels for existing conditions; and evaluates the potential noise and vibration impacts associated with buildout of the Valley Corridor Specific Plan (Specific Plan). The noise modeling data are included in Appendix F of this DEIR.

5.9.1 Fundamentals of Acoustics, Noise, and Vibration

A detailed description of the characteristics of sound, psychological and physiological effects of noise, and vibration fundamentals is provided in Appendix F of this DEIR.

5.9.1.1 NOISE DESCRIPTORS

Noise is most often defined as unwanted sound. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness."

The following are brief definitions of terminology used in this chapter:

- **Sound.** A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.

- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

- **Decibel (dB).** A unitless measure of sound on a logarithmic scale.

- **Vibration Decibel (VdB).** A unitless measure of vibration, expressed on a logarithmic scale and with respect to a defined reference vibration velocity. In the U.S., the standard reference velocity is 1 micro-inch per second (1x10-6 in/sec).

- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

- **Equivalent Continuous Noise Level (L_{eq}); also called the Energy-Equivalent Noise Level.** The value of an equivalent, steady sound level which, in a stated time period (often over an hour) and at a stated location, has the same A-weighted sound energy as the time-varying sound. Thus, the L_{eq} metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.

- **Statistical Sound Level (L_n).** The sound level that is exceeded "n" percent of time during a given sample period. For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the

changing noise levels are above this value and half of the time they are below it. This is called the "median sound level." The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the "intrusive sound level." The L_{90} is the sound level exceeded 90 percent of the time and is often considered the "effective background level" or "residual noise level."

- **Day-Night Level (L_{dn} or DNL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10 PM to 7 AM.

- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring during the period from 7 PM to 10 PM and 10 dB added to the A-weighted sound levels occurring during the period from 10 PM to 7 AM. For general community/environmental noise, CNEL and L_{dn} values rarely differ by more than 1 dB. As a matter of practice, L_{dn} and CNEL values are interchangeable and are treated as being equivalent in this assessment.

- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.

5.9.2 Environmental Setting

5.9.2.1 REGULATORY FRAMEWORK

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, the federal government, State of California, and many local governments have established criteria to protect public health and safety and to prevent disruption of certain human activities.

The environmental impact of noise is a function of the sensitivity of the land use where noise is heard. In general, land use sensitivity to noise is a function of human annoyance and community reaction rather than health and safety considerations. Human annoyance takes place at sound levels that are much lower than the sound levels that could produce hearing loss.

Residents typically become annoyed when the noise level in their environment interferes with sleeping, talking, and listening to radio or television. People are particularly sensitive to nighttime noises that interfere with sleep. Interior noise levels of 45 Ldn or CNEL or less are considered necessary for restful sleep (USEPA 1974).

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the State of California and the County of San Bernardino have established standards and ordinances to control noise.

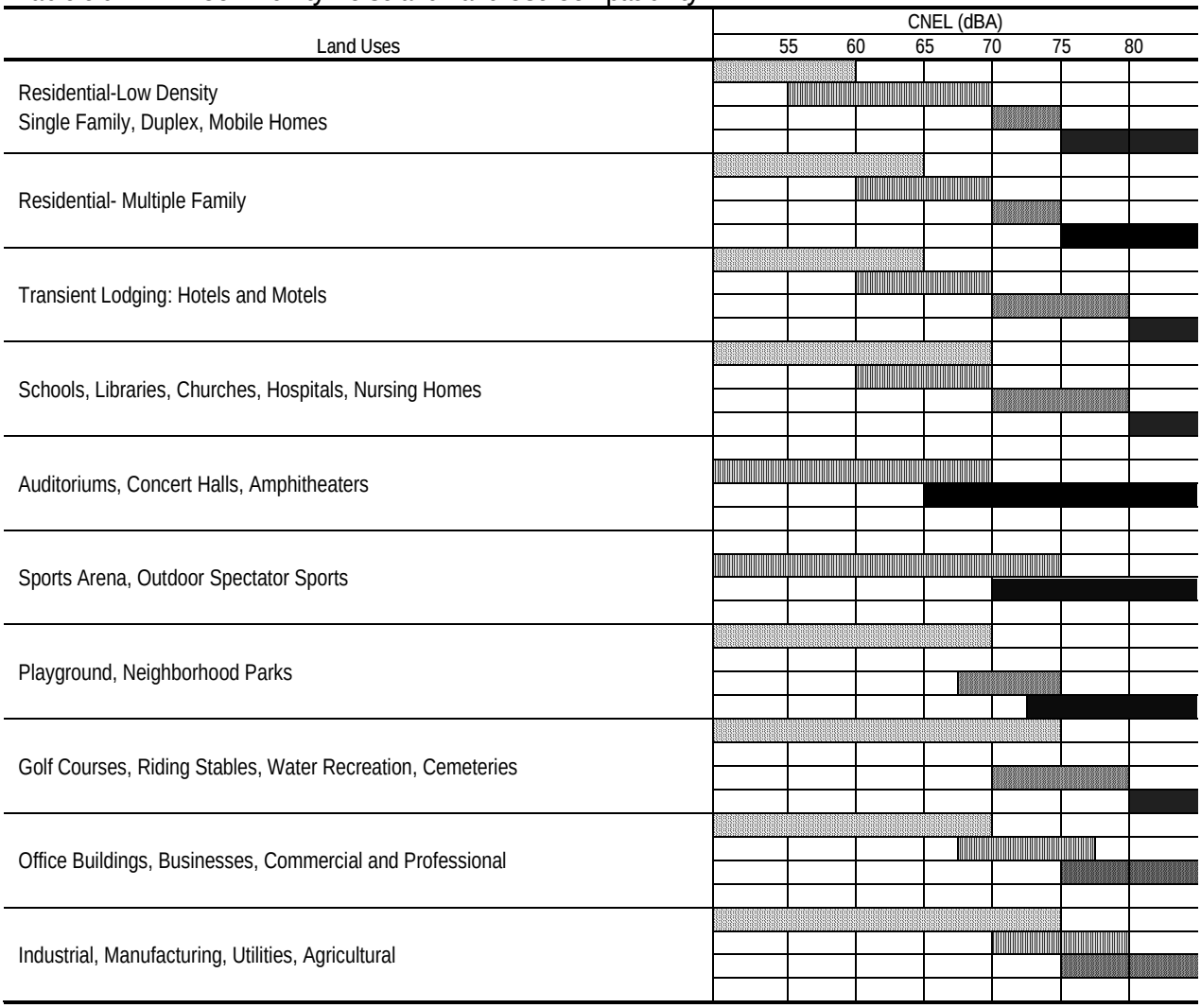
State of California Noise Requirements

The state regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise insulation standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a general plan that includes a noise element, which is to be prepared according to guidelines adopted by the Governor's Office of Planning and Research. The purpose of the noise element is to "limit the exposure of the community to excessive noise levels" (OPR 2003).

The state noise compatibility guidelines, presented in Table 5.9-1, are designed to ensure that proposed land uses are compatible with the predicted future noise environment. At different exterior noise levels, individual land uses are identified as "clearly acceptable," "normally acceptable," "normally unacceptable," or "clearly unacceptable." 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 5.9-1 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.

In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts. Under CEQA, a project has a significant impact if the project exposes people to noise levels in excess of thresholds, which can include standards established in the local general plan or noise ordinance.

State of California Building Code

The state's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, California Building Code. These noise standards are applied to new construction in the state for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

County of San Bernardino

The project is in the unincorporated community of Bloomington in the County of San Bernardino. Therefore, the project is subject to the County's General Plan Noise Element and the San Bernardino County Development Code (SBCDC).

General Plan Noise Element

The noise element includes a summary of the variety of noise sources in the County and an action plan for achieving goals for the future noise environment in the County. It aims to limit the exposure of the community to excessive noise levels by guiding decisions concerning land use and location of new roads and transit facilities. Since no land use compatibility standards were included in the noise element, the state noise compatibility guidelines (see Table 5.9-4) will be used to evaluate land use compatibility.

The goals and policies in the County of San Bernardino General Plan Noise Element that are relevant to the project are:

Goal 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.

- **Policy N 1.1** Designate areas within San Bernardino County as "noise impacted" if exposed to existing or projected future exterior noise levels from mobile or stationary sources exceeding the standards listed in Chapter 83.01 of the Development Code.

- **Policy N 1.2** Ensure that new development of residential or other noise-sensitive land uses is not permitted in noise-impacted areas unless effective mitigation measures are incorporated into the project

design to reduce noise levels to the standards of Noise-sensitive land uses include residential uses, schools, hospitals, nursing homes, places of worship and libraries.

- **Policy N 1.3** When industrial, commercial, or other land uses, including locally regulated noise sources, are proposed for areas containing noise-sensitive land uses, noise levels generated by the proposed use will not exceed the performance standards of Table N-2 within outdoor activity areas. If outdoor activity areas have not yet been determined, noise levels shall not exceed the performance standards listed in Chapter 83.01 of the Development Code at the boundary of areas planned or zoned for residential or other noise-sensitive land uses.

- **Policy N 1.4** Enforce the state noise insulation standards (California Administrative Code, Title 24) and Chapter 35 of the California Building Code (CBC).[1]

- **Policy 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.

- **Policy N 1.6** Enforce the hourly noise-level performance standards for stationary and other locally regulated sources, such as industrial, recreational, and construction activities as well as mechanical and electrical equipment.

- **Policy N 1.7** Prevent incompatible land uses, by reason of excessive noise levels, from occurring in the future.

Goal N 2 The County will strive to preserve and maintain the quiet environment of mountain, desert and other rural areas.

- **Policy N 2.1** The County will require appropriate and feasible on-site noise attenuating measures that may include noise walls, enclosure of noise-generating equipment, site planning to locate noise sources away from sensitive receptors, and other comparable features.

- **Policy N 2.2** The County will continue to work aggressively with federal agencies, including the branches of the military, the US Forest Service, BLM, and other agencies to identify and work cooperatively to reduce potential conflicts arising from noise generated on federal lands and facilities affecting nearby land uses in unincorporated County areas.

[1] Title 24 requires that an acoustical analysis be prepared for all new developments of multi-family dwellings, condominiums, hotels, and motels proposed for areas within the 60 dB Ldn (or CNEL) contour of a major noise source for the purpose of documenting that an acceptable interior noise level of 45 dB Ldn (or CNEL) or below will be achieved with the windows and doors closed. CBC Chapter 35 requires that common wall and floor/ceiling assemblies in multifamily dwellings comply with minimum standards for the transmission of airborne sound and structure-borne impact noise.

County Code of Ordinances

Stationary Source Noise

SBCDC Section 83.01.080 (Noise) of the County of San Bernardino Code of Ordinances establishes standards concerning acceptable noise levels for both noise-sensitive land uses and noise-generating land uses. Noise limits based on receiving land use are shown below in Table 5.9-2, *Noise Standards for Stationary Noise Sources*.

Table 5.9-2 Noise Standards for Stationary Noise Sources

Affected Land Uses (Receiving Noise)	7:00 AM–10:00 PM L_{eq}	10:00 PM–7:00 AM L_{eq}
Residential	55 dBA	45 dBA
Professional Services	55 dBA	55 dBA
Other Commercial	60 dBA	60 dBA
Industrial	70 dBA	70 dBA

Source: SBCDC, Section 83.01.080 (Noise).
L_{eq} = Equivalent-Energy Sound Level (see 5.9.1.1, *Noise Descriptors*, above).
dBA = A-weighted Sound Pressure Level.

The following adjustments are applicable to the standards in Table 5.9-5:

Noise levels at receiving properties may not exceed the standards:

1. for a cumulative period of more than 30 minutes in any hour (equivalent to the L_{50} statistical sound level).
2. plus 5 dBA for a cumulative period of more than 15 minutes in any hour (equivalent to the L_{25} statistical sound level).
3. plus 10 dBA for a cumulative period of more than 5 minutes in any hour (equivalent to the $L_{8.3}$ statistical sound level).
4. plus 15 dBA for a cumulative period of more than 1 minute in any hour (equivalent to the $L_{1.6}$ statistical sound level).
5. plus 20 dBA for any period of time (equivalent to the L_0 or L_{max} statistical sound level).

If the measured ambient level exceeds any of the first four noise limit categories above, the allowable noise exposure standard shall be increased to reflect the ambient noise level. If the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under this category shall be increased to reflect the maximum ambient noise level.

If the alleged offense consists entirely of impact noise or simple tone noise, each of the noise levels in Table 5.9-5, *Noise Standards for Stationary Noise Sources,* shall be reduced by 5 dBA.

Mobile Source Noise

Table 5.9-3 shows the noise standards by receiving land use type for exposures to mobile noise sources.

Table 5.9-3 Noise Standards for Adjacent Mobile Noise Sources

Land Use		L_{dn} (or CNEL) dBA	
Categories	Uses	Interior[1]	Exterior[2]
Residential	Single and multi-family, duplex, mobile homes	45	60[3]
Commercial	Hotel, motel, transient housing	45	60[3]
	Commercial retail, bank, restaurant	50	N/A
	Office Building, research and development, professional offices	45	65
	Amphitheater, concert hall, auditorium, movie theater	45	N/A
Institutional / Public	Hospital, nursing home, school classroom, religious institution, library	45	65
Open Space	Park	N/A	65

Source: SBCDC, Section 8.01.080 (Noise).
Notes: CNEL = Community Noise Equivalent Level
[1] The indoor environment shall exclude bathrooms, kitchens, toilets, closets and corridors.
[2] The outdoor environment shall be limited to:
Hospital/office building patios
Hotel and motel recreation areas
Mobile home parks
Multi-family private patios or balconies
Park picnic areas
Private yard of single-family dwellings
School playgrounds
[3] An exterior noise level of up to 65 dBA Ldn (or CNEL) shall be allowed provided exterior noise levels have been substantially mitigated through a reasonable application of the best available noise reduction technology, and interior noise exposure does not exceed 45 dB(A) Ldn (or CNEL) with windows and doors closed. Requiring that windows and doors remain closed to achieve an acceptable interior noise level shall necessitate the use of air conditioning or mechanical ventilation.

SBCDC also has noise level standards for other structures, as summarized in Table 5.9-4. In addition, the average of the maximum levels of the loudest of intrusive sounds occurring during a 24-hour period shall not exceed an interior sound level of 65 dBA.

Table 5.9-4 Interior 12-Hour Equivalent Sound Level

Typical Uses	dBA L_{dn}[1]
Educational, Institutions, Libraries, Churches, etc.	45 dBA
General Office, Reception, etc.	50 dBA
Retail Stores, Restaurants, etc.	55 dBA
Other Areas for Manufacturing, Assembly, Test, Warehousing, etc.	65 dBA

Source: SBCDC, Section 83.01.080 (Noise).
[1] Note that there is an inherent mismatch between the specified 12-hour sound level and the L_{dn} level, which is, by definition, a 24-hour noise metric.

Construction Noise

Under SBCDC Section 83.01.080, the County allows construction activities from 7AM to 7PM, except on Sundays and federal holidays.

Vibration

SBCDC Section 83.01.090 prohibits vibration that can be felt without the aid of instruments or produces a particle velocity greater than or equal to two-tenths inches per second (i.e., 0.20 in/sec) at or beyond the lot

line of the source. Exceptions are made for temporary construction, maintenance, repair, or demolition activities between 7:00 AM and 7:00 PM, except Sundays and federal holidays.

5.9.2.2 EXISTING NOISE ENVIRONMENT

The Specific Plan area is in a developed portion of the community and is subject to noise from a myriad of transportation and stationary sources. The area currently consists of residential, office, and commercial uses.

Nearby Noise Sources

On-Road Vehicles

On-road vehicles represent the most prominent source of noise in the project area, and the majority of traffic and resultant noise are associated with Interstate 10 (I-10) and Valley Boulevard. Therefore, existing traffic noise conditions were modeled using the Federal Highway Administration's (FHWA) Traffic Noise Prediction computer model (FHWA 1978). Table 5.9-5 lists the calculated existing noise levels on roadways in the vicinity of the Specific Plan area at 50 feet from the roadway centerline. These roadways are selected based on the traffic study area (Appendix G of this DEIR) to capture roadway segments that may be affected by increases in traffic levels by Specific Plan implementation.

Table 5.9-5 Existing Conditions Traffic Noise Levels

Roadway	Segment	Daily Traffic Volumes	Noise Level at 50 Feet (dBA CNEL)	Distance to Noise Contour (feet)		
				70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
Valley Boulevard	Sierra Ave to Palmetto Ave	29,972	75.5	117	251	541
Valley Boulevard	Palmetto Ave to Alder Ave	20,594	70.8	56	121	261
Valley Boulevard	Alder Ave to Locust Ave	18,540	71.6	64	137	296
Valley Boulevard	Locust Ave to Cedar Ave	23,033	72.5	74	159	342
Valley Boulevard	Cedar Ave to Cactus Ave	12,467	68.6	40	87	187
Sierra Avenue	Slover Ave to I-10 ramps	49,975	80.2	239	514	1108
Sierra Avenue	I-10 ramps to Valley Blvd	60,406	81.0	271	583	1257
Sierra Avenue	Valley Blvd to San Bernardino Ave	37,906	72.5	73	158	340
Alder Avenue	Valley Blvd to Marygold Ave	8,781	66.3	28	61	131
Alder Avenue	Marygold Ave to San Bernardino Ave	10,388	67.4	33	72	155
Locust Avenue	Valley Blvd to San Bernardino Ave	5,538	64.2	21	45	96
Cedar Avenue	Slover Ave to I-10 ramps	25,800	71.7	65	141	303
Cedar Avenue	I-10 ramps to Valley Blvd	41,531	76.9	145	312	673
Cedar Avenue	Valley Blvd to Bloomington Ave	30,206	75.6	117	253	544
Cedar Avenue	Bloomington Ave to San Bernardino Ave	22,863	71.2	60	130	280

Source: FHWA 1978.
Notes: Based on traffic volumes provided by Webb in 2016. Calculations included in Appendix F.

Table 5.9-6 lists the calculated existing noise levels on I-10 in the vicinity of the Specific Plan area at 100 feet[2] from the roadway centerline.

[2] Noise levels for freeways are calculated at 100 feet from the centerline because a distance of 50 feet from the centerline is within the right-of-way.

Table 5.9-6 Existing Conditions Freeway Traffic Noise Levels

Roadway	Segment	Daily Traffic Volumes	Noise Level at 100 Feet (dBA CNEL)	Distance to Noise Contour (feet)		
				70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
I-10	Sierra Ave to Cedar Ave	200,000	82.3	662	1425	3071

Source: FHWA 1978.
Notes: Based on traffic volumes from Caltrans 2014. Calculations included in Appendix F.

Approximately one-half of the project area lies within the 65+ dBA CNEL noise level contour, and the entire project area is above 60 dBA CNEL, both due to the I-10 traffic flows.

Airports

The closest airport from the edges of the project area is Rialto Airport, approximately 4 miles to the north. Other airports in the area include Flabob Airport in Riverside, approximately 5.4 miles to the south, the Riverside Municipal Airport, approximately 8.1 miles to the southwest, and San Bernardino International Airport, approximately 8.9 miles to the east. Ontario International Airport is approximately 10.5 miles west of the project area. The project area is well outside the 60 CNEL contour for all of these airports. Aircrafts overflights, takeoffs, and landings are sporadically heard, but do not cause a substantial noise impact in the vicinity of the project area.

The Kaiser Hospital Heliport is approximately 0.8 mile west of the project area. There are no other heliports within 2 miles of the project boundary. Operation of Kaiser Hospital Heliport is sporadic and would not generate substantial amounts of noise to users in the Specific Plan area.

Rail

There are no rail lines within the Specific Plan boundaries. However, the Union Pacific rail system, including 11 sidings that run east-west along the south side of I-10, is approximately 300 feet south of the site just south of the I-10. The lines are a major thoroughfare for freight and lead into a major railyard (West Colton Railyard) southeast of the project area (generally between Spruce Avenue and Pepper Avenue in the City of Rialto). As rail operations are intermittent, their influence on hourly or 24-hour noise metrics would generally be lower than noise produced by traffic on I-10. However, rail operations noise would have some affect at receptors that are near the rail lines.

Stationary-Source Noise

Stationary-source noise from commercial operations within and surrounding the project area results primarily from mechanical sources and systems, including heaters, ventilation systems, pumps, compressors, air conditioners (HVAC), and refrigeration systems.

Project and Nearby Sensitive Receptors

Certain land uses are particularly sensitive to noise and vibration. These uses include residences, schools, hospital facilities, houses of worship, and open space/recreation areas where quiet environments are necessary

for the enjoyment, public health, and safety of the community. Commercial and industrial uses are not considered noise- or vibration-sensitive uses.

The proposed Specific Plan includes residential, mixed-use, retail, restaurant, hotel, and business development/office space uses. Surrounding land consists of residential, educational, church, and commercial uses.

5.9.3 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would result in:

N-1 Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

N-2 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

N-3 A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

N-4 A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

N-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, expose people residing or working in the project area to excessive noise levels.

N-6 For a project within the vicinity of a private airstrip, expose people residing or working the project area to excessive noise levels.

5.9.3.1 METHODOLOGY

Traffic Noise Modeling

The traffic noise levels for this Project were estimated using the FHWA Highway Traffic Noise Prediction Model (RD-77-108). The FHWA model determines a predicted noise level through a series of adjustments to a reference sound level. These adjustments account for traffic flows, speed, truck mix, varying distances from the roadway, length of exposed roadway, and noise shielding. Vehicle speeds on each roadway were assumed to be the posted speed limit, and no reduction in speed was assigned due to congested traffic flows. Current roadway characteristics, such as the number of lanes and speed limits, were determined from field observations and according to roadway classification.

Project Land Use Compatibility

Land use compatibility is determined by the future noise level anticipated on a site and the type of existing or proposed land use on that site. In an urban environment (such as the project area), transportation-related noise is the primary concern. Therefore, the analysis for land use compatibility addresses traffic noise impacts on proposed uses. Traffic noise contour boundaries are often used by local land use planning and zoning authorities to evaluate sound level exposures on land that is being considered for development and is adjacent to highways, and they are used in this analysis to assess the traffic noise impacts on the project. The noise contours do not take into account any existing noise barriers that may affect ambient noise levels, and they do not take into account the noise contribution from traffic on other roadways, aircraft noise, railway noise, or noise associated with transit facilities.

Vibration

The potential for vibration impacts from freight and commuter train operations are based on FTA's general assessment procedures. The FTA includes procedures to identify areas of potential impacts with potential exposure to high levels of groundborne vibration according to the type of rail activity, distance to the tracks, and type of potentially affected use. The procedures are discussed in detail in Chapters 9 and 10 of the FTA's Transit Noise and Vibration Impact Assessment (FTA 2006). Vibration from roadway sources (such as heavy trucks passing over potholes, pavement joints, and/or discontinuities) is generally not a notable concern from a CEQA standpoint as these conditions do not normally create vibrational energy above applicable thresholds (Caltrans 2002).

5.9.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the NOP disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.9-1: Implementation of the Specific Plan would involve construction activities that would result in temporary noise increases in the vicinity of the project area. [Thresholds N-1 and N-4]

Impact Analysis: Implementation of the Specific Plan would create a land use, development, and implementation framework to support up to approximately 1.9 million square feet of retail stores, restaurants, hotels, and business development/office space, and 1,093 housing units in residential and mixed-use projects throughout the project area. Two types of temporary noise impacts could occur during construction. First, the transport of workers and movement of materials to and from the site could incrementally increase noise levels along local access roads. The second type of temporary noise impact is related to demolition, site preparation, grading, and/or physical construction. Construction is performed in distinct steps, each of which has its own mix of equipment, and, consequently, its own noise characteristics. Table 5.9-7 lists typical construction equipment noise levels recommended for noise-impact assessments, based on a distance of 50 feet between the equipment and noise receptor.

Table 5.9-7 Construction Equipment Noise Emission Levels

Construction Equipment	Typical Max Noise Level (dBA L_{max})[1]	Construction Equipment	Typical Max Noise Level (dBA L_{max})[1]
Air Compressor	81	Pile-Driver (Impact)	101
Backhoe	80	Pile-Driver (Sonic)	96
Ballast Equalizer	82	Pneumatic Tool	85
Ballast Tamper	83	Pump	76
Compactor	82	Rail Saw	90
Concrete Mixer	85	Rock Drill	98
Concrete Pump	71	Roller	74
Concrete Vibrator	76	Saw	76
Crane, Derrick	88	Scarifier	83
Crane, Mobile	83	Scraper	89
Dozer	85	Shovel	82
Generator	81	Spike Driver	77
Grader	85	Tie Cutter	84
Impact Wrench	85	Tie Handler	80
Jack Hammer	88	Tie Inserter	85
Loader	85	Truck	88
Paver	89		

Source: FTA 2006.
[1] Measured 50 feet from the source

As shown, construction equipment generates high levels of noise, with maximums ranging from 71 dBA to 101 dBA. Construction of individual developments associated with implementation of the Specific Plan would temporarily increase the ambient noise environment and would have the potential to affect noise-sensitive land uses in the vicinity of an individual project. According to SBCDC Section 83.01.080, construction activities are exempt from the noise standards between 7:00 AM and 7:00 PM, except on Sundays and federal holidays.

Implementation of the Specific Plan anticipates an increase in development intensity. Most of the project area is currently developed as residential and commercial uses. Construction noise levels are dependent upon the specific locations, site plans, and construction details of individual projects. Significant noise impacts may occur from operation of heavy earthmoving equipment and truck haul operations that would occur with construction of individual development projects, which have not yet been developed. Construction would be localized and would occur intermittently for varying periods of time.

Because specific project-level information is not available at this time, it is not possible to quantify the construction noise impacts at specific sensitive receptors. Construction of individual developments associated with implementation of the Specific Plan would temporarily increase the ambient noise environment in the vicinity of each individual project, potentially affecting existing and future sensitive uses. Because construction activities associated with any individual development may occur near noise-sensitive receptors and because, depending on the project type, noise disturbances may occur for prolonged periods of time,

construction noise impacts associated with implementation of the Specific Plan are considered potentially significant.

Impact 5.9-2 **Buildout of the individual land uses and projects for implementation of the Specific Plan may expose sensitive uses to strong levels of groundborne vibration. [Threshold N-2]**

Impact Analysis:

Construction Vibration Impacts

Construction operations at projects within the Specific Plan can generate varying degrees of ground vibration, depending on the construction procedures and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish with distance from the source. The effect on buildings in the vicinity of the construction site varies depending on soil type, ground strata, and receptor-building construction. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures, but can achieve the audible and perceptible ranges in buildings close to the construction site. Table 5.9-8 lists vibration levels for construction equipment.

Table 5.9-8 Vibration Levels for Construction Equipment

Equipment	Approximate Velocity Level at 25 Feet (VdB)	Approximate RMS[1] Velocity at 25 Feet (in/sec)
Pile Driver, Impact (Upper Range)	112	1.518
Pile Driver, Impact (Typical)	104	0.644
Pile Driver, Sonic (Upper Range)	105	0.734
Pile Driver, Sonic (Typical)	93	0.170
Vibratory Roller	94	0.210
Large Bulldozer	87	0.089
Caisson Drilling	87	0.089
Loaded Trucks	86	0.076
Jackhammer	79	0.035
Small Bulldozer	58	0.003
FTA Criteria – Human Annoyance (Daytime/Nighttime)	78/72	—
FTA Criteria – Structural Damage	—	0.200

Source: FTA 2006.
1 RMS velocity calculated from vibration level (VdB) using the reference of 1 microinch/second.

As shown in Table 5.9-8, vibration generated by construction equipment has the potential to be substantial, since it has the potential to exceed the FTA criteria for human annoyance of 78 VdB and structural damage of 0.200 in/sec. However, groundborne vibration is almost never annoying to people who are outdoors, so it is usually evaluated in terms of indoor receivers (FTA 2006).

Construction details and equipment for future project-level developments under the Specific Plan are not known at this time, but may cause vibration impacts. As such, this would be a potentially significant impact.

Other Operations Vibration Impacts

Commercial and industrial operations at future developments within the Specific Plan can possibly generate varying degrees of ground vibration, depending on the operational procedures and equipment. Such equipment-generated vibrations would spread through the ground and diminish with distance from the source. The effect on buildings in the vicinity of the vibration source varies depending on soil type, ground strata, and receptor-building construction. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels.

Because specific project-level information is not available at this time, it is not possible to quantify future vibration levels at vibration-sensitive receptors that may be in close proximity to existing and future vibration sources. Therefore, with the potential for sensitive uses within the Specific Plan area to be exposed to annoying and/or interfering levels of vibration from commercial or industrial operations, such operations-related vibration impacts associated with implementation of the Specific Plan are considered potentially significant.

Impact 5.9-3: Buildout of the Specific Plan would cause a substantial noise increase related to traffic on local roadways. [Thresholds N-1 and N-3]

Impact Analysis: Future development in accordance with the Specific Plan would cause increases in traffic along local roadways. Traffic noise levels were estimated using the FHWA Highway Traffic Noise Prediction Model. Traffic volumes for existing and 2035 conditions, with and without the project, were obtained from the traffic impact analysis prepared for the project (Webb 2016). The FHWA model predicts noise levels through a series of adjustments to a reference sound level. These adjustments account for distances from the roadway, traffic flows, vehicle speeds, car/truck mix, length of exposed roadway, and road width. The distances to the 70, 65, and 60 dBA CNEL noise contours for selected roadway segments in the vicinity of project area are included in Appendix F.

Following industry standard practice, a significant impact could occur if the project would result in an increase of 5 dB when the resultant noise level remains within the objectives of the general plan (e.g., an exterior of 65 dBA CNEL at multifamily residential locations), or would result in an increase of 3 dB when the resultant level meets or exceeds the objectives of the general plan.

Table 5.9-9 presents the noise level increases on roadways over existing conditions at 50 feet from the centerline of each roadway segment.

Table 5.9-9 Existing Plus Project Traffic Noise Increases

Roadway	Segment	Existing	Existing Plus Project	Increase	Potentially Significant?
Valley Boulevard	Sierra Ave to Palmetto Ave	75.5	76.0	0.5	no
Valley Boulevard	Palmetto Ave to Alder Ave	70.8	71.6	0.8	no
Valley Boulevard	Alder Ave to Locust Ave	71.6	72.8	1.2	no
Valley Boulevard	Locust Ave to Cedar Ave	72.5	73.4	0.9	no
Valley Boulevard	Cedar Ave to Cactus Ave	68.6	71.0	2.4	no
Sierra Avenue	Slover Ave to I-10 ramps	80.2	80.4	0.2	no
Sierra Avenue	I-10 ramps to Valley Blvd	81.0	81.2	0.2	no
Sierra Avenue	Valley Blvd to San Bernardino Ave	72.5	73.0	0.5	no
Alder Avenue	Valley Blvd to Marygold Ave	66.3	67.7	1.4	no
Alder Avenue	Marygold Ave to San Bernardino Ave	67.4	68.0	0.6	no
Locust Avenue	Valley Blvd to San Bernardino Ave	64.2	67.0	2.8	no
Cedar Avenue	Slover Ave to I-10 ramps	71.7	72.3	0.6	no
Cedar Avenue	I-10 ramps to Valley Blvd	76.9	77.5	0.6	no
Cedar Avenue	Valley Blvd to Bloomington Ave	75.6	76.4	0.8	no
Cedar Avenue	Bloomington Ave to San Bernardino Ave	71.2	71.6	0.4	no

Notes: Segments with potentially significant noise level increases are shown in **bold**.
[1] Traffic noise model calculations included in Appendix F.
[2] A potentially significant would occur if the project would cause an increase greater than 3 dBA and the resulting level with the project would be greater than 65 dBA CNEL.

Table 5.9-9 shows that traffic noise increases due to implementation of the Specific Plan would be would be up to 2.8 dBA CNEL. No segments would result in an increase greater than 3 dB or reach 65 dBA CNEL. Therefore, traffic noise increases for existing plus project conditions would be less than significant.

Table 5.9-10 presents the noise level increases on roadways over 2035 conditions at 50 feet from the centerline of each roadway segment.

Table 5.9-10 2035 Conditions Traffic Noise Increases

Roadway	Segment	2035 No Project	2035 Plus Project	Increase	Significant?
Valley Boulevard	Sierra Ave to Palmetto Ave	75.3	75.9	0.6	no
Valley Boulevard	Palmetto Ave to Alder Ave	70.6	71.5	0.9	no
Valley Boulevard	Alder Ave to Locust Ave	72.4	73.4	1.0	no
Valley Boulevard	Locust Ave to Cedar Ave	72.8	73.6	0.8	no
Valley Boulevard	Cedar Ave to Cactus Ave	69.1	71.3	2.2	no
Sierra Avenue	Slover Ave to I-10 ramps	80.2	80.4	0.2	no
Sierra Avenue	I-10 ramps to Valley Blvd	81.6	81.7	0.1	no
Sierra Avenue	Valley Blvd to San Bernardino Ave	72.9	73.4	0.5	no
Alder Avenue	Valley Blvd to Marygold Ave	67.3	68.5	1.2	no
Alder Avenue	Marygold Ave to San Bernardino Ave	69.1	69.6	0.5	no
Locust Avenue	Valley Blvd to San Bernardino Ave	63.0	66.3	3.3	yes
Cedar Avenue	Slover Ave to I-10 ramps	72.4	73.0	0.6	no
Cedar Avenue	I-10 ramps to Valley Blvd	77.6	78.1	0.5	no
Cedar Avenue	Valley Blvd to Bloomington Ave	76.5	77.2	0.7	no
Cedar Avenue	Bloomington Ave to San Bernardino Ave	71.7	72.1	0.4	no

Notes: Segments with potentially significant noise level increases are shown in **bold**.
[1] Traffic noise model calculations included in Appendix F.
[2] A potentially significant would occur if the project would cause an increase greater than 3 dBA and the resulting level would be greater than 65 dBA CNEL.

Table 5.9-10 shows that traffic noise increases along roadways would be up to 3.3 dBA CNEL. Traffic along Locust Avenue between Valley Boulevard and San Bernardino Avenue would result in noise increases greater than 3 dB, and the resulting noise levels are predicted to be greater than 65 dBA CNEL. The acceptable condition for the single-family homes that line Locust Avenue (both north and south of Marygold Avenue) is 65 dBA CNEL. Therefore, this segment would experience a substantial noise increase. Traffic noise increases for 2035 conditions would be a significant impact.

Impact 5.9-4: Noise-sensitive uses would not be exposed to elevated noise levels from stationary sources. [Thresholds N-1 and N-3]

Impact Analysis: Noise is regulated by numerous codes and ordinances across federal, state, and local agencies. In addition, the County regulates noise through the SBCDC. Buildout of the Specific Plan would result in an increase in residential, commercial, and employment within the City. The primary noise sources from these land uses are landscaping, maintenance activities, mechanical equipment, and air conditioning systems. In addition, future commercial and light industrial uses may include loading docks. Noise generated by residential or commercial uses is generally short and intermittent, and these uses are not a substantial source of noise. The County regulates noise produced by stationary sources (such as air conditioning units, landscape maintenance, and loading activities) in SBCDC Section 83.01.080 (Noise). This section is based on receiving land use, protecting noise-sensitive uses regardless of neighboring uses. Noise that exceeds the limitations of the development code is considered a violation and is punishable by a fine or imprisonment. Consequently, with adherence to the development code, stationary-source noise from these types of proposed land uses would not substantially increase the noise environment. Noise impacts from stationary sources would be less than significant, and no mitigation measures would be necessary.

Impact 5.9-5: The proximity of the project area to an airport or airstrip would not result in exposure of future resident and/or workers to airport-related noise. [Thresholds N-5 and N-6]

Impact Analysis: As stated above in *Existing Conditions*, the closest airport from the edges of the Specific Plan boundaries is Rialto Airport, approximately 4 miles to the north. Other airports in the area include Flabob Airport, approximately 5.4 miles to the south, the Riverside Municipal Airport, approximately 8.1 miles to the southwest, and San Bernardino International Airport, approximately 8.9 miles to the east. Ontario International Airport is approximately 10.5 miles west of the Specific Plan boundary. The Specific Plan is outside the 60 CNEL contour for all of these airports. Aircrafts overflights, takeoffs, and landings are sporadically heard, but do not cause a substantial noise impact in the vicinity of the project area.

The Kaiser Hospital Heliport is approximately 0.8 mile west of the Specific Plan boundary. There are no other heliports within 2 miles of the project boundary. Operation of Kaiser Hospital Heliport is sporadic and would not generate substantial amounts of noise to users in the Specific Plan area.

Impacts due to nearby airports and heliports would be less than significant and no mitigation would be required.

5.9.5 Cumulative Impacts

The above analysis of the proposed project addresses cumulative impacts with regard to operational and construction noise as well as groundborne noise and vibration in the project area. Although multiple simultaneous nearby noise sources may, in combination, result in higher overall noise levels, this effect is captured and accounted for by the ambient noise level metrics that form the basis of the standards of significance for noise analysis. Any measurement of sound or ambient noise, whether for the purpose of evaluating land use compatibility, establishing compliance with noise standards, or determining point-source violations of a noise ordinance, necessarily will incorporate noise from all other nearby, perceptible sources. To specifically estimate the proposed project's contribution to traffic noise, existing noise levels were compared to those projected with completion of the proposed project. As demonstrated above, the proposed project's contribution to increases in ambient noise levels and vibration results in a significant impact. None of the potential mitigation measures considered below would reduce the potentially significant impacts to less than significant. The proposed project would therefore contribute to cumulatively considerable traffic-generated noise, and the cumulative impact would be significant and unavoidable.

Additionally, construction activities may occur simultaneously and in close proximity to noise-sensitive receptors, resulting in significant impacts. Since details of individual development projects in the project area are currently unknown, it cannot be determined whether Mitigation Measure N-1, listed below, would reduce potentially significant impacts to less than significant. The proposed project would therefore contribute to cumulatively considerable construction-related noise and vibration, and the cumulative impact would be significant and unavoidable.

5.9.6 Existing Regulations and Standard Conditions

State

- California Code of Regulations, Title 21, Part 1, Public Utilities Code (Regulation of Airports)
- California Code of Regulations, Title 24, Part 11, California Green Building Standards Code

Local

- SBCDC Section 83.01.080, Noise
- SBCDC Section 83.01.090, Vibration
- SBCDC Chapter 82.18, Noise Hazard Overlay

General Plan Noise Element

- Various Goals (presented above in Section 5.9.1.1).

5.9.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.9-4 (stationary noise sources) and 5.9-5 (airport related noise), dealing with stationary sources and air facilities, respectively.

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.9-1:** Noise from construction activities from implementation of projects in the Specific Plan area could result in substantial impacts to sensitive receptors.
- **Impact 5.9-2:** Groundborne vibration from construction activities and commercial/industrial operations at future developments in the Specific Plan area could result in significant impacts to offsite vibration-sensitive receptors.
- **Impact 5.9-3:** Noise-sensitive uses could be exposed to elevated noise levels from Specific Plan–related roadway sources.

5.9.8 Mitigation Measures

Impact 5.9-1

N-1 Prior to issuance of demolition, grading and/or building permits, a note shall be provided on plans indicating that, ongoing during grading, demolition, and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related noise:

- Construction activity is limited to the daytime hours between 7 AM to 7 PM on Monday through Friday and 9 AM to 6PM on Saturday, as prescribed in SBCDC Section 83.01.080. Construction is prohibited on Sundays.
- All internal combustion engines on construction equipment and trucks are fitted with properly maintained mufflers no less effective than those supplied by the original manufacturer.
- Stationary equipment such as generators, air compressors shall be located as far as feasible from nearby noise-sensitive uses.
- Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors.
- Construction traffic shall be limited—to the extent feasible—to approved haul routes established by the County Planning Department.

Impact 5.9-2

N-2 Prior to issuance of a building permit for any project requiring pile driving or blasting during construction, the property owner/developer shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant/engineer. The maximum levels shall not exceed 0.2 inch/second, which is the level that can cause architectural damage for typical residential construction. If maximum levels would exceed this threshold, alternative uses such static rollers, nonexplosive blasting, and drilling piles as opposed to pile driving shall be used.

N-3 During the project-level CEQA process for each individual development under the Specific Plan, a noise and vibration analysis shall be conducted to assess and mitigate potential noise and vibration impacts related to the operations of that individual development. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant/ engineer and shall follow the then-applicable CEQA guidelines, practices, and precedents.

Impact 5.9-3

N-4 Prior to issuance of building permits for future residential units in the Specific Plan area that are adjacent to Locust Avenue (between Valley Boulevard and Marygold Avenue), the applicant(s)/developer(s) shall submit an acoustical study to the County of San Bernardino that demonstrates that the proposed residential building design would provide an interior noise level of 45 dBA CNEL or less and include a means of mechanical ventilation (for occupancy with windows closed), as required by the California Building Code.

Without other mitigation measures, existing noise-sensitive uses adjacent to Locust Avenue between Valley Boulevard and San Bernardino Avenue would be exposed to elevated traffic noise levels that would result in substantial impacts at some time in the Specific Plan buildout. At present, there are approximately 40 households along this roadway segment of concern. The following potential mitigation measures were considered.

Mitigation Measures Considered

In compliance with CEQA, "each public agency shall mitigate or avoid the significant effects on the environment of project it carries out or approves whenever it is feasible to do so" (Public Resources Code § 21002.1(b)). The term "feasible" is defined in CEQA to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (Public Resources Code § 21061.1). A number of measures were considered for mitigating or avoiding the traffic noise impacts.

Special Roadway Paving

Notable reductions in tire noise have been achieved via the implementation of special paving materials, such as rubberized asphalt or open-grade asphalt concrete overlays. For example, Sacramento County conducted a study of pavement noise along the Alta Arden Expressway (Sacramento County 1999) and found an average improvement of 4 dB compared to conventional asphalt overlay.

Although this amount of noise reduction from rubberized/special asphalt materials would be sufficient to preclude the predicted project-generated noise increase due to project traffic, the potential up-front and ongoing maintenance costs are such that the cost versus benefits ratio[3] is not expected to be reasonably feasible. Therefore, this mitigation measure was dropped from further discussion.

Sound Barrier Walls

With a cursory review of aerial depictions of the single impacted segment, the majority (if not all) of residences around the Specific Plan area have direct access (via driveways) to the associated roadway. Therefore, barrier walls would prevent access to individual properties and would be infeasible. Further, these impacted homes are on private property outside of the control of future Specific Plan developers, so there would be limited admittance (onto these properties) to construct such walls. Lastly, this approach would also be quite expensive in relation to the number of benefitted households.

All things considered, retrofitting roadway sound barrier walls along the impacted segment is infeasible, and this method was dropped from further consideration.

Sound Insulation of Offsite Residences

The highest predicted roadway noise level was approximately 66.5 dBA CNEL (at 50 feet from the centerline of the closest travel lane), which is 6.5 dB above the "normally acceptable" compatibility classification for single-family residential land uses, and 1.5 dB above for multifamily residential land uses. Exterior-to-interior noise reductions depend on the materials used, the design of the homes, and their conditions. To determine what upgrades would be needed, a noise study would be required for each house to measure exterior-to-interior noise reduction. Sound insulation may require upgraded windows, upgraded doors, and a means of mechanical ventilation to allow for a "windows closed" condition. There are no funding mechanisms and procedures that would guarantee that the implementation of sound insulation features at each affected home would offset the increase in traffic noise to interior areas and ensure that the 45 dBA CNEL would be achieved. Therefore, this method was dropped from further consideration.

Summary for Impact 5.11-3, Project-Generated Traffic Noise

In summary, no individual measure and no set of feasible or practical mitigation measures are available to reduce project-generated traffic noise to less than significant levels. Thus, traffic noise will remain a significant and unavoidable impact for the roadway segment of Locust Avenue between Valley Boulevard and San Bernardino Avenue.

[3] Cost versus benefit considerations are in terms of the number of households benefited, per the general methodology employed by Caltrans in the evaluation of highway sound walls.

5.9.9 Level of Significance After Mitigation

Impact 5.9-1

Mitigation Measure N-1 would reduce potential noise impacts during construction to the extent feasible. However, due to the potential for proximity of construction activities to sensitive uses, the number of construction projects occurring simultaneously, and the potential longevity of construction activities, Impact 5.9-1 (construction noise) could result in a temporary substantial increase in noise levels above ambient conditions. Therefore, impacts would remain ***significant and unavoidable***.

Impact 5.9-2

With Mitigation Measures N-2 and N-4, coupled with adherence to associated performance standards, Impact 5.9-2 would be reduced to less than significant levels. Specifically, Mitigation Measure N-2 would reduce potential vibration impacts during construction below the pertinent thresholds, and Mitigation Measure N-3 (operations-related vibration) would reduce potential vibration impacts from commercial/industrial uses to less than significant levels. No significant and unavoidable vibration impacts would remain.

Impact 5.9-3

Mitigation Measure N-4 would reduce potential interior noise impacts to future noise-sensitive receptors below the thresholds. However, as demonstrated above under "Mitigation Measures Considered" there are no feasible or practical mitigation measures available to reduce project-generated traffic noise to less than significant levels for existing residences along the affected roadway. Thus, traffic noise would remain a ***significant and unavoidable*** impact for the roadway segment of Locust Avenue between Valley Boulevard and San Bernardino Avenue.

5.9.10 References

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5.10 POPULATION AND HOUSING

This section of the draft environmental impact report (DEIR) examines the potential for socioeconomic impacts of the proposed Valley Corridor Specific Plan on Bloomington and San Bernardino County, including changes in population, employment, and demand for housing.

Analysis in this section is based, in part, on population, housing, and employment data from the following sources:

- **US Census.** The official United States Census is described in Article I, Section 2, of the US Constitution. It calls for an actual enumeration of the people every 10 years, to be used for apportionment among the states of seats in the House of Representatives. The Census Bureau publishes population and household data gathered in the decennial census. This information provides a record of historical growth rates in Bloomington and San Bernardino County.

- **California Department of Finance.** The Department of Finance (DOF) prepares and administers California's annual budget. Other duties include estimating population demographics and enrollment projections. DOF's "Table E-5: City/County Population and Housing Estimates" reports on population and housing estimates for the state, counties, and cities, January 2011 to 2015, benchmarked to base year 2010.

- **Southern California Association of Governments.** Policies and programs adopted by SCAG to achieve regional objectives are expressed in its 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

Throughout this section, data for San Bernardino County, Bloomington, and the unincorporated portions of the County in aggregate are used to describe existing conditions and demographic trends in the vicinity and region of the project area. Note that community-level data were not available for every projection because Bloomington is an unincorporated community.

5.10.1 Environmental Setting

5.10.1.1 REGULATORY SETTING

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 in each county based on DOF 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, HCD provides the RHNA to the council. Such is the case for the County of San Bernardino, which is a member of SCAG. The council, in

this case SCAG, assigns a share of the regional housing need to each of its cities and counties. The process gives cities and counties the opportunity to comment on the proposed allocations. 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 that 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 (California Government Code §§ 65580–65589) require that each city and county identify and analyze existing and projected housing needs within 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.

2014–2021 County of San Bernardino Housing Element

The County's most recent housing element was adopted by the San Bernardino County Board of Supervisors on January 28, 2014. For the 2014–2021 planning period, SCAG determined that the County's RHNA allocation for its unincorporated areas—which include Bloomington—was 39 units (SCAG 2012).

Regional Planning

Refer to Section 4.2.2 of this DEIR for a detailed description of SCAG and the most recent RTP/SCS for the SCAG region.

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 actions in the San Bernardino County subregion that

includes Bloomington are partially the result of input from the San Bernardino Associated Governments, which offers recommendations regarding SCAG's initiatives.

Regional Transportation Plan/Sustainable Communities Strategy

SCAG is responsible for the development of the regional transportation plan every four years and the regional transportation improvement plan every two years. SCAG uses regional transportation plans to focus on the relationship between jobs and housing and how it impacts mobility, minimizes congestion, and protects quality of life. Unique to the SCAG region is the option for subregions to create their own SCS. However, the San Bernardino Associated Governments has not chosen to do this and relies on SCAG's 2016-2040 RTP/SCS.

On April 7, 2016, SCAG's Regional Council adopted the 2016-2040 RTP/SCS. This long-range visioning plan balances future mobility and housing needs with economic, environmental, and public health goals. The 2016 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the National Ambient Air Quality Standards. It balances the region's future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS is required by the state of California and the federal government and is updated by SCAG every four years as demographic, economic, and policy circumstances change. The 2016 RTP/SCS is a living, evolving blueprint for the region's future (SCAG 2016). Following adoption of the RTP/SCS, SCAG identified the region's high quality transit areas. Valley Boulevard is in a high quality transit area (see Figure 4-1).

Population Trends

As shown in Table 3-1 of this DEIR, the existing population of the Specific Plan area is estimated to be 2,216 residents. According to estimates by the US Census Bureau for the 2009–2013 period—the most recent period for which estimates are available—Bloomington's population was 25,062 in 2013.

Table 5.10-1 shows population and housing data collected by the Census Bureau for Bloomington and San Bernardino County during the last two decennial censuses.

Table 5.10-1 Census Data for Bloomington and San Bernardino County, 2000 and 2010

	2000	2010	Change, 2000–2010	
			Total	Percent
Bloomington				
Population	19,318	23,851	4,533	23.5
Dwelling Units	5,260	5,745	485	9.2
Unincorporated San Bernardino County (includes Bloomington)				
Population	292,857	291,776	-1,081	-0.4
Dwelling Units	126,869	132,921	6,052	4.8
San Bernardino County				
Population	1,709,434	2,035,210	325,776	19.1
Dwelling Units	601,369	699,637	98,268	16.3

Source: US Census 2015a.

As shown in Table 5.10-1, Bloomington's population grew 23.5 percent between 2000 and 2010, and the County's population grew by 19.1 percent. During the same period, housing units grew by 9.2 percent in Bloomington and by 16.3 percent in the County. Growth was markedly slower in the County's unincorporated area (which includes Bloomington): housing units only grew 4.8 percent between 2000 and 2010, and the population fell by approximately 0.4 percent.

Table 5.10-2 identifies yearly population figures for unincorporated San Bernardino County and the County as a whole, illustrating that yearly growth rates have fluctuated in parallel with the health of the state's economy. For example, effects of the 2007–2009 recession can be seen in 2007 when the unincorporated County lost 4.5 percent of its population. An overall slowing of growth can be seen for the County as a whole during the second half of the 2000s.

Table 5.10-2 Population Growth Trends in San Bernardino County, 2000–2015

	Unincorporated San Bernardino County (includes Bloomington)[1]		San Bernardino County	
Year	Population[2]	Percent Change	Population[2]	Percent Change
2000	292,857	N/A	1,709,434	N/A
2001	286,712	-2.1	1,741,416	1.9
2002	290,711	1.4	1,782,268	2.3
2003	294,902	1.4	1,825,379	2.4
2004	295,094	0.1	1,875,063	2.7
2005	299,020	1.3	1,921,423	2.5
2006	301,072	0.7	1,959,715	2.0
2007	287,538	-4.5	1,989,690	1.5
2008	288,864	0.5	2,009,594	1.0
2009	290,424	0.5	2,019,432	0.5
2010	291,776	0.5	2,035,210	0.8
2011	293,297	0.5	2,046,619	0.6
2012	294,031	0.3	2,054,786	0.4
2013	295,808	0.6	2,069,806	0.7
2014	297,507	0.6	2,084,151	0.7
2015	299,110	0.5	2,104,291	1.0

Sources: DOF 2012; DOF 2015a.
1. DOF does not prepare population estimates for individual unincorporated communities such as Bloomington.
2. Population counts for the years 2000 and 2010 are derived from US Census data; counts for other years consist of estimates calculated by the DOF.

Table 5.10-2 demonstrates that growth in San Bernardino is beginning to accelerate as the state and national economy recovers. Growth in the unincorporated County has remained relatively stable since 2008. However, because of its location in the heavily urbanized portion of the County, Bloomington's yearly fluctuations in population growth are more likely to mirror those of surrounding cities than those of the unincorporated County, which has numerous rural areas.

Population Forecasts

Population forecasts for the unincorporated County and the County as a whole are listed in Table 5.10-3. The 2040 population forecasts are from the SCAG 2016-2040 RTP/SCS regional forecast. SCAG's household and employment projections, also shown in Table 5.10-3, are discussed later in this subsection.

Table 5.10-3 Adopted SCAG Growth Forecasts

	Unincorporated San Bernardino County		San Bernardino County		Projected Increase, 2012–2040		Projected % Increase, 2012–2040	
Forecast	2012	2040	2012	2040	Unincorporated County	San Bernardino County	Unincorporated County	San Bernardino County
Population	295,600	344,100	2,068,000	2,731,300	48,500	663,300	16.4	32.1
Households	94,200	111,300	615,300	854,300	17,100	239,000	18.2	38.8
Employment	57,400	91,100	659,500	1,028,100	33,700	368,600	58.7	55.9

Source: SCAG 2016.

As shown in the Table 5.10-3, the population of the County is forecast to increase to 2,731,300 by 2040, an increase of 663,300 or approximately 30.7 percent beyond its 2012 population. Approximately 48,500 of these future residents are expected to reside in the unincorporated portions of the County, which include Bloomington. SCAG forecasts also predict strong household and employment growth in the County.

Housing Trends

Housing units and households as counted in the 2010 Census and compared to 2015 DOF estimates are shown in Table 5.10-4.

Table 5.10-4 Housing Units and Households in Bloomington and San Bernardino County, 2010 and 2015

	2010 US Census	2015 DOF Estimate[1]
Bloomington		
Housing Units	5,745	–
Households	5,428	–
Vacant Housing Units	317	–
Vacancy Rate	5.5%	–
Unincorporated San Bernardino County		
Housing Units	132,921	133,404
Households	94,085	94,598
Vacant Housing Units	38,836	38,771
Vacancy Rate	29.2%	29.1%

Table 5.10-4 Housing Units and Households in Bloomington and San Bernardino County, 2010 and 2015

	2010 US Census	2015 DOF Estimate[1]
San Bernardino County		
Housing Units	699,637	709,385
Households	611,618	620,238
Vacant Housing Units	88,109	88,573
Vacancy Rate	12.6%	12.5%

Source: US Census 2015a; DOF 2015b.
[1] DOF does not prepare population estimates for individual unincorporated communities such as Bloomington.

The housing vacancy rate in Bloomington was 5.5 percent in 2010, as reported in the 2010 Census. San Bernardino County's vacancy rate was substantially higher than Bloomington's, both in 2010 (12.6 percent) and currently (12.5 percent). The vacancy rate of the unincorporated County was even higher, at 29.2 percent in 2010 and 29.1 percent currently. As shown in Table 5.10-3, the number of households in the County is forecast to increase by over a third—38.8 percent—between 2012 and 2040.

Housing Tenure

Tenure refers to whether a household owns or rents a home. As of the 2010 Census, 68.9 percent (3,740) of households in Bloomington owned a home and 31.1 percent (12,390) rented a home. In comparison, San Bernardino County's homeownership rate was 62.7 percent in 2010 (US Census 2015a).

Housing Unit Types

Existing housing units in unincorporated San Bernardino County are classified by unit type in Table 5.10-5. As shown in the table, existing housing in the unincorporated County is primarily single-family detached units, at 83.1 percent. However, mobile homes are well represented at nearly 10 percent of the overall housing stock.

Table 5.10-5 Housing Units in Unincorporated San Bernardino County by Unit Type, 2015 Estimates

	Number of Units	Percent of Units
Single-Family Detached	110,890	83.1
Single-Family Attached	2,929	2.2
Multifamily (2 to 4 Units)	4,079	3.1
Multifamily (5+ units)	2,247	1.7
Mobile Homes	13,259	9.9
Total Units	133,404	100%

Source: DOF 2015a.

Because Bloomington is not an incorporated city, DOF housing type estimates are not available at the community level. However, the percentages shown in Table 5.10-5 are largely reflective of existing land uses in Bloomington and the Specific Plan area, which are both dominated by single-family detached housing. Notable exceptions are concentrated in the southwestern quadrant of the Specific Plan area, where three mobile home communities (Bloomington, Idle Wheels, and Log Cabin mobile home parks) and one apartment community (Sierra Vista Crossing Apartments) are located along the southern side of Valley Boulevard.

Household Size

The average household size was reported as 4.36 persons in Bloomington and 3.26 persons in San Bernardino County in the 2010 US Census. The DOF estimates that in 2015, unincorporated San Bernardino County had an average household size of 3.12 persons, and the County as a whole had an average household size of 3.3 persons (DOF 2015a).

Current and Future Housing Needs

The County of San Bernardino 2014–2021 Housing Element was adopted by the County Board of Supervisors on January 28, 2014, and was determined to comply with state housing law by HCD on September 25, 2014. The housing element provides a thorough discussion of housing conditions and issues in the unincorporated County, and identifies goals and policies that address housing affordability.

Regional Housing Needs Allocation

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 upper 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 households needed in the community. Additional factors used to determine the RHNA include tenure, the average rate of units needed to replace housing units demolished, and other factors.

The County of San Bernardino's RHNA allocation for the 2014–2021 period was approved in 2012 and is shown in Table 5.10-6. The County is required to ensure that sufficient sites planned and zoned for housing are available to accommodate its need and to implement proactive programs that facilitate and encourage the production of housing commensurate with its housing needs.

Table 5.10-6 County of San Bernardino Regional Housing Needs Allocation for 2014–2021

Income Category	Definition	RHNA	
		Number of Units	Percentage
Very Low[1]	50% or Less of MFI[2]	9	23.1
Low	51–80% of MFI	6	15.4
Moderate	81–120% of MFI	7	17.9
Above Moderate	above 120% of MFI	17	43.6
	Total	39	100%

Source: San Bernardino County 2014.
[1] Includes Extremely Low
[2] MFI = median family income

Consistent with state housing law, the housing element demonstrates that the County can accommodate its RHNA allocation through its inventory of appropriate housing sites.

Employment

Table 5.10-7 shows Bloomington's workforce by occupation and industry. According to estimates calculated by the US Census for the 2009–2013 period—the most recent period for which estimates are available—Bloomington had an employed civilian labor force (16 years and older) of 9,090 workers.[1] The largest occupational category was "production, transportation, and material moving occupations," which accounted for 27 percent of Bloomington residents employed in the civilian workforce (US Census 2015b). During the same period, more Bloomington residents were employed in construction than in any other industry, at 14.2 percent of all civilian workers.

Table 5.10-7 Existing Bloomington Employment by Business Sector, 2009–2013

Occupation/Industry	Number	Percent
Occupation		
Management, business, science, and arts occupations	1,073	11.8
Service occupations	1,704	18.7
Sales and office occupations	2,173	23.9
Natural resources, construction, and maintenance occupations	1,684	18.5
Production, transportation, and material moving occupations	2,456	27.0
Total	9,090	100%
Industry		
Agriculture, forestry, fishing and hunting, and mining	97	1.1
Construction	1,291	14.2
Manufacturing	1,140	12.5
Wholesale trade	740	8.1
Retail trade	1,231	13.5
Transportation and warehousing, and utilities	942	10.4
Information	68	0.7

[1] Note that the statistics in Table 5.10-7 describe the employment status of Bloomington residents only and do not account for the employees who work in Bloomington but live elsewhere.

Table 5.10-7 Existing Bloomington Employment by Business Sector, 2009–2013

Occupation/Industry	Number	Percent
Finance and insurance, and real estate and rental and leasing	229	2.5
Professional, scientific, and management, and administrative and waste management services	772	8.5
Educational services, and health care and social assistance	1,177	12.9
Arts, entertainment, and recreation, and accommodation and food services	593	6.5
Other services, except public administration	475	5.2
Public administration	335	3.7
Total	9,090	100%

Source: US Census 2015b.
Note: Employment figures count civilian employees only.

As shown in Table 3-1 of this DEIR, existing land uses in the project area are estimated to employ approximately 477 workers.

Employment Trends

According to the California Employment Development Department, Bloomington and San Bernardino County both experienced a major drop in employment during 2008 and 2009, which is consistent with the effects of the national recession seen throughout the region and state. However, as shown in Table 5.10-8, Bloomington and San Bernardino County have seen employment numbers recover since the economic downturn, and both currently have substantially more jobs than at their prerecession peak in 2006. As shown in the table, Bloomington's employment growth trend is almost identical to that of San Bernardino County's from 2011 onward.

Table 5.10-8 Historic Employment Growth Trends in Bloomington and San Bernardino County

	Bloomington		San Bernardino County	
Year	Total Employment (Persons)[1]	Percent Change	Total Employment (Persons)[1]	Percent Change
2000	6,500	N/A	704,500	N/A
2001	6,600	1.5	723,900	2.8
2002	6,800	3.0	739,600	2.2
2003	6,900	1.5	752,300	1.7
2004	7,200	4.3	781,600	3.9
2005	7,400	2.8	807,200	3.3
2006	7,500	1.4	818,600	1.4
2007	7,500	0.0	813,900	-0.6
2008	7,300	-2.7	792,800	-2.6
2009	6,800	-6.8	749,100	-5.5
2010	8,700	27.9	769,200	2.7
2011	8,800	1.1	773,700	0.6
2012	9,000	2.3	791,700	2.3

Table 5.10-8 Historic Employment Growth Trends in Bloomington and San Bernardino County

	Bloomington		San Bernardino County	
Year	Total Employment (Persons)[1]	Percent Change	Total Employment (Persons)[1]	Percent Change
2013	9,200	2.2	810,700	2.4
2014	9,500	3.3	836,000	3.1
2015	9,700	2.1	857,900	2.6

Source: EDD 2015a; EDD 2015b.
[1] Employment is defined as the number of individuals, aged 16 years or older, who are working.

Employment estimates in Table 5.10-8 describe the employment of Bloomington and San Bernardino County residents, and SCAG forecasts shown in Table 5.10-3 describe total employment in Bloomington and the County (much of which consists of non-Bloomington or non-County residents, respectively). Because they represent different sets of data, these figures cannot be used to calculate projected increases from existing employment.

5.10.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, 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 housing, necessitating the construction of replacement housing elsewhere.

P-3 Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

5.10.3 Environmental Impacts

The following impact analysis addresses the above thresholds of significance. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.10-1: Implementation of the Valley Corridor Specific Plan would directly and indirectly induce population growth in Bloomington. [Threshold P-1]

Impact Analysis: As described in Chapter 3 of this DEIR, buildout of the proposed Specific Plan would result in a net increase of 568 dwelling units and 1,857 additional residents in the Specific Plan area. Buildout would also result in approximately 907,319 additional square feet of nonresidential uses (i.e., commercial, office, light industrial, and institutional). These uses would employ 1,413 more people than currently employed on the project site—employment growth that would indirectly induce population growth in the

area. Therefore, the Valley Corridor Specific Plan would both directly and indirectly induce population growth in the Specific Plan area and in Bloomington.

Population Growth Impacts

As stated previously, the most recent (2013) population estimate for Bloomington was 25,062 residents. Therefore, the Specific Plan area's net increase of 1,857 residents represent approximately 7.4 percent of the community's population and approximately 0.6 percent of unincorporated San Bernardino County's 2015 population of 299,110. Upon buildout of the proposed Specific Plan, the Specific Plan area would be home to a total of 4,073 residents, or approximately 1.2 percent of the 344,100 residents projected for unincorporated San Bernardino County in 2040 by SCAG (see Table 5.10-3). Although Specific Plan buildout would represent an increase in the Specific Plan area's share of the unincorporated County's total population, this is a minor increase that is consistent with the County's goals to focus growth into established urbanized areas of the County (e.g., the San Bernardino Valley) and away from rural areas at the metropolitan area's periphery. The increase would also allow opportunities for development of affordable housing consistent with the County's RHNA allocation for the period between 2014 and 2021.

By another measure, the additional 1,857 residents anticipated from buildout of the proposed Specific Plan would represent only 3.8 percent of the growth anticipated by SCAG for the unincorporated County between 2012 and 2040, which is an increase of 48,500 residents. The area is planned for and can accommodate this growth. Therefore, although the Specific Plan would directly induce population growth, this growth would not represent a significant increase in population; nor would it be inconsistent with SCAG projections for the community or region.

Employment Growth Impacts

Implementation of the proposed Specific Plan would generate short-term design, engineering, and construction jobs during project construction and long-term jobs during operation of allowed land uses. As shown in Table 3-1 of this DEIR, buildout of the Specific Plan would generate approximately 1,890 jobs in Bloomington, an increase of 1,413 compared to existing conditions and 4.2 percent of job growth projected for the unincorporated County by SCAG for 2012 to 2040 of 33,700. Although this growth constitutes a substantial local increase in jobs compared to existing conditions, it is consistent with goals and policies of the proposed Specific Plan—which aim to spur private investment along the Valley Boulevard corridor—and Goal HV/ED 1 of the adopted Bloomington Community Plan, which aims to promote economic development in Bloomington.

Jobs-Housing Balance

The jobs-housing ratio is a general measure of the total number of jobs and number of 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 a 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. No ideal jobs-housing ratio has been adopted in state, regional, or local policies; jobs-housing goals and ratios are advisory only. SCAG applies the jobs-housing ratio at the regional and subregional level to analyze the fit between jobs, housing, and infrastructure. The American Planning Association is an authoritative resource for community planning best practices, including recommendations for assessing jobs-housing ratios. Although the American Planning Association 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).

Project Impact on Jobs-Housing Balance

Buildout of the proposed Specific Plan would increase both jobs and housing in Bloomington. Table 5.10-9 shows jobs-housing ratios for the project area, community of Bloomington, and the overall unincorporated County (which includes Bloomington) and how they would be affected by implementation of the proposed Specific Plan.

Table 5.10-9 Existing and Projected Jobs-Housing Balance

	Existing	Specific Plan Buildout	Existing Plus Project	SCAG Projection for 2040	SCAG Projection Plus Project
Specific Plan Area					
Jobs	477	1,890	–	–	–
Households	525	1,093	–	–	–
Jobs-Housing Ratio	0.9	1.7	–	–	–
Bloomington					
Jobs	2,787[1]	–	4,677	–	–
Households	5,530[2]	–	6,623	–	–
Jobs-Housing Ratio	0.5	–	0.7	–	–
Unincorporated San Bernardino County					
Jobs	62,214[3]	–	–	91,100	92,990
Households	98,072[4]	–	–	111,300[5]	112,393
Jobs-Housing Ratio	0.63	–	–	0.82	0.83

[1] US Census (LEHD Origin-Destination Employment Statistics) estimate for 2014.
[2] US Census estimate for 2014 based on 5 years of survey data (2010-2014).
[3] Calculated for 2016 by adding pro-rated growth for 4 out of 28 years (2012-2040) to the jobs estimate for 2012.
[4] DOF estimate for 2016.
[5] SCAG forecast for 2040.

As shown in Table 5.10-9, buildout of the proposed Specific Plan would result in a more balanced jobs-housing ratio in the project area (1.7) compared to existing conditions (0.9). When housing units and jobs generated by implementation of the Specific Plan are added to Bloomington's existing jobs and housing, the community would also experience a more balanced community-wide jobs-housing ratio (0.7) compared to existing conditions (0.5). Last, buildout of the proposed Specific Plan would help improve long-term jobs-housing balance in unincorporated San Bernardino County. However, as shown in the two right-hand columns of Table 5.10-9, that improvement is statistically insignificant when added to SCAG's 2040

projections for the unincorporated County. Bloomington and the unincorporated County would remain housing-rich with or without implementation of the proposed project.

Conclusion

Although implementation of the Valley Corridor Specific Plan would directly and indirectly induce population, housing, and employment growth in Bloomington and San Bernardino County, this growth would be consistent with goals of the adopted Bloomington Community Plan. Projected growth associated with buildout of the Specific Plan area would be consistent with growth projections for the region and the County's RHNA allocation. It would also have a beneficial impact on jobs-housing balance in the community. Impacts related to inducement of growth would be less than significant and no mitigation is necessary.

Impact 5.10-2: Implementation of the Valley Corridor Specific Plan would not displace people or housing. [Thresholds P-2 and P-3]

Impact Analysis: The proposed Specific Plan is designed to be a long-term planning document that will provide comprehensive direction for the development of the Specific Plan area over a period of 20 or more years. The Specific Plan area is developed with a variety of land uses, including residential, commercial, industrial, and institutional. Implementation of the proposed project would allow existing uses to continue even where new zoning and land use designations are proposed under the Valley Corridor Specific Plan. No existing uses would be forced to remove or relocate as a result of the plan's implementation.

The proposed Specific Plan designates areas of existing residential uses into the Bloomington Enterprise or Commercial land use districts, which are designations intended for nonresidential uses (see Chapter 3, *Project Description*, of this DEIR). Therefore, implementation of the Specific Plan would convert some residential uses to nonresidential uses. Affected parcels include single-family residences, the Sierra Vista Crossing Apartments, and the corridor's three mobile home communities. The reclassification of these areas is proposed, in large part, because of their location between I-10 and Valley Boulevard. Residential uses adjacent to the freeway and near the Colton Railyard presents land use conflicts related to air quality, health risks, and noise impacts. To promote further investment in the corridor, the Specific Plan aims for existing residential uses in the Enterprise and Commercial land use districts to gradually transition from residential to nonresidential over time. Furthermore, these areas are already designated for nonresidential uses in the County's currently adopted Land Use Plan. Nevertheless, as previously stated, existing residential uses would be allowed to remain until their landowners submit proposals to redevelop the affected parcels. Therefore, any displacement of housing due to implementation of the Specific Plan would be incremental. As shown in Table 3-1 (see Chapter 3), despite the gradual replacement of some existing residential uses with commercial, retail, office, and/or light industrial uses, buildout of the Specific Plan would result in an overall net increase of 568 housing units and 1,857 residents.

In conclusion, although buildout of the proposed Specific Plan would allow for redevelopment of residential to nonresidential uses, this impact would be temporary and incremental over a period of approximately 20 years. Furthermore, buildout of the proposed project would result in an overall net increase in dwelling units

and population. Therefore, impacts related to displacement of people and housing would be less than significant.

5.10.4 Cumulative Impacts

Population Growth

As described in Chapter 4 (see Subsection 4.4, *Assumptions Regarding Cumulative Impacts*), capacity for additional residential and nonresidential development in surrounding areas of Bloomington would be expected to be used during the planning period of the proposed Specific Plan. This growth is also accounted for in SCAG's growth projections for the region—the San Bernardino Valley is well known as an area that continues to experience moderate to high levels of population and employment growth. In the long-term, regional growth could result in adverse effects on the regional jobs-housing balance. However, as discussed under Impact 5.10-1, implementation of the proposed Specific Plan would not exacerbate any such imbalance. To the contrary, buildout of the Specific Plan area would result in a beneficial impact related to jobs-housing balance. As a result, cumulative impacts of the proposed project would be less than significant.

Displacement of People and Housing

Future development and redevelopment in surrounding areas of Bloomington (and adjacent communities), result in the conversion of residential to nonresidential uses. However, as in the project area, this growth would be temporary, incremental over a period of many years, would be driven by market demand, and determined by private land owner decisions. Furthermore, redevelopment would not necessarily displace existing residents or housing units, since the project area and Bloomington are housing rich. Cumulative impacts of the proposed project related to displacement of people and housing would be less than significant.

5.10.5 Existing Regulations and Standard Conditions

No regulations or standard conditions apply to population and housing.

5.10.6 Level of Significance Before Mitigation

Impacts 5.10-1 (induce population growth) and 5.10-2 (displacement of people and housing) would be less than significant.

5.10.7 Mitigation Measures

Because impacts related to population and housing would be less than significant, no mitigation is necessary.

5.10.8 Level of Significance After Mitigation

Impacts would be less than significant. No significant and unavoidable impacts related to population and housing would occur.

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5. Environmental Analysis
POPULATION AND HOUSING

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5.11 PUBLIC SERVICES

This section addresses public services, including: fire protection and emergency services, police protection, school services, and library services. Park services are addressed in Section 5.12, *Recreation*. Public and private utilities and service systems, including water, wastewater, and solid waste services and systems, are addressed in Section 5.14.

5.11.1 Fire Protection and Emergency Services

5.11.1.1 ENVIRONMENTAL SETTING

Regulatory Setting

California Code of Regulations Title 24, Part 2 and Part 9

The California Building Code (CBC) (Part 2 of Title 24 of the CCR) sets forth complete regulations and general construction building standards, including administrative, fire and life safety, and field inspection provisions. In 2008, the base document for Part 2 changed from the Uniform Building Code to the International Building Code. Part 9 is the California Fire Code (CFC), which compiles building standards related to fire safety from throughout Title 24. This code was preassembled from the 2000 Uniform Fire Code of the Western Fire Chiefs Association. It was revised in January 2008 when the base code changed from the Uniform Fire Code series to the International Fire Code. The current CBC and CFC are the 2013 codes that took effect on January 1, 2014; these codes are updated on a three-year cycle. The CBC and CFC are issued by the California Building Standards Commission, which is authorized under California Health and Safety Code, Sections 18901 et seq.

Fire flow requirements are in CFC Appendix B, Table B105.1. Fire hydrant location and distribution requirements are in CFC Appendix C.

Existing Conditions

The San Bernardino County Fire Department (SBCFD) provides fire protection and emergency medical services to the site from two fire stations.

- Station 76 at 10174 Magnolia Street onsite in the Community of Bloomington (see Figure 5.11-1, *Public Facilities Services Map*). Station 76 is equipped with one engine and one brush engine; daily staffing is three.

- Station 77 at 17459 Slover Avenue in the City of Fontana about 0.6 mile southwest of the site. Station 77 is equipped with a paramedic truck, a paramedic squad, and a water tender; daily staffing is five (McLinn 2015).

The SBCFD and the Rialto Fire Department participate in the County's Fire and Rescue Mutual Aid system. The SBCFD serves the City of Fontana as well as the community of Bloomington. The nearest Rialto Fire Department station to the site is Station 201 at 131 South Willow Avenue, about 1.9 miles to the northeast.

SBCFD Fire Stations 76 and 77 are part of the Valley Division that provides fire and emergency medical services to 585 square miles encompassing much of the Upper Santa Ana River Valley, the southeastern part of the San Gabriel Mountains, and the southwest foothills of the San Bernardino Mountains; this excludes incorporated areas that provide their own fire service, such as Upland, Ontario, Rancho Cucamonga. Fifteen of SBCFD's 56 active stations are within the Valley Division. During the 2013-2014 fiscal year (July 2013-June 2014) the Valley Division responded to 23,501 calls for service (SBCFD 2015).

During the 2013-2014 fiscal year, SBCFD had 642 funded fire suppression positions and a total staff of 865 (SBCFD 2015). The SBCFD is the Certified Unified Program Agency for the County, enforcing several state and federal regulations governing hazardous materials.

SBCFD's goal for response time to emergency calls in the service area is four to six minutes. Average response time in the service area is four to eight minutes. Response times in the southeast section of Bloomington currently exceed the four- to six-minute goal. The city of Fontana identified the need to relocate Fire Station 77 to the vicinity of Santa Ana Avenue and Juniper Avenue in Fontana. This relocation was approved in the Fontana Fire Protection District's 2008 Strategic Plan and is scheduled between the 2018 and 2020 fiscal years. The Fontana Fire Protection District serves the city of Fontana through contract by the SBCFD.

The westward relocation of Station 77 will increase the response times to the southeast section of Bloomington from the current four to eight minutes to over four to ten minutes and will require the current Fire Station 76 to respond to the southeast section of Bloomington. The additional demands on Fire Station 76 could leave the northwest section of Bloomington facing extended response times (McLinn 2015).

Major funding sources for the SBCFD include fees and service charges (44 percent of total funding), taxes (23 percent), County general fund (13 percent), and fund balance (12 percent) (SBCFD 2016). Other projects would generate increased revenue for the SBCFD, both directly through fees and service charges, and indirectly through tax revenue for San Bernardino County.

5.11.1.2 THRESHOLDS OF SIGNIFICANCE

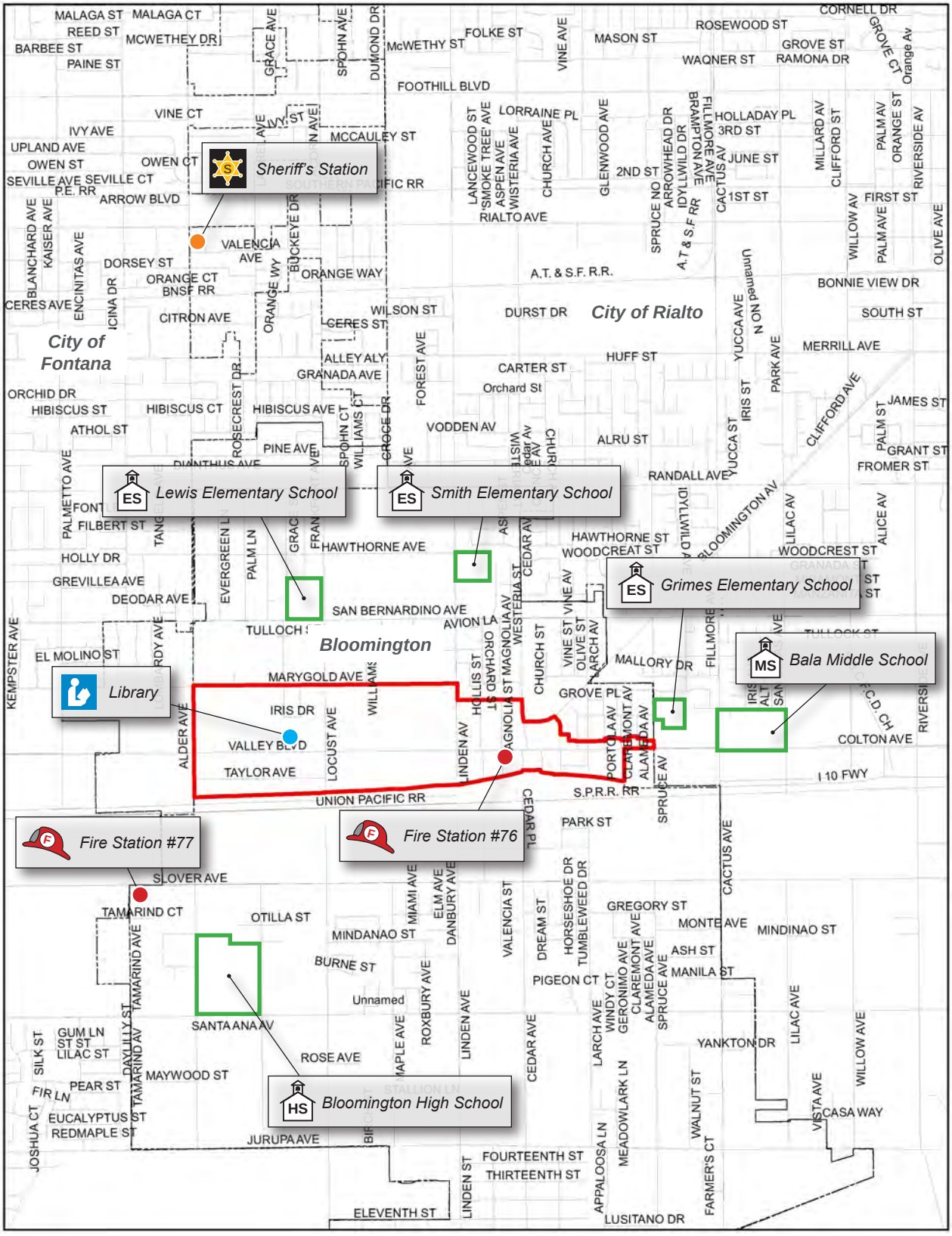
According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

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.

5.11.1.3 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Figure 5.11-1 - Public Services Facilities Map
5. Environmental Analysis



Base Map Source: ESRI, 2016

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Impact 5.11-1: Implementation of the Specific Plan would introduce new residents, workers, and structures into the San Bernardino County Fire Department's service boundaries, increasing the demands for fire protection facilities. [Threshold FP-1]

Impact Analysis: Implementation of the Specific Plan would result in a net increase of 568 residential units, 1,857 residents, 907,000 square feet of nonresidential land uses, and 1,413 jobs at buildout, which would increase demands for fire protection and emergency medical services. The project is expected to create fire service calls that are typical for its land uses, such as structure fires, garbage bin fires, car fires, various accidents causing injuries or medical emergencies, and electrical fires.

Existing response times to emergency calls in the southeast portion of the project area are four to eight minutes, exceeding the goal of four to six minutes. With the planned relocation of SBCFD Station 77 farther west of the project area (1.1 mile southwest of its current location and 1.7 miles southwest of the project area) and increased development in the Specific Plan, response times are expected to further exceed response time goals (SBCFD 2016). Following relocation of Station 77, the project area would be served by Station 76.

SBCFD indicated that buildout of the Specific Plan would require the relocation of Station 76 from 10174 Magnolia Street to the vicinity of Valley Boulevard and Alder Avenue to provide adequate service times in the project area because of the planned relocation of Station 77 and buildout would add growth to an area where response times currently exceed response time goals (SBCFD 2016). This area is currently developed with various commercial and residential uses. The southeast quadrant of Valley Boulevard and Alder Avenue is designated Bloomington Enterprise, and the northeast quadrant is designated Medium & High Residential. Both of these land uses would allow relocation of the fire station, and development of a fire station would be consistent with the proposed Specific Plan. No site-specific location, building size, or equipment requirements for a new fire station have been determined at this time. However, future development in accordance with the proposed Specific Plan is addressed as part of the overall project buildout throughout this DEIR (see environmental topic areas in Chapter 5, *Environmental Analysis*). Furthermore, subsequent County review would be required for approval and development of a fire station. Consequently, implementation of the proposed project would not result in significant impacts related to new or expanded fire facilities.

5.11.1.4 CUMULATIVE IMPACTS

The area considered for cumulative impacts is Bloomington. To determine cumulative fire service impacts, community growth projections are used as a basis to determine future demand. Since the SCAG growth projections do not provide projections for the Bloomington community and the Bloomington Community Plan has projections for 2030 and does not provide a timeframe for buildout projections, cumulative growth was calculated to determine population and units in 2040 (the horizon consistent with SCAG's 2016 RTP/SCS). To identify the projection for 2040, growth rate assumptions from the Bloomington Community Plan were applied to the 2030 numbers.

Based on the above methodology, Bloomington would have approximately 6,995 dwelling units, an increase of approximately 1,132 over 2014 conditions (5,863 dwelling units; 2014 American Community Survey) in 2040. The Bloomington Community Plan projects the population to increase from the 2014 population of

25,228 to approximately 28,761 in 2040. The proposed project's net increase of 1,857 residents constitutes approximately 53 percent of Bloomington growth.

Cumulative growth in Bloomington would increase demands for fire protection and emergency medical services. Such demand increases could require the SBCFD to obtain additional staff and equipment and could require construction of new and/or expanded fire stations. SBCFD indicated that in addition to the relocation of Stations 77 and 76, a new station would be required in the vicinity of Cedar Avenue and Jurupa Avenue to service the Bloomington community (SBCFD 2016).

Major funding sources for the SBCFD include fees and service charges (44 percent of total funding), taxes (23 percent), County general fund (13 percent), and fund balance (12 percent) (SBCFD 2016). Other projects would generate increased revenue for the SBCFD, both directly through fees and service charges, and indirectly through tax revenue for San Bernardino County. These increases in funding for the fire department would reduce impacts from other developments. Therefore, cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

5.11.1.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

State

- California Code of Regulations Title 24, Part 2: 2013 California Building Code
- California Code of Regulations Title 24, Part 9: 2013 California Fire Code

5.11.1.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.11-1 (demand for fire protection facilities) would be less than significant.

5.11.1.7 MITIGATION MEASURES

No mitigation measures are required.

5.11.1.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.11.2 Police Protection

5.11.2.1 ENVIRONMENTAL SETTING

The San Bernardino County Sheriff's Department provides police protection to Bloomington from its Fontana Station at 17780 Arrow Boulevard in the City of Fontana, about 1.8 miles northwest of the site. The station is staffed with 30 deputy positions, five detectives, seven sergeants, one lieutenant, one captain, one secretary, five clerks, one motor pool assistant, and one Sheriff's Service Specialist (SBCSD 2015a). The current ratio of deputies to population is under 0.4 deputy per 1,000 people, which does not meet the 1.0 per 1,000 recommended by the Federal Bureau of Investigation (Boatwright 2015).

The Fontana Station serves a 139-square-mile area, including the unincorporated communities of Bloomington, Lytle Creek, and San Antonio Heights, and other unincorporated areas near the cities of Upland, Ontario, and Rancho Cucamonga. This station does not serve incorporated cities that have their own police departments, including Upland and Ontario. In 2014, Fontana Station deputies responded to 34,367 calls for service (SBCSD 2015b).

Current response times in the Fontana Station's service area average 6 minutes for emergency calls and 15 minutes for nonemergency calls (Boatwright 2015).

Over 95 percent of funding for the SBCSD is from the County's general fund (County of San Bernardino 2015). The largest sources of revenue for the general fund are property taxes; state and federal funding for public safety, health, and welfare spending; and fees for services.

5.11.2.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, 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.

5.11.2.3 ENVIRONMENTAL IMPACTS

Impact 5.11-2: The proposed project would introduce new residents, workers, and structures into the San Bernardino County Sheriff's Department service boundaries, increasing the demands for police protection facilities. [Threshold PP-1]

Impact Analysis: Specific Plan buildout would involve net increases of about 568 residential units, 1,857 residents, 907,000 square feet of nonresidential land uses, and 1,413 jobs compared to existing conditions, which would generate increased demands for police protection. At least one additional full-time sheriff's deputy position would be required—six deputy sheriffs are needed to staff one full-time position 24 hours per day, seven days per week (Boatwright 2015). However, no new or expanded police facility would be required. Therefore, buildout of the Specific Plan could be accommodated by the existing police facilities; no construction of new or expanded facilities resulting in physical impacts to the environment would occur.. As a result, impacts are considered less than significant.

5.11.2.4 CUMULATIVE IMPACTS

Based on the projections methodology used in Section 5.11.1.4, the population is expected to increase from the 2014 population of 25,228 to approximately 28,761 in 2040, which would increase demands for police protection. New construction in the community at large, as well as new construction within the Specific Plan area, would pay County taxes accruing to the County's general fund, including business taxes, property taxes,

sales taxes, and utility users' taxes. Over 95 percent of funding for the SBCSD is from the County's general fund (County of San Bernardino 2015). The largest sources of revenue for the general fund are property taxes; state and federal funding for public safety, health, and welfare spending; and fees for services. Increases in general fund revenue from increases in property taxes resulting from development activity pursuant to the Specific Plan and service area would reduce impacts on police services. Additional personnel and associated equipment would be provided through the continued implementation of the County's five-year financial forecast and the annual budget strategy process. Therefore, despite the increased need for police services in Bloomington, cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

5.11.2.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

No regulations pertain to police protection.

5.11.2.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, impact 5.11-2 (demand for police protection facilities) would be less than significant.

5.11.2.7 MITIGATION MEASURES

No mitigation measures are required.

5.11.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.11.3 School Services

5.11.3.1 ENVIRONMENTAL SETTING

Regulatory Setting

California State Assembly Bill 2926: School Facilities Act of 1986

To assist in providing school facilities to serve students generated by new development, Assembly Bill (AB) 2926 was enacted in 1986 and authorizes a levy of impact fees on new residential and commercial/industrial development. The bill was expanded and revised in 1987 through the passage of AB 1600, which added Sections 66000 et seq. to the Government Code. Under this statute, payment of impact fees by developers serves as CEQA mitigation to satisfy the impact of development on school facilities.

California Senate Bill 50

Senate Bill (SB) 50, passed in 1998, provides a comprehensive school facilities financing and reform program and enables a statewide bond issue to be placed on the ballot. Under the provisions of SB 50, school districts

are authorized to collect fees to offset the costs associated with increasing school capacity as a result of development and related population increases. The funding goes to acquiring school sites, constructing new school facilities, and modernizing existing school facilities. SB 50 establishes a process for determining the amount of fees developers would be charged to mitigate the impact of development on school districts from increased enrollment. According to Section 65996 of the California Government Code, development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation."

Under this legislation, there are three levels of developer fees that may be imposed on new development by the governing school district. Level I fees are assessed based upon the proposed square footage of residential, commercial/industrial, and/or parking structure uses. Level II fees require the developer to provide one-half of the costs of accommodating students in new schools, and the state provides the remaining half. To qualify for Level II fees, the governing board of the school district must adopt a School Facilities Needs Analysis and meet other prerequisites in accordance with Section 65995.6 of the California Government Code. Level III fees apply if the state runs out of bond funds, allowing the governing school district to impose 100 percent of the cost of school facility or mitigation minus any local dedicated school monies on the developer.

Existing Conditions

Schools

The project area is in the Colton Joint Unified School District (CJUSD). Schools serving the project area are listed in Table 5.11-1.

Table 5.11-1 Colton Joint Unified School District Schools, Enrollment, and Capacity

School Address Distance and Direction from Site	Grade Levels	Capacity			Enrollment	Remaining Capacity
		Permanent Buildings	Portable Buildings	Total		
Lewis Elementary School 18040 San Bernardino Avenue, Bloomington 0.25 mile north	K-6	444	402	846	730	116
Smith Elementary School 9551 Linden Avenue, Bloomington 0.4 mile north	K-6	482	452	934	708	226
Grimes Elementary School 1609 Spruce Avenue, Bloomington Opposite Spruce Avenue from east site boundary	K-6	362	362	724	627	97
Baca Middle School 1640 S. Lilac Avenue, Bloomington 0.25 mile east	7-8	1,250	0	1,250	895	355
Bloomington High School 10750 Laurel Avenue, Bloomington 0.5 mile south	9-12	Not available	43 portable buildings	2,910	1,987	923

Source: Chang 2015.

The CJUSD encompasses most of the City of Colton, the City of Grand Terrace, parts of the cities of Rialto and Fontana, Bloomington, and extends into an area of unincorporated northwest Riverside County. Districtwide enrollment was 23,332 during the 2014-15 school year (CDE 2015). CJUSD operates 18 elementary schools, 3 middle schools, 3 high schools, a continuation high school, and an alternative high school.

Developer Fees (SB 50)

CJUSD currently charges the following developer fees pursuant to SB 50:

- **Level I fees:**
  - Residential: Additional Construction: $3.36 per square foot
  - Commercial/Industrial/Senior Housing: $0.54 per square foot
- **Level II fees:** Residential, New construction: $3.60 per square foot (CJUSD 2015)

5.11.3.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

SS-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 school services.

5.11.3.3 ENVIRONMENTAL IMPACTS

Impact 5.11-3: Implementation of the Specific Plan would generate new students who would impact the school enrollment capacities of area schools. [Threshold SS-1]

Impact Analysis: Specific Plan buildout would involve development of a net increase of up to 568 residential units, which would generate net increases of 153 elementary school students, 36 middle school students, and 56 high school students, for a total of 245 students, as shown in Table 5.11-2.

Table 5.11-2 Estimated Student Generation

School Level	Residential Unit Type	Proposed Residential Units, Net Increase	Estimated Students Generated per Household	Student Generation
Elementary (K-6)	Single Family	-10	0.4604	-5
	Multifamily	578	0.2739	158
	Total	568	Not applicable	153
Middle (7-8)	Single Family	-10	0.1314	-1
	Multifamily	578	0.0643	37
	Total	568	Not applicable	36
High (9-12)	Single Family	-10	0.2299	-2
	Multifamily	578	0.1040	58
	Total	568	Not applicable	56
Total	-	-	Not applicable	245

Source: Chang 2015.

Based on Table 5.11-1, the remaining capacity for schools serving the project area are 439 elementary school students, 355 middle school students, and 923 high school students. Schools serving the project area have sufficient capacity to accommodate buildout of the Specific Plan in total and at each grade level. Since there is sufficient residual capacity at the schools serving the site, the project would not require CJUSD to build new or expanded schools. Impacts would be less than significant.

5.11.3.4 CUMULATIVE IMPACTS

The area considered for cumulative impacts to school services and facilities is the CJUSD. Other projects would add housing units and thus households to the District, increasing the number of students. The total number of households in the cities of Colton, Grand Terrace, Rialto, and Fontana is forecast to increase by 40 percent between 2012 and 2040, as shown in Table 5.11-3. If CJUSD enrollment were to increase 40 percent above its 2014-15 level by 2040, that would be an increase of 9,333 students.

Other projects would be required to pay SB 50 fees to the CJUSD; such fees would mitigate cumulative impacts to school facilities. Such impacts would be less than significant after payment of such fees, and project impacts would not be cumulatively considerable.

Table 5.11-3 Households in Cities In and Overlapping Colton Joint Unified School District

	2012	2040	Change, 2012-2040	Percent Change, 2012-2040
Colton	15,000	20,800	5,800	38.7%
Grand Terrace	4,400	5,700	1,300	29.5%
Rialto	25,400	31,500	6,100	24.0%
Fontana	49,600	74,000	24,400	49.2%
Total	94,400	132,000	37,600	39.8%

Source: SCAG 2016.

5.11.3.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

State

- California Government Code Sections 66000 et seq.: School Facilities Act of 1986
- California Government Code Section 65996: Senate Bill 50

5.11.3.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.11-3 (school services) would be less than significant.

5.11.3.7 MITIGATION MEASURES

No mitigation measures are required.

5.11.3.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.11.4 Library Services

5.11.4.1 ENVIRONMENTAL SETTING

The Bloomington Branch Library of the San Bernardino County Library is at 18028 Bloomington Boulevard in the new Affordable Bloomington project (see Figure 5.11-1). The Bloomington Branch Library is open eight hours per day five days per week (Monday through Thursday and Saturday).

The San Bernardino County Library operates 32 branch libraries, including branches in the cities of Rialto and Fontana. The Rialto Branch Library is at 251 West 1st Street in the City of Rialto, about two miles northeast of the project site. The Fontana Lewis Library and Technology Center is at 8437 Sierra Avenue in the City of Fontana, approximately two miles northwest of the project site (SBCL 2015).

The San Bernardino County Library is funded mostly from property taxes and from fees and fines collected from patrons (San Bernardino County 2015).

5.11.4.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

LS-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 library services.

5.11.4.3 ENVIRONMENTAL IMPACTS

Impact 5.11-4: Implementation of the Specific Plan would generate additional population, increasing the service demands on the local libraries. [Threshold LS-1]

Impact Analysis: Specific Plan buildout would result in a population increase onsite of up to 1,857 persons, thus increasing demands for library services. The San Bernardino County Library expects that it will be able to provide adequate library services at project buildout through the collection, services, and staff at its new Bloomington Branch Library (Merryman 2015). Project buildout would not require construction of new or expanded library facilities, and impacts would be less than significant.

5.11.4.4 CUMULATIVE IMPACTS

The area considered for cumulative impacts to library services is San Bernardino County, the service area for the San Bernardino County Library. The population of San Bernardino County is forecast to increase by 663,300, or about 32.1 percent, between 2012 and 2040 (SCAG 2016). Demands for library services are generally proportional to the service areas of the affected libraries; thus, demands for library services in San Bernardino County would increase by approximately 30 percent by 2040. The recent construction of the Bloomington Branch Library would provide additional library resources to assist in meeting in the increase in demand.

The San Bernardino County Library is funded mostly from property taxes and from fees and fines collected from patrons (San Bernardino County 2015). Increased development in the County by 2040 would generate increased property tax. Such increases in revenue for the library would proportionately reduce impacts resulting from population growth, and cumulative impacts would be less than significant. Project impacts would not be cumulatively considerable.

5.11.4.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

No existing regulations pertain to library services.

5.11.4.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.11-4 (school services) would be less than significant.

5.11.4.7 MITIGATION MEASURES

No mitigation measures are required.

5.11.4.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant without mitigation.

5.11.4.9 REFERENCES

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5.12 RECREATION

This section of the draft environmental impact report (DEIR) evaluates the potential for implementation of the Valley Corridor Specific Plan to impact public parks and recreational facilities.

5.12.1 Environmental Setting

5.12.1.1 REGULATORY BACKGROUND

State Regulations

Mitigation Fee Act

The California Mitigation Fee Act (Government Code §§ 66000 et seq.), allows cities to establish fees that will be imposed on development projects to mitigate the impact of the development projects on the city's ability to provide specified public facilities. In order to comply with the Mitigation Fee Act, a city must follow four primary requirements: 1) Make certain determinations regarding the purpose and use of a fee and establish a nexus or connection between a development project or class of project and the public improvement being financed with the fee; 2) Segregate fee revenue from the general fund in order to avoid commingling of capital facilities fees and general funds; 3) For fees that have been in the possession of the City for five years or more and for which the dollars have not been spent or committed to a project, the City must make findings each fiscal year describing the continuing need for the money; and 4) Refund any fees with interest for which the findings noted above cannot be made.

Quimby Act

The State Quimby Act (California Government Code § 66477) was first established by the California legislature in 1965. It provided provisions in the State Subdivision Map Act for the dedication of parkland and/or payment of in-lieu fees as a condition of approval of certain types of residential development projects. Previously, a city or county could only use these fees to provide parks that served the developer's proposed subdivision. However, Assembly Bill 1359 (AB 1359), signed in September 2013 by Governor Brown, allows cities and counties to use developer-paid Quimby Act fees to provide parks in neighborhoods other than the one in which the developer's subdivision is located. Overall, AB 1359 provides cities and counties with opportunities to improve parks and create new parks in areas that would not have benefited before provided that certain requirements are met. It also allows a city or county to enter into a joint or shared use agreement with one or more public districts in order to provide additional park and recreational access.

California Public Park Preservation Act

The primary instrument for protecting and preserving parkland is California's Public Park Preservation Act of 1971. Under this act, 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 it. This provides no net loss of parkland and facilities.

County Regulations

2007 County of San Bernardino General Plan

The County of San Bernardino General Plan Open Space Element includes a program that requires new residential development to provide park and recreation facilities at a rate of not less than 3 acres per 1,000 population. The General Plan also includes the Bloomington Community Plan, which features goals and policies that are specific to Bloomington.

2007 San Bernardino County Development Code

The San Bernardino County Development Code (SBCDC) describes the process for determining the dedication of park land, payment of in-lieu fees, or a combination of both in Chapter 89.02, Recreational Facilities Financing.

5.12.1.2 EXISTING CONDITIONS

Parks and other recreational facilities in Bloomington are maintained by a special district, the Bloomington Recreation and Park District. There are two official parks in Bloomington; Ayala Park and Kessler Park.

Parks

The Bloomington Recreation and Park District was established by an act of the County of San Bernardino Board of Supervisors in 1972 and is part of the County of San Bernardino Special Districts Department. The District maintains Ayala and Kessler parks and coordinates with nonprofits on the provision of recreational programming in those parks.

Within the Specific Plan boundary is Ayala Park, a six-acre active park located at 18313 Valley Boulevard. It contains an open play area, trail, playground, community center, Old Timer's Senior Center, and picnic shelter structures. While Ayala Park is a valuable community resource, its one sided access, depth (over 700 feet) from the street, location adjacent to the freeway, and lack of neighboring residential properties makes the parks location less than ideal. There is another active park in Bloomington approximately 1.4 miles south of the Specific Plan boundary. Kessler Park is located at 18400 Jurupa Avenue. It has several shade structures, a playground, skate park, multiple baseball fields, a batting cage, community building, and an equestrian arena.

To estimate existing parkland and future parkland need based on growth and population projections, the County uses the standard of 3 acres per 1,000 residents as stated in the 2007 General Plan Open Space Element. The open space element provides guidance for the acquisition, maintenance, expansion, and development of parks, trails, scenic areas, and recreational facilities throughout for the County as a whole and within each region—Valley, Mountain, and Desert. The entire proposed Specific Plan area is in the Valley Region.

An excerpt from the open space element:

- Goal OS 1. The County will provide plentiful open spaces, local parks, and a wide variety of recreational amenities for all residents.

- Program 1. Require new residential development to provide local park and recreation facilities at a rate of not less than 3 acres per 1,000 population. This could include the dedication of lands, payment of fees, or both.
- Program 2. Implement the Quimby Act (California Government Code Section 66477) through the subdivision process in providing for local opportunities (both passive and active).
- Program 4. In addition to providing new parkland at a ratio of 3 acres per 1,000 population, multi-family housing projects in the Valley Region will provide onsite recreational amenities, and single-family housing projects over 250 units will provide onsite recreational facilities, including pools, tennis courts, and turfed play areas, and tot-lots.

The General Plan also includes the Bloomington Community Plan, which includes this recreation-specific goal:

- Goal BL/OS 1. Develop parks and recreation facilities to meet the recreational needs of the community.

The existing parks in the proposed project area include just over 6 acres of parkland for 2,216 residents, a ratio of 2.7 acres per 1,000 residents. This is slightly under the County standard of 3 acres per 1,000 residents.

Existing Regional Parks and Recreational Facilities

There are a total of 2,351 acres of regional park facilities within 12 miles of the proposed Specific Plan area.

Martin Tudor-Jurupa Hills Regional Park is 1.5 miles southwest of the site in the City of Fontana at 11925 Sierra Avenue. This 861-acre park features amenities such as ball fields, barbecues, bocce ball, horseshoes, shade structures, picnic tables, playground, restrooms, trails, and a volleyball court.

The County's Cucamonga-Guasti Regional Park is approximately 12 miles west of the Specific Plan area at 800 N. Archibald Avenue in Ontario. Cucamonga-Guasti Regional Park provides 150 acres of open space and amenities, including two lakes for fishing and boat rentals, a swimming complex with water slides, a splash pad, shade structures, picnic tables, barbeques, restrooms, and trails.

The County's Glen Helen Regional Park is approximately 12 miles north of the Specific Plan area at 2555 Glen Helen Parkway in San Bernardino. This 1,340-acre park includes open play fields, playgrounds, two lakes for fishing, a swimming complex with water slides, splash pad, disc golf, RV and tent camping, restrooms and showers, trails, barbeques, picnic areas accommodating up to 300 people, the San Manuel Amphitheater (a 65,000-seat outdoor concert venue), and the Glen Helen Raceway (an off-highway competitive event facility).

County Public Park Funding

The County general plan requires all multifamily residential projects and single-family residential projects over 250 units to include onsite recreational amenities. Funding for future public parks and recreational facilities in Bloomington is expected to be provided primarily through development impact fees. There is also the potential for financial support from the County general fund. The SBCDC describes how parkland, fees for recreational facilities, or a combination of both can be collected as a condition of the approval for a parcel

map or final map (Chapter 89.02, Recreational Facilities Financing). The Bloomington Recreation and Park District has the authority to spend parks in-lieu fees within its service boundary, which includes the entire proposed Specific Plan area.

5.12.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, 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.

PS-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 or other performance objectives for park services. (This threshold was taken from the public services section of the Appendix G Guidelines.)

5.12.3 Environmental Impacts

The following impact analysis addresses thresholds of significance.

Impact 5.12-1: The proposed project would generate 1,857 additional residents that would increase the use of existing park and recreational facilities. [Threshold R-1]

Impact Analysis: Buildout in accordance to the Specific Plan would increase housing by 568 residential units and 907,319 square feet of nonresidential building space. The additional housing units, at full occupancy, are expected to generate approximately 1,857 additional residents. These additional residents would increase the use of existing park and recreational facilities. Based on the County General Plan parkland guideline of a minimum of 3 acres per 1,000 residents, the projected population increase would generate a demand for 5.6 additional acres of parkland.

The proposed Specific Plan would add to the existing 6 acres of parkland and facilities by establishing the Valley Corridor Open Space land use floating designation north of Valley Boulevard. The proposed Specific Plan creates a floating open space designation which can be applied anywhere in the Specific Plan area for the purpose of allowing new parks to be created where they make the most sense in the future.

The proposed Specific Plan provides standards to require private open space, public park space, and common open spaces.

Table 5-12.1 Parks and Open Space Standards from the Proposed Specific Plan

Standard	Conventional SFD	Other SFD	SFA	MF	All Other Buildings
Public park land/plaza[1]	3 acres per 1,000 residents				-
Min private open space[2]	800 sq ft	300 sq ft	200 sq ft	70 sq ft	-
Min common open space[2]	100 sq ft[3]	300 sq ft	200 sq ft	100 sq ft	10% ≤15K sq ft GLA 5% 15K+ sq ft GLA[4]

Notes: Min = minimum; sq ft = square feet; SFD = single-family detached; SFA = single-family attached; MF = multifamily; K = thousand; GLA = gross leasable area

1. The park requirement may be met through a combination of land dedication, improvements, private recreation, and in-lieu fees.
2. Conventional single family detached homes are designed to provide all open space through private yards. Other types of single family detached product types (see the Residential Products section of this chapter) are designed to maximize flexibility in lot size, unit size, clustering of units, and sharing of driveways/aisles while providing open space primarily through large common areas along with a limited amount of private area. The standards in this table are minimums and each product may provide more common open space and/or more private open space than required depending on the ultimate design. Common open space cannot include parking areas, roadways, or the first five feet of external space around a building.
3. This requirement only applies to large housing projects with 100 or more units. For projects with 100 or more units of conventional SFD, additional onsite recreational facilities equal to 100 sq ft per unit must be provided within the project area. For other types of large housing projects with more than 100 units, onsite recreational facilities shall be provided through the common open space requirement.
4. Buildings with more than 15,000 square feet of GLA can either provide the open space or plaza area adjacent to the building or coordinated with the open space or plaza area of other buildings to create larger, more centralized open spaces that serve multiple buildings. Open space or plaza areas cannot include parking areas, roadways, areas closed to members of the general public, or the first five feet of external space around a building. Outdoor eating areas may contribute up to 50 percent of the total requirement provided the eating area is enclosed by fencing or landscaping no greater than four feet in height.

The proposed Specific Plan requires a park acreage tracking system to monitor the amount and type of park and recreation facilities constructed. The purpose is to ensure that new development would accommodate adequate park facilities for new residents. This also ensures that new development would not deteriorate existing facilities.

Additionally, pursuant to the Mitigation Fee Act and the SBCDC Chapter 89.02, the County would either require dedicated parkland or public open space and/or would collect park impact fees to be used for the acquisition, development, improvement, and maintenance of public parks and recreational facilities in the Bloomington Recreation and Park District. The Specific Plan also falls within the Bloomington Recreation and Parks District (BRP District), which is operated through the County Special Districts Department. The BRP District is funded through a portion of property taxes to finance the construction, operations, and maintenance of facilities and services within the BRP District boundaries. New development would generate additional property tax revenue to support the cost of additional facilities.

The Specific Plan requires the establishment of additional funding through either increasing property taxes or establishing a residential development impact fee as described Chapter 5 of the Specific Plan. The combination of the Specific Plan implementation measures, SBCDC requirements (Chapter 89.02), and BRP District property tax revenues would be sufficient to serve the buildout of the Specific Plan.

Thus, the Specific Plan would increase the amount of available parkland and recreational facilities and generate sufficient monies from development fees to adequately meet the increased demand for parks and recreational facilities associated with implementation of the proposed Specific Plan. In this regard, impacts would be less than significant.

Impact 5.12-2: Project implementation would generate a need for new and expanded recreational facilities. [Thresholds R-2 and PS-1]

Impact Analysis: The proposed Specific Plan guides growth and development in the Specific Plan area and is not itself a development project. Parks and recreational facilities in the Specific Plan area would develop in accordance to the Specific Plan requirements for each land use district. Buildout of the proposed Specific Plan would create demand for more park and recreational facilities. Based on the County General Plan parkland guideline of a minimum of 3 acres per 1,000 residents, the projected population increase would generate a demand for 5.6 additional acres of parkland.

Relocation of Existing Parks

This Specific Plan seeks to facilitate the creation of new parks and open spaces to better serve the existing residents in northern Bloomington as well as future residents in the Specific Plan. Three potential park and open space concepts are detailed in the Specific Plan and could be constructed in or near the Specific Plan area.

- Relocated Ayala Park (explore feasibility of including a community garden and fruit park)
- Public Plaza
- Rooftop Open Space

Relocated Ayala Park

Although Ayala Park is a valuable community resource, its location in a commercialized area adjacent to the freeway, lack of surrounding residential neighborhoods, and depth from the street (over 700 feet) make it difficult to police and create real and perceived safety problems. The Specific Plan facilitates the relocation of Ayala Park elsewhere in Bloomington north of Valley Boulevard. The new site for Ayala Park will be carefully selected to address public safety issues. When Ayala Park is relocated, it could be rebuilt as one facility on a more appropriate and accessible site or redistributed as two smaller, three-acre-minimum parks to enhance park access and address policing concerns.

The Specific Plan includes a floating Open Space designation for parkland that will be sited once potential sources of funding have been identified. The County is currently investigating and applying for grants to relocate Ayala Park adjacent to the Affordable Bloomington development on County-owned land.

The relocation would move the park farther from the freeway and railroad line and bring it closer to residential neighborhoods. Access would be improved because people could walk, bike, or drive along smaller, local roads instead of Valley Boulevard. Internal and external roadway access would be provided, enhancing the ability of sheriff's deputies to patrol all areas of the park. Types of facilities envisioned for the park include community meeting space, formal and informal play areas, outdoor gathering spaces, and the potential for a community garden and/or fruit park. The park concept is discussed in Section 3.4.4 of the Specific Plan.

Public Plaza

Public plaza spaces are the "front porches" of commercial and business-related development, extending the public realm from the right-of-way into the building area. Nonresidential uses in the Specific Plan are encouraged to provide open space for employees and patrons in pedestrian-accessible plazas, courtyards, and landscape areas. The precise nature and size of the open space would vary depending on the mix of uses within and around a proposed development. Guidelines for these plazas are provided in Section 3.4.4 of the Specific Plan.

Rooftop Open Space

New development is encouraged to provide creative solutions for onsite common open space, including green roofs on top of buildings or above a parking area. Rooftop green space carries the potential to be readily accessible to residents and provide an attractive amenity. Additional benefits include the reduction of the heat island effect, reduced and filtered stormwater runoff, and outdoor active and passive recreational space. Since these types of parks would not require development on vacant land or require the conversion of another land use, environmental impacts would be limited to the construction of new buildings and compliance with California Building Code specifications to carry the added weight. Amenities and features of rooftop open space are provided in Section 3.4.4 of the Specific Plan.

Conclusion

Development and operation of new or expanded parks and recreational facilities generates the potential for adverse physical effects on the environment, including impacts relating to air quality, biological resources, lighting, noise, and traffic. Environmental impacts associated with the construction of new and/or expansion of existing recreational facilities in accordance with the proposed Specific Plan are addressed as part of the overall project buildout throughout this DEIR (see environmental topic areas in Chapter 5, *Environmental Analysis)*. However, it is speculative to determine impacts arising from development of individual park projects, since no development is proposed at this time, and the locations of future parks have not been determined. Potentially adverse impacts to the environment that may result from the expansion of parks, recreational facilities, and multiuse trails pursuant to buildout of the proposed land use plan would be less than significant upon implementation of the Specific Plan's goals, policies, and implementation actions and existing federal, state, and local regulations. Furthermore, subsequent County review would be required for approval and development of future park projects. Consequently, implementation of the proposed project would not result in significant impacts related to new or expanded recreational facilities.

5.12.4 Cumulative Impacts

At project buildout, a total of 1,093 residential units are projected for the Specific Plan area (including the existing 525 residential units), generating an additional 1,857 new residents. Based on the County's parkland standard of 3 acres per 1,000 residents, buildout of the Specific Plan area would generate a need for 5.6 new acres of parkland. Therefore, recreational needs of future residents of the proposed Specific Plan area, in conjunction with cumulative development in accordance with the County of San Bernardino General Plan and Bloomington Community Plan, would add to demand for parks and recreational facilities.

To determine cumulative public park and recreational impacts, Bloomington community growth projections are used as a basis to determine future demand. Since the SCAG growth projections do not provide projections for the Bloomington community and the Bloomington Community Plan has projections for 2030 but does not provide a timeframe for its buildout projections, cumulative growth was calculated to determine 2040 Bloomington population and units (the horizon consistent with SCAG's 2016 RTP/SCS). To identify the projection for 2040, growth rate assumptions from the Bloomington Community Plan were applied to the 2030 numbers.

In 2040, the community would have approximately 6,995 dwelling units, an increase of approximately 1,132 over 2014 conditions (5,863 dwelling units; 2014 American Community Survey). The Bloomington Community Plan projects the population to increase from the 2014 population of 25,228 to approximately 28,761 in 2040. Based on the County's standard of 3 acres of parkland per 1,000 residents, this increase of approximately 3,533 residents would create a cumulative need for a net increase of approximately 10.6 acres of new public park and recreation space in addition to the proposed Specific Plan-generated need of 5.6 new acres.

Existing regulations requiring the creation and maintenance of adequate recreational facilities include:

- Mitigation Fee Act (California Government Code §§ 66000 et seq.)
- Quimby Act
- California Public Park Preservation Act
- SBCDC, Chapter 89.02, Recreational Facilities Financing
- County of San Bernardino General Plan Open Space Element and Bloomington Community Plan

Each project in the County of San Bernardino is required to comply with the County's parkland dedication requirements in the County's General Plan and Development Code. As a result, new parks and recreational facilities would be developed as residential development occurs. Furthermore, public and common open space are required and encouraged in the Specific Plan. Thus, implementation of the policies in the proposed Specific Plan, as well as those applying to other cumulative new development would increase development impact fees that would be used to provide and/or improve neighborhood and community parks available in Bloomington. Therefore, cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

5.12.5 Existing Regulations and Standard Conditions

State

- California Code of Regulations Title 24, Part 2: 2013 California Building Code
- Mitigation Fee Act (California Government Code §§ 66000 et seq.)
- Quimby Act
- California Public Park Preservation Act

Local

- SBCDC, Section 89.02

5.12.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, Impacts 5.12-1 (use of existing parks) and 5.12-2 (expansion and development of new parks) would be less than significant.

5.12.7 Mitigation Measures

Plan-level and cumulative impacts are less than significant, and no mitigation measures are required.

5.12.8 Level of Significance After Mitigation

No mitigation measures are identified because impacts are less than significant.

5.12.9 References

San Bernardino, County of. 2007a, March. Bloomington Community Plan. http://www.sbcounty.gov/Uploads/lus/CommunityPlans/BloomingtonCP.pdf.

———. 2007b, March. County of San Bernardino General Plan Open Space Element. http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FINALGP.pdf.

———. 2007c, March. County of San Bernardino Development Code. http://www.sbcounty.gov/Uploads/lus/DevelopmentCode/DCWebsite.pdf.

US Census Bureau. 2014. 2010-2014 American Community Survey 5-Year Estimates. http://factfinder2.census.gov.

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5.13 TRANSPORTATION AND TRAFFIC

This section of the draft environmental impact report (DEIR) evaluates the potential for implementation of the Valley Corridor Specific Plan to result in transportation and traffic impacts in Bloomington and the adjacent cities of Fontana and Rialto. The analysis in this section is based in part on the following technical report:

- *Traffic Impact Analysis, Valley Corridor Specific Plan*, Albert A. Webb Associates, January 12, 2016.

A complete copy of this study is in Appendix G to this DEIR.

5.13.1 Environmental Setting

5.13.1.1 REGULATORY BACKGROUND

San Bernardino Associated Governments

San Bernardino Associated Governments (SANBAG), is the council of governments and transportation planning agency for San Bernardino County. SANBAG is responsible for cooperative regional planning and furthering an efficient multi-modal transportation system countywide. SANBAG supports freeway construction projects, regional and local road improvements, train and bus transportation, railroad crossings, call boxes, ridesharing, congestion management efforts and long-term planning studies. SANBAG administers Measure I, the half-cent transportation sales tax approved by county voters in 1989

Regional Transportation Development Mitigation Plan ("The PLAN")

In November 2004, San Bernardino County voters approved Measure I 2010-2040, a half-cent transaction and use tax dedicated to countywide transportation improvements. The Measure I Ordinance requires that the cities and the unincorporated sphere of influence areas in the San Bernardino Valley and Victor Valley must adopt a mechanism to "require all future development to pay its fair share for needed transportation facilities as a result of new development pursuant to California Government Code 66000 et seq. and as determined by the Congestion Management Agency," and to "comply with the Land Use/Transportation Analysis and Deficiency Plan provisions of the San Bernardino County Congestion Management Program pursuant to California Government Code Section 65089." Included in these transportation facilities are freeway interchanges, major arterial roads, and railroad grade separations. Measure I also required the Congestion Management Agency to update the Congestion Management Program (CMP) to include fair share mitigation for regional transportation facilities.

SANBAG serves as the San Bernardino County Congestion Management Agency and is responsible for implementing and maintaining the CMP for San Bernardino County. As part of the CMP Update process required by Measure I 2010-2040, SANBAG developed and adopted the SANBAG Development Mitigation Nexus Study (hereafter "SANBAG Nexus Study") on November 2, 2005 (updated on November 7, 2007, November 4, 2009, November 2, 2011, and November 6, 2013). The SANBAG Nexus Study provides a framework for fair-share development contributions to regional transportation improvements.

The SANBAG Nexus Study determines the fair-share contributions from new development for each jurisdiction in the urbanized areas of the County. The County's fair-share contributions are based upon growth projections reviewed and approved by the County Land Use Planning Department and specific transportation projects submitted to SANBAG by the Department of Public Works – Transportation. Projects identified in the PLAN must be included in the SANBAG Nexus Study to be eligible to receive SANBAG public share contributions of regional Measure I funding or allocations of state or federal transportation funds administered by SANBAG. The PLAN is intended to generate only the development fair-share contribution of project costs as required by the CMP and is not intended to provide 100 percent funding for or construction of all projects listed in the PLAN. Additional regional Measure I and federal/state funds administered by SANBAG are required for full funding of projects listed in the PLAN.

Payment of fees required by the PLAN replaces TIA requirements of the CMP. The PLAN is intended to satisfy all requirements set for in California Government Code, Chapter 5, Section 66000 et seq. (AB 1600 "Mitigation Fee Act")

5.13.1.2 EXISTING ROADWAY NETWORK

Roadways

Study area roadways and intersections are mapped on Figure 5.13-1, *Roadway System;* roadways are described below.

Sierra Avenue is a divided 4- to 8-lane north-south arterial in the study area. In the City of Fontana Circulation Master Plan, it is classified as a Major Highway south of Slover Avenue, an Eight Lane Major Highway between Slover Avenue and Valley Boulevard, and a Modified Major Highway north of Valley Boulevard. Street parking is not allowed. There are existing sidewalks on both sides of the street, but there are no designated bike lanes in the study area.

Palmetto Avenue is an undivided 2-lane north-south highway in the study area. It is classified as a Collector Street in the Fontana Circulation Master Plan. Street parking is allowed. There are existing sidewalks but no designated bike lanes in the study area.

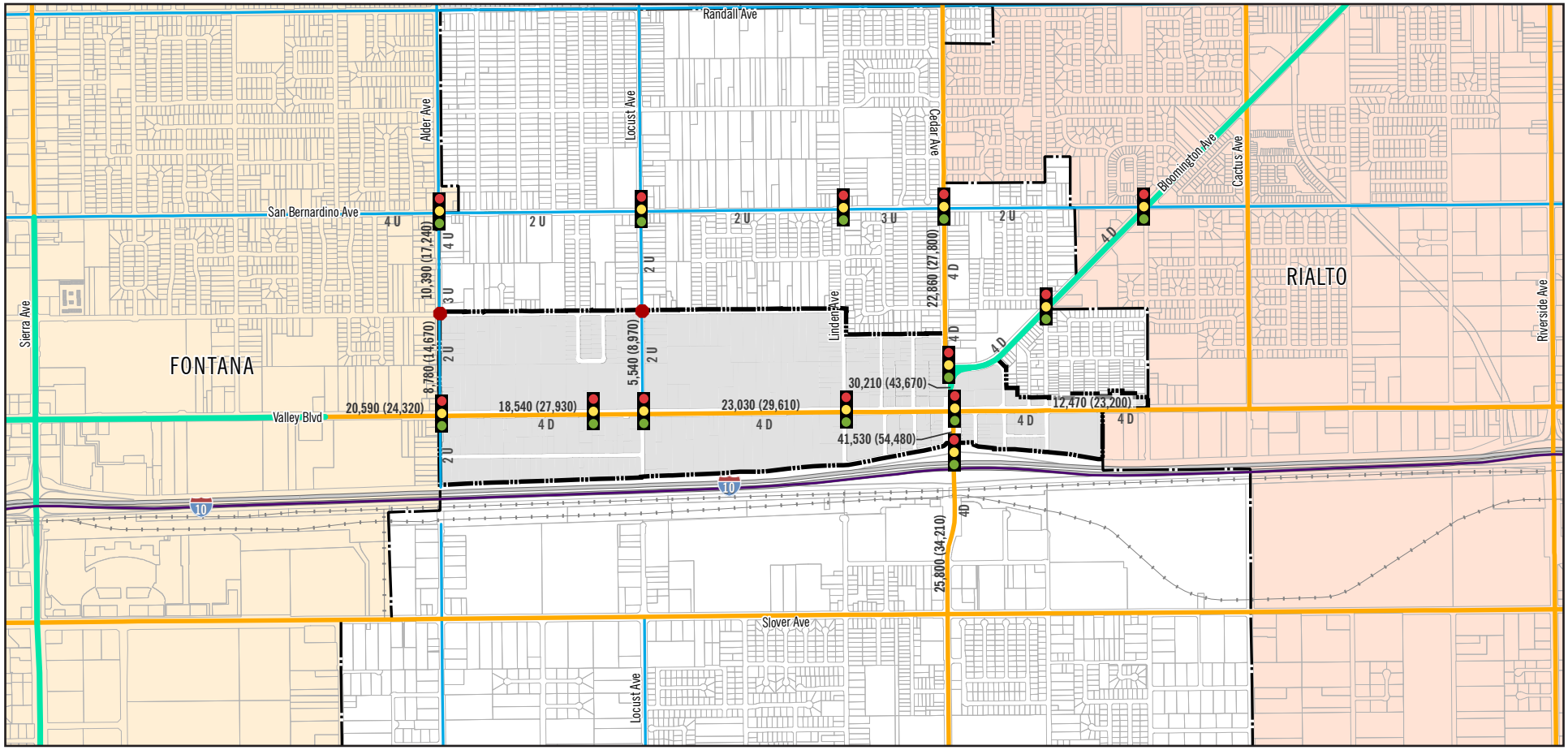
Alder Avenue is an undivided 2- to 4-lane north-south highway in the study area. In the Fontana Circulation Master Plan, it is classified as a Modified Secondary Highway. In the Bloomington Community Plan Circulation Element, it is classified as a Secondary Highway. Street parking is allowed along some portions of the street. Sidewalks are intermittently provided, but there are no designed bike lanes in the study area.

Locust Avenue is an undivided 2-lane north-south highway in the study area. In the Bloomington Community Plan Circulation Element, it is classified as a Secondary Highway. Street parking is allowed. Sidewalks are intermittently provided, but there are no designated bike lanes in the study area.

Cedar Avenue is a divided 4-lane north-south highway in the study area. In the Bloomington Community Plan Circulation Element, it is classified as a Major Highway. Street parking is allowed along some portions of the street. There are existing sidewalks on both sides of the street but no designated bike lanes in the study area.

Figure 5.13-1 - Roadway System

5. Environmental Analysis



Roadway System

- Freeway
- Major Divided Highway
- Major Highway
- Secondary Highway*
- Controlled/Limited Access Collector

Valley Corridor Specific Plan Boundary
Bloomington Community Boundary

Existing Signal
Existing 4-Way Stop (All Way Stop Control (AWSC))

Traffic Volume

23,030 (29,610)
- Projected 2035 Average Daily Traffic (ADT)
- Existing 2015 Average Daily Traffic (ADT)

Roadway Description

2U
- Indicates if roadway is Divided (D) or Undivided (U)
- Indicates number of lanes** (2 = 2 lanes of travel)

NOTE: No new roadway designations or descriptions are proposed within this Specific Plan.
*Alder & San Bernadino Avenues are designated as Modified Secondary Highways by the City of Fontana, and as Secondary Highways by San Bernadino County.
**Number of lanes excludes turning lanes and intersection conditions.

0 700
Scale (Feet)

Base Map Source: ESRI, 2016; WEBB

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San Bernardino Avenue in an undivided 2- to 4-lane east-west highway in the study area. In the Fontana Circulation Master Plan, it is classified as a Modified Secondary Highway. In the Bloomington Community Plan Circulation Element, it is classified as a Secondary Highway. Street parking is allowed. There are existing sidewalks on both sides of the street in Fontana, but only intermittently in Bloomington. There are no designated bike lanes on this street in the study area.

Marygold Avenue is an undivided 2-lane east-west highway in the study area. In the Fontana Circulation Master Plan, it is classified as a Collector Street. In is not a designated roadway in the Bloomington Community Plan Circulation Element. Street parking is allowed. Sidewalks are intermittently provided, but there are no designated bike lanes in the study area.

Valley Boulevard is a divided 4- to 6-lane east-west highway in the study area. Valley Boulevard is a 4-lane facility throughout the project area and becomes a 6-lane facility west of Palmetto Avenue. In the Fontana Circulation Master Plan, it is classified as a Modified Major Highway. In the Bloomington Community Plan Circulation Element, it is classified as a Major Highway. Street parking is allowed on some portions of the street. There are existing sidewalks on both sides of the street in Fontana, but only intermittently in Bloomington. No designated bike lanes are present on this street in the study area.

Slover Avenue is a 2- to 6-lane east-west highway in the study area. It is generally divided in Fontana and undivided in Bloomington. In the Fontana Circulation Master Plan, it is classified as a Primary Highway. In the Bloomington Community Plan Circulation Element, it is classified as a Major Highway. Street parking is generally not allowed in Fontana, but generally allowed in Bloomington. There are existing sidewalks on both sides of the street in Fontana, but only intermittently in Bloomington. There are no designated bike lanes on this street in the study area.

Interstate 10 (I-10) is an eight-lane freeway abutting the southern site boundary. There are ramps to and from I-10 from one study area roadway, Cedar Avenue.

Existing Traffic Volumes

The existing AM peak period and PM peak period intersection turning movement counts were conducted by Counts Unlimited on Tuesday, March 11, 2014, and Wednesday, October 7, 2015. The existing daily traffic counts along Valley Boulevard were conducted by Counts Unlimited. Based on these counts, the peak hour volume is approximately 8 percent of the daily volume. The estimated existing average daily traffic for roadways in the study area is presented in Table 5.13-1.

Table 5.13-1 Average Daily Traffic, Study Area Roadway Segments

Roadway Segment	Average Daily Traffic
Valley Boulevard between Sierra Avenue and Palmetto Avenue	29,970
Valley Boulevard between Palmetto Avenue and Alder Avenue	20,590
Valley Boulevard between Alder Avenue and Locust Avenue	18,540
Valley Boulevard between Locust Avenue and Cedar Avenue	23,030
Valley Boulevard between Cedar Avenue and Cactus Avenue	12,470
Sierra Avenue between Slover Avenue and I-10 Ramps	49,980
Sierra Avenue between I-10 Ramps and Valley Boulevard	60,410
Sierra Avenue between Valley Boulevard and San Bernardino Avenue	37,910
Alder Avenue between Valley Boulevard and Marygold Avenue	8,780
Alder Avenue between Marygold Avenue and San Bernardino Avenue	10,390
Locust Avenue between Valley Boulevard and Marygold Avenue	5,540
Cedar Avenue between Slover Avenue and I-10 Ramps	25,800
Cedar Avenue between I-10 Ramps and Valley Boulevard	41,530
Cedar Avenue between Valley Boulevard and Bloomington Avenue	30,210
Cedar Avenue between Bloomington Avenue and San Bernardino Avenue	22,860

Source: Webb 2016.

Intersections

Study area intersections are listed in Table 5.13-2. Lane configurations are shown in Figure 3-A of the traffic impact analysis, included as Appendix G of this DEIR.

Table 5.13-2 Study Area Intersections

Map ID No.	Intersection	Traffic Control
1	Sierra Avenue (NS) / San Bernardino Avenue (EW)	Signalized
2	Sierra Avenue (NS) / Valley Boulevard (EW)	Signalized
3	Sierra Avenue (NS) / I-10 Ramps (EW)	Signalized
4	Sierra Avenue (NS) / Slover Avenue (EW)	Signalized
5	Palmetto Avenue (NS) / Valley Boulevard (EW)	Signalized
6	Alder Avenue (NS) / San Bernardino Avenue (EW)	Signalized
7	Alder Avenue (NS) / Marygold Avenue (EW)	All-way stop
8	Alder Avenue (NS) / Valley Boulevard (EW)	Signalized
9	Locust Avenue (NS) / Marygold Avenue (EW)	All-way stop
10	Locust Avenue (NS) / Valley Boulevard (EW)	Signalized
11	Cedar Avenue (NS) / San Bernardino Avenue (EW)	Signalized
12	Cedar Avenue (NS) / Bloomington Avenue (EW)	Signalized
13	Cedar Avenue (NS) / Valley Boulevard (EW)	Signalized
14	Cedar Avenue (NS) / I-10 Westbound Ramps (EW)	Signalized
15	Cedar Avenue (NS) / I-10 Eastbound Ramps (EW)	Signalized
16	Cedar Avenue (NS) / Slover Avenue (EW)	Signalized

Source: Webb 2016.

Future Infrastructure Improvements

Cedar Avenue Overcrossing Widening

Separate from this project, Caltrans is expanding the I-10/Cedar Avenue interchange to improve operation and capacity. This involves widening the existing Cedar Avenue overcrossing, the Union Pacific Railroad (UPRR) overhead, and Cedar Avenue from four to six lanes and realigning and widening the I-10 on- and off-ramps to improve turning and storage capacity. The improvements also include dual left-turn lanes between the eastbound and westbound ramp intersections and the addition of an auxiliary lane on the eastbound on- and off-ramps.

Alder Avenue Interchange

Alder Avenue dead-ends at I-10/UPRR. There are currently no plans for constructing an overcrossing or interchange in the Bloomington Community Plan, but the Fontana General Plan shows a future interchange at this location. No known design or funding is available for this project, so construction of this project was not assumed in the traffic analysis.

Pedestrian and Bicycle Circulation

Sidewalks are intermittently provided along Valley Boulevard and throughout the Specific Plan area. Most improved parcels have sidewalks; others have dirt shoulders. The Affordable Bloomington project will install sidewalks along that project's frontage, and the Cedar Avenue overcrossing project will remove the southern east-west crosswalk. Crosswalks are provided primarily at signalized intersections, with some also at unsignalized intersections.

Walk Score gives the community of Bloomington an overall score of 26 and labels it a car-dependent community. The proposed project area receives a higher walk score of 43 due to some available transit and proximity to Ayala Park, a number of schools, and restaurants and stores.

There are no existing bikeways or trails in the study area, and only one trail is planned, for Marygold Avenue. Bicyclists generally ride along the street or on the sidewalk (when available). The Cedar Avenue overcrossing project would include a shoulder width of 6 to 10 feet, which is adequate to accommodate a Class II bike lane on the overcrossing.

Transit Service

The project area is served by two Omnitrans bus routes. Route 19 runs east-west between Yucaipa and Fontana, operating on San Bernardino Avenue in the study area. Route 19 operates seven days per week; weekday peak hour frequency is 30 minutes. Route 29 runs northwest-southeast in Bloomington and Fontana, operating on Slover Avenue, Cedar Avenue, Valley Boulevard, Sierra Avenue, and Marygold Avenue in the study area. Route 29 operates Monday through Saturday with hourly frequency.

The Affordable Bloomington project, on the north side of Valley Boulevard just west of Locust Avenue, plans to install a bus turnout lane along the project frontage. The direct access to bus service expands access to and from the corridor and enables the County to better compete for future funding.

5.13.1.3 LEVEL OF SERVICE METHODOLOGY

The County of San Bernardino Public Works Department requires that the latest version of the Transportation Research Board Highway Capacity Manual—that is, HCM2010—be used to analyze level of service (LOS).

Level of service describes how well a transportation facility or service operates from the driver's perspective. It uses a familiar A to F rating system, where LOS A represents the best conditions from a driver's perspective and LOS F the worst. The simplicity of the LOS letter system hides much of the complexity of transportation facility performance in order to simplify assessment of whether facility performance is generally acceptable and whether a future change in performance is likely to be perceived as significant by the general public. One reason for the widespread adoption of LOS is the concept's ability to communicate roadway performance to nontechnical decision makers.

The HCM2010 evaluates the LOS of intersections based on the control delay per vehicle. Control delay is the delay associated with vehicles slowing in advance of an intersection, the time spent stopped on an intersection approach, the time spent as vehicles move up in the queue, and the time needed for vehicles to accelerate to their desired speed. The methodology used to evaluate the intersection LOS differs between signalized and unsignalized intersections. For this Specific Plan, LOS at signalized and unsignalized intersections was evaluated using PTV Vistro 4.00, which is based on HCM2010 methodologies.

Signalized Intersections

The LOS for signalized intersections is based on the weighted average control delay, in seconds per vehicle, of all vehicles passing through the intersection. Table 5.13-3 shows the criteria used to determine the level of service for signalized intersections.

Table 5.13-3 Levels of Service, Signalized Intersections

LOS	Control Delay, seconds per vehicle	Description
A	≤ 10	Minimal delay and primarily free-flow operation. Most vehicles do not stop because they arrive during the green light or only stop for a brief time as the signal changes.
B	> 10–20	Short delay and reasonably unimpeded operation. Many vehicles do not stop because they arrive during the green light or only stop for a short time as the signal changes. More vehicles stop than with LOS A.
C	> 20–35	Moderate delay and stable operation. Individual cycle failures (i.e., when queued vehicles do not clear the signal during the next green light) may begin to appear. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
D	> 35–55	Less stable operation. Small increases in vehicles may cause substantial increases in delay. Many vehicles stop and individual cycle failures are noticeable.
E	> 55–80	Significant delay and unstable operation. Most vehicles stop and individual cycle failures are frequent.
F	> 80	Considerable delay and extensive queuing. Almost all vehicles stop and most cycles fail to clear the queue.

Source: Webb 2016.

Unsignalized Intersections

Unsignalized intersections have also been evaluated using the HCM2010. According to this methodology, the level of service for all-way stop intersections is based on the weighted average control delay, in seconds per vehicle, of all vehicles passing through the intersection. For two-way stop controlled intersections, the level of service is based on the highest control delay of all intersection approaches. Table 5.13-4 shows the criteria used to determine the level of service for unsignalized intersections.

Table 5.13-4 Levels of Service, Unsignalized Intersections

LOS	Control Delay, seconds per vehicle	Description
A	≤ 10	Minimal delay. Usually no conflicting traffic.
B	> 10–15	Short delay. Occasionally some conflicting traffic.
C	> 15–25	Noticeable delay, but not inconveniencing. Usually some conflicting traffic.
D	> 25–35	Noticeable delay and irritating. A significant amount of conflicting traffic. Increased likelihood of risk taking.
E	> 35–50	Significant delay approaching tolerance level. Lots of conflicting traffic, but with some gaps of suitable size. Risk taking behavior likely.
F	> 50	Considerable delay exceeding tolerance level. Lots of conflicting traffic, with not enough gaps of suitable size. High likelihood of risk taking.

Source: Webb 2016.

Acceptable Levels of Service

The acceptable LOS for the Bloomington area in unincorporated San Bernardino County is based on the Bloomington Community Plan, **Policy BL/CI 1.1**:

> Ensure that all new development proposals do not degrade Levels of Service (LOS) on Major Arterials below LOS "C" during non-peak hours or below LOS "D" during peak hours.

The acceptable LOS for the City of Fontana is based on the City of Fontana General Plan Circulation Element Goal #1, **Policy 12**:

> All streets and intersections designed after the adoption of the General Plan will be planned to function at level of service (LOS) C or better, wherever possible. Improvements to existing streets will be designed to LOS C standards whenever feasible.

The acceptable LOS for Caltrans facilities is based on the Caltrans' Guide for the Preparation of Traffic Impact Studies Section II:

> Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than the appropriate target LOS, the existing measures of effectiveness (MOE) should be maintained.

Per discussion with Mark Roberts, Caltrans District 8 Office Chief, Intergovernmental Review, Community and Regional Planning, the regionwide goal for acceptable LOS on all freeways, roadway segments, and intersections is LOS D.

5.13.1.4 EXISTING CONDITIONS

The existing project area generates approximately 19,244 daily trips with 1,286 in the AM peak hour and 1,500 in the PM peak hour.

Table 5.13-5 details LOS for the 16 study area intersections. Of these, 13 currently operate at acceptable LOS; the 3 intersections in the following list currently operate at unacceptable LOS.

- 1. Sierra Avenue (NS) / San Bernardino Avenue (EW)
- 2. Sierra Avenue (NS) / Valley Boulevard (EW)
- 14. Cedar Avenue (NS) / I-10 Westbound Ramps (EW)

Peak hour intersection turning movement volumes are shown on Figures 3-B (AM Peak Hour) and 3-C (PM Peak Hour) of the traffic impact analysis (Appendix G of this DEIR).

Table 5.13-5 Existing Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Peak Hour	Traffic Control	Delay (sec)	LOS
1. Sierra Avenue (NS) / San Bernardino Avenue (EW)	Fontana	C	AM PM	Signal	28.7 37.0	C D
2. Sierra Avenue (NS) / Valley Boulevard (EW)	Fontana	C	AM PM	Signal	27.9 36.6	C D
3. Sierra Avenue (NS)/ I-10 Ramps (EW)	Caltrans	D	AM PM	Signal	25.5 28.1	C C
4. Sierra Avenue (NS)/ Slover Avenue (EW)	Fontana	C	AM PM	Signal	28.2 34.7	C C
5. Palmetto Avenue (NS) / Valley Boulevard (EW)	Fontana	C	AM PM	Signal	22.0 17.0	C B
6. Alder Avenue (NS) / San Bernardino Avenue (EW)	Fontana/ County	C	AM PM	Signal	15.5 16.7	B B
7. Alder Avenue (NS) / Marygold Avenue (EW)	Fontana/ County	C	AM PM	All-way stop	11.7 22.9	B C
8. Alder Avenue (NS) / Valley Boulevard (EW)	Fontana/ County	C	AM PM	Signal	26.1 25.1	C C
9. Locust Avenue (NS) / Marygold Avenue (EW)	County	D	AM PM	All-way stop	8.8 10.7	A B
10. Locust Avenue (NS) / Valley Boulevard (EW)	County	D	AM PM	Signal	18.1 16.8	B B
11. Cedar Avenue (NS) / San Bernardino Avenue (EW)	County	D	AM PM	Signal	18.7 16.8	B B
12. Cedar Avenue (NS) / Bloomington Avenue (EW)	County	D	AM PM	Signal	12.4 12.2	B B
13. Cedar Avenue (NS) / Valley Boulevard (EW)	County	D	AM PM	Signal	43.4 31.4	D C
14. Cedar Avenue (NS) / I-10 Westbound Ramps (EW)	Caltrans	D	AM PM	Signal	67.5 33.8	E C
15. Cedar Avenue (NS) / I-10 Eastbound Ramps (EW)	Caltrans	D	AM PM	Signal	39.1 39.6	D D
16. Cedar Avenue (NS) / Slover Avenue (EW)	County	D	AM PM	Signal	21.8 25.5	C C

Source: Webb 2016.
Note: **Boldface** indicates unacceptable LOS.

5.13.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project could:

T-1 Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

T-2 Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

T-3 Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

T-4 Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

T-5 Result in inadequate emergency access.

T-6 Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The determination of significant impacts at intersections used in this study is based on the County of San Bernardino Traffic Impact Analysis Guidelines, Sections 10.8.1 and 10.8.2, with modifications to accommodate the varying acceptable LOS standards in different jurisdictions.

Signalized Intersections

Any study intersection that is operating at an acceptable LOS for any study scenario without project traffic in which the addition of project traffic causes the intersection to degrade to an unacceptable LOS shall mitigate the impact to bring the intersection back to an acceptable LOS.

Any study intersection that is operating at an unacceptable LOS for any study scenario without project traffic shall mitigate any impacts so as to bring the intersection back to the overall level of delay established prior to project traffic being added. For scenarios which include the addition of Cumulative Project Traffic (i.e. shared impacts), study intersections shall be mitigated to an acceptable LOS.

Unsignalized Intersections

An impact is considered significant if the study determines that either section a) or both sections b) and c) occur.

a) The addition of project related traffic causes the intersection to move from an acceptable LOS to an unacceptable LOS

OR

b) The project contributes additional traffic to an intersection that is already projected to operate at an unacceptable LOS with background traffic

AND

c) One or both of the following conditions are met:

   1) The project adds ten (10) or more trips to any approach

   2) The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

Once a significant impact has been identified, mitigation shall be provided as follows:

1) For scenarios involving project traffic but not Cumulative Project Traffic, the LOS shall be mitigated to either an acceptable LOS for case a) above or to pre-project LOS and delay for case b) above.

2) For scenarios that include Cumulative Project Traffic study intersections shall be mitigated to an acceptable LOS.

5.13.3 Environmental Impacts

5.13.3.1 METHODOLOGY

Trip Generation Rates

Trip generation represents the amount of traffic traveling to and from the proposed project. The traffic generation figures used in the traffic impact analysis are based on the existing and proposed land uses in the Specific Plan area. Table 5.13-6 shows the peak hour and daily trip generation rates for the existing and proposed land uses.

The trip generation rates are based on the weighted average trip generation rates provided in the Institute of Transportation Engineers' manual, Trip Generation (9th ed., 2012), except for the mixed-use land use. The inbound and outbound peak-hour trip generation rates are calculated by multiplying the total peak-hour generation rate by the directional distribution in the ITE manual. The mixed-use trip generation rates are based on the "(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region" (2002) by the San Diego Association of Governments.

Table 5.13-6 Trip Generation Rates

Land Use	Unit	AM Peak Hour			PM Peak Hour			Daily
		Total	In	Out	Total	In	Out	
*General Light Industrial Land Use Category: 110	TSF	0.92	0.81	0.11	0.97	0.12	0.85	6.97
Industrial Park Land Use Category: 130	TSF	0.82	0.67	0.15	0.85	0.18	0.67	6.83
Mini-Warehouse Land Use Category: 151	TSF	0.14	0.08	0.06	0.26	0.13	0.13	2.50
*Single-Family Detached Housing Land Use Category: 210	DU	0.75	0.19	0.56	1.00	0.63	0.37	9.52
Apartments Land Use Category: 220	DU	0.51	0.10	0.41	0.62	0.40	0.22	6.65
**Residential Condominium/Townhouse Land Use Category: 230	DU	0.44	0.07	0.37	0.52	0.35	0.17	5.81
Mobile Home Park Land Use Category: 240	DU	0.44	0.09	0.35	0.59	0.37	0.22	4.99
*Hotel Land Use Category: 310	Rooms	0.53	0.31	0.22	0.60	0.31	0.29	8.17
City Park Land Use Category: 411	Acres	4.50	2.52	1.98	3.50	2.00	1.51	9.00
Recreational Community Center Land Use Category: 495	TSF	2.05	1.35	0.70	2.74	1.34	1.40	33.82
Church Land Use Category: 560	TSF	0.56	0.35	0.21	0.55	0.26	0.29	9.11
General Office Building Land Use Category: 710	TSF	1.56	1.37	0.19	1.49	0.25	1.24	11.03
Nursery (GardenCenter) Land Use Category: 817	TSF	2.43	1.26	1.17	6.94	3.40	3.54	68.10
*Shopping Center Land Use Category: 820	TSF	0.96	0.60	0.36	3.71	1.78	1.93	42.70
Automobile Sales Land Use Category: 841	TSF	1.92	1.44	0.48	2.62	1.05	1.57	32.30
*High-Turnover (Sit-Down) Restaurant Land Use Category: 932	TSF	10.81	5.95	4.86	9.85	5.91	3.94	127.15
Automobile Care Center Land Use Category: 942	TSF	3.11	1.49	1.62	3.22	1.93	1.29	2.25
*Gasoline/Service Station with Convenience Market Land Use Category: 945	VFP	10.16	5.08	5.08	13.51	6.76	6.76	162.78
**Mixed Use: Commercial Only	TSF	3.30	1.98	1.32	9.90	4.95	4.95	110.00
**Mixed Use: Residential Only	DU	0.45	0.14	0.32	0.65	0.39	0.26	5.00

Source: Webb 2016.
TSF = thousand square feet; DU = dwelling unit
* = Specific Plan and existing land use; ** = Specific Plan only land use

Internal Trips

A key characteristic of a multiuse development is that trips among the various land uses can be made onsite. These internal trips can be made either by walking or by vehicle entirely on internal pathways or internal roadways. Internal trips for existing and proposed land uses were calculated based on the Transportation Research Board's "National Cooperative Highway Research Program (NCHRP) Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments" (2011). The internal trip capture estimation worksheets are included in the traffic impact analysis (Appendix G).

Pass-by Trips

Pass-by trips are trips made as intermediate stops on the way from an origin to a primary trip destination without a route diversion. They are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site; they do not add new traffic to the adjacent street system; and they are only applicable to trips that enter or exit the site. Pass-by trips for existing and proposed land uses were calculated based on methodology and data in ITE's *Trip Generation Handbook* (3rd ed., 2014).

Project Trip Distribution and Assignment

Trip distribution represents the directional orientation of traffic to and from the project site. Trip distribution is influenced by the location of the site; types of land use in the study area, such as shopping centers and recreational sites; and proximity to the regional freeway system.

The trip directional orientation of traffic for the proposed project was determined based on the existing roadway system, existing traffic patterns, and existing and future land uses. The directional distribution for the proposed residential, commercial, and business park land uses of the Specific Plan assumed in this study is shown on Figure 4-A, Figure 4-B, and Figure 4-C, respectively, of the traffic impact analysis in Appendix G.

Trip assignment is the result of assigning the previously discussed trip generation numbers to the circulation system using the previously discussed trip distribution. The project-related AM peak hour and PM peak hour intersection turning movement volumes are shown on Figure 4-D and Figure 4-E, respectively, of the traffic impact analysis in Appendix G.

San Bernardino Transportation Analysis Model

Year 2035 traffic conditions were derived from the regional travel demand model currently being used for long-range planning in the County of San Bernardino. This model is commonly referred to as the San Bernardino Transportation Analysis Model (SBTAM).

The San Bernardino Associated Governments (SANBAG) developed SBTAM by refining the Southern California Association of Governments' (SCAG) 2008 RTP transportation demand model. The SCAG model covers the entire SCAG region and is calibrated to year 2000 travel behavior and validated with year 2003 travel statistics. SANBAG refined this model by including certain SCAG V6 model updates, disaggregating the 402 zones within San Bernardino County to 2,521 zones, replacing the socioeconomic data in San Bernardino County with 2008 data, and adding new centroid connectors based on the new zone structure.

For future growth projections, the current city-level general plans were analyzed to determine how much growth could potentially occur in areas with vacant, developable land or in potential redevelopment areas. The general plan data were collected from each jurisdiction, and the forecast growth from 2008 to 2035 was kept consistent with city- and county-level projections.

The future circulation network is also based on the general plans of each jurisdiction. Because of this, the SBTAM model includes unfunded network improvements such as the Alder Avenue Interchange with I-10. Since this improvement is not funded, it was removed from the SBTAM model for this analysis.

The volumes have been refined and adjusted based on the NCHRP methodology, briefly explained here. The model peak hour directional link volume forecasts have been refined using the growth increment approach. Existing peak hour intersection arrival and departure data is a necessary input to this approach since it serves as the starting point for the refinement process and also provides important insight into current travel patterns and the relationship between peak hour and daily traffic conditions. The initial turning movement proportions are estimated based on the relationship of each approach leg's forecast traffic volume to the other legs' forecast volumes at the intersection. This initial estimate is then entered into a spreadsheet program consistent with the NCHRP Report 255. A linear programming algorithm is used to calculate individual turning movements which match the known directional roadway segment volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

Scenarios Analyzed

Four scenarios were analyzed in the Traffic Impact Analysis:

- Existing Conditions (see Section 5.13.1.3 above)
- Existing Plus Project Conditions
- 2035 Without Project Conditions
- 2035 Plus Project Conditions

The following impact analysis addresses thresholds of significance for which the NOP disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.13-1: Project-related trip generation would impact levels of service on the area's existing roadway system. [Threshold T-1]

Impact Analysis:

Project Trip Generation

As shown in Tables 4-3 and 4-4 of the TIA, buildout of the Specific Plan would generate a total of 42,877 average daily trips with 2,460 in the AM peak hour and 2,857 in the PM peak hour. This would result in net new trips of 23,633 ADT with 1,174 in the AM peak hour and 1,356 in the PM peak hour.

The traffic-reducing potential of public transit was not considered. Therefore, the traffic projections are considered conservative, since public transit could reduce traffic volumes in the Specific Plan area.

Existing Plus Project Conditions

Roadway Segment Average Daily Traffic Volumes

The existing plus project estimated average daily traffic (ADT) volumes for roadways in the study area are presented in Table 5.13-7.

Table 5.13-7 Existing Plus Project ADT Volumes

Roadway Segment	ADT
Valley Boulevard between Sierra Avenue and Palmetto Avenue	33,680
Valley Boulevard between Palmetto Avenue and Alder Avenue	25,030
Valley Boulevard between Alder Avenue and Locust Avenue	24,290
Valley Boulevard between Locust Avenue and Cedar Avenue	28,280
Valley Boulevard between Cedar Avenue and Cactus Avenue	21,700
Sierra Avenue between Slover Avenue and I-10 Ramps	52,340
Sierra Avenue between I-10 Ramps and Valley Boulevard	62,950
Sierra Avenue between Valley Boulevard and San Bernardino Avenue	42,910
Alder Avenue between Valley Boulevard and Marygold Avenue	12,390
Alder Avenue between Marygold Avenue and San Bernardino Avenue	12,070
Locust Avenue between Valley Boulevard and Marygold Avenue	10,360
Cedar Avenue between Slover Avenue and I-10 Ramps	29,710
Cedar Avenue between I-10 Ramps and Valley Boulevard	47,250
Cedar Avenue between Valley Boulevard and Bloomington Avenue	36,610
Cedar Avenue between Bloomington Avenue and San Bernardino Avenue	25,200

Source: Webb 2016.

Intersection Levels of Service

Table 5.13-8 provides the projected delays and levels of service at the study intersections under existing plus project conditions. These levels of service vary from LOS A to E. The existing plus project AM and PM peak hour intersection turning movement volumes are shown on Figure 5-A and Figure 5-B in the TIA (Appendix G). The levels of service are based on the existing geometrics for the study intersections. The level of service calculation worksheets are in Appendix G. The project is expected to have a significant impact at the following five study intersections:

1) Sierra Avenue (NS) / San Bernardino Avenue (EW). PM Peak Hour delay will increase from an unacceptable 37.0 seconds to 39.3 seconds.

2) Sierra Avenue (NS) / Valley Boulevard (EW). PM Peak Hour delay will increase from an unacceptable 36.6 seconds to 38.1 seconds.

7) Alder Avenue (NS) / Marygold Avenue (EW). PM Peak Hour LOS will degrade from an acceptable LOS C to unacceptable LOS E.

14) Cedar Avenue (NS) / I-10 Westbound Ramps (EW). AM Peak Hour delay will increase from an unacceptable 67.5 seconds to 91.3 seconds.

15) Cedar Avenue (NS) / I-10 Eastbound Ramps (EW). AM Peak Hour LOS will degrade from an acceptable LOS D to unacceptable LOS E.

Existing plus project intersection turning movement volumes are shown on Figures 5A (AM Peak Hour) and 5B (PM Peak Hour) in Appendix G.

Table 5.13-8 Intersection Levels of Service, Existing Plus Project Conditions

				Without Project			With Project		
Intersection	Jurisdiction	LOS Standard	Peak Hour	Traffic Control	Delay (sec)	LOS	Traffic Control	Delay (sec)	LOS
1. Sierra Avenue (NS) / San Bernardino Avenue (EW)	Fontana	C	AM	Signal	28.7	C	Signal	29.0	C
			PM		37.0	D		39.3	D
2. Sierra Avenue (NS) / Valley Boulevard (EW)	Fontana	C	AM	Signal	27.9	C	Signal	29.2	C
			PM		36.6	D		38.1	D
3. Sierra Avenue (NS)/ I-10 Ramps (EW)	Caltrans	D	AM	Signal	25.5	C	Signal	25.8	C
			PM		28.1	C		28.6	C
4. Sierra Avenue (NS)/ Slover Avenue (EW)	Fontana	C	AM	Signal	28.2	C	Signal	28.2	C
			PM		34.7	C		34.7	C
5. Palmetto Avenue (NS) / Valley Boulevard (EW)	Fontana	C	AM	Signal	22.0	C	Signal	21.2	C
			PM		17.0	B		17.0	B
6. Alder Avenue (NS) / San Bernardino Avenue (EW)	Fontana/ County	C	AM	Signal	15.5	B	Signal	15.9	B
			PM		16.7	B		17.1	B
7. Alder Avenue (NS) / Marygold Avenue (EW)	Fontana/ County	C	AM	All-way stop	11.7	B	AWSC	13.8	B
			PM		22.9	C		41.4	E
8. Alder Avenue (NS) / Valley Boulevard (EW)	Fontana/ County	C	AM	Signal	26.1	C	Signal	30.8	C
			PM		25.1	C		33.0	C
9. Locust Avenue (NS) / Marygold Avenue (EW)	County	D	AM	All-way stop	8.8	A	AWSC	9.6	A
			PM		10.7	B		12.9	B
10. Locust Avenue (NS) / Valley Boulevard (EW)	County	D	AM	Signal	18.1	B	Signal	23.0	C
			PM		16.8	B		22.9	C
11. Cedar Avenue (NS) / San Bernardino Avenue (EW)	County	D	AM	Signal	18.7	B	Signal	18.7	B
			PM		16.8	B		16.7	B
12. Cedar Avenue (NS) / Bloomington Avenue (EW)	County	D	AM	Signal	12.4	B	Signal	13.0	B
			PM		12.2	B		12.7	B
13. Cedar Avenue (NS) / Valley Boulevard (EW)	County	D	AM	Signal	43.4	D	Signal	30.8	C
			PM		31.4	C		33.7	C
14. Cedar Avenue (NS) / I-10 Westbound Ramps (EW)	Caltrans	D	AM	Signal	67.5	E	Signal	91.3	F
			PM		33.8	C		43.2	D

Table 5.13-8 Intersection Levels of Service, Existing Plus Project Conditions

Intersection	Jurisdiction	LOS Standard	Peak Hour	Without Project			With Project		
				Traffic Control	Delay (sec)	LOS	Traffic Control	Delay (sec)	LOS
15. Cedar Avenue (NS) / I-10 Eastbound Ramps (EW)	Caltrans	D	AM	Signal	39.1	D	Signal	55.7	E
			PM		39.6	D		54.8	D
16. Cedar Avenue (NS) / Slover Avenue (EW)	County	D	AM	Signal	21.8	C	Signal	22.6	C
			PM		25.5	C		33.6	C

Source: Webb 2016.
Notes: Boldface indicates unacceptable LOS.
Gray shading indicates significant impact.

2035 Without Project Conditions

Roadway Segment Average Daily Traffic

The year 2035 without project estimated ADT for roadways in the study area is presented in Table 5.13-9.

Table 5.13-9 2035 Without Project ADT Volumes

Roadway Segment	ADT
Valley Boulevard between Sierra Avenue and Palmetto Avenue	28,750
Valley Boulevard between Palmetto Avenue and Alder Avenue	19,880
Valley Boulevard between Alder Avenue and Locust Avenue	22,190
Valley Boulevard between Locust Avenue and Cedar Avenue	24,370
Valley Boulevard between Cedar Avenue and Cactus Avenue	13,960
Sierra Avenue between Slover Avenue and I-10 Ramps	50,320
Sierra Avenue between I-10 Ramps and Valley Boulevard	68,910
Sierra Avenue between Valley Boulevard and San Bernardino Avenue	41,490
Alder Avenue between Valley Boulevard and Marygold Avenue	11,060
Alder Avenue between Marygold Avenue and San Bernardino Avenue	15,550
Locust Avenue between Valley Boulevard and Marygold Avenue	4,150
Cedar Avenue between Slover Avenue and I-10 Ramps	30,300
Cedar Avenue between I-10 Ramps and Valley Boulevard	48,760
Cedar Avenue between Valley Boulevard and Bloomington Avenue	37,270
Cedar Avenue between Bloomington Avenue and San Bernardino Avenue	25,470

Source: Webb 2016.

Intersection Levels of Service

Table 5.13-10 shows the projected delays and levels of service at the study intersections under year 2035 without project conditions. These levels of service vary from LOS B to F. The year 2035 without project AM and PM peak hour intersection turning movement volumes are shown on Figure 5-C and Figure 5-D, respectively, in Appendix G. The levels of service are based on the existing geometrics for the study intersections. Future circulation improvements were not assumed in this analysis since they are not guaranteed

to be constructed. The level of service calculation worksheets are in Appendix G. The following seven intersections are expected to operate at an unacceptable level of service in 2035 without Project Conditions:

1) Sierra Avenue (NS) / San Bernardino Avenue (EW)

4) Sierra Avenue (NS) / Slover Avenue (EW)

7) Alder Avenue (NS) / Marygold Avenue (EW)

8) Alder Avenue (NS) / Valley Boulevard (EW)

14) Cedar Avenue (NS) / I-10 Westbound Ramps (EW)

15) Cedar Avenue (NS) / I-10 Eastbound Ramps (EW)

16) Cedar Avenue (NS) / Slover Avenue (EW)

Table 5.13-10 Intersection Levels of Service, 2035 Without Project Conditions

Intersection	Jurisdiction	LOS Standard	Peak Hour	Traffic Control	Delay (sec)	LOS
1. Sierra Ave (NS)/ San Bernardino Ave (EW)	Fontana	C	AM PM	Signal	34.9 *47.0*	C *D*
2. Sierra Avenue (NS) / Valley Boulevard (EW)	Fontana	C	AM PM	Signal	25.2 32.9	C C
3. Sierra Avenue (NS) / I-10 Ramps (EW)	Caltrans	D	AM PM	Signal	31.8 31.7	C C
4. Sierra Avenue (NS) / Slover Avenue (EW)	Fontana	C	AM PM	Signal	30.6 *38.6*	C *D*
5. Palmetto Avenue (NS) / Valley Boulevard (EW)	Fontana	C	AM PM	Signal	31.0 21.9	C C
6. Alder Avenue (NS) / San Bernardino Avenue (EW)	Fontana/County	C	AM PM	Signal	19.8 21.5	B C
7. Alder Avenue (NS) / Marygold Avenue (EW)	Fontana/County	C	AM PM	All-way stop	*29.5* *128.2*	*D* *F*
8. Alder Avenue (NS) / Valley Boulevard (EW)	Fontana/County	C	AM PM	Signal	*OFL* *OFL*	*F* *F*
9. Locust Avenue (NS) / Marygold Avenue (EW)	County	D	AM PM	All-way stop	11.0 22.0	B C
10. Locust Avenue (NS) / Valley Boulevard (EW)	County	D	AM PM	Signal	32.5 23.3	C C
11. Cedar Avenue (NS) / San Bernardino Avenue (EW)	County	D	AM PM	Signal	28.3 27.5	C C
12. Cedar Avenue (NS) / Bloomington Avenue (EW)	County	D	AM PM	Signal	18.7 15.7	B B
13. Cedar Avenue (NS) / Valley Boulevard (EW)	County	D	AM PM	Signal	25.8 49.1	C D
14. Cedar Avenue (NS) / I-10 Westbound Ramps (EW)	Caltrans	D	AM PM	Signal	*119.6* *80.4*	*F* *F*

Table 5.13-10 Intersection Levels of Service, 2035 Without Project Conditions

Intersection	Jurisdiction	LOS Standard	Peak Hour	Traffic Control	Delay (sec)	LOS
15. Cedar Avenue (NS) / I-10 Eastbound Ramps (EW)	Caltrans	D	AM PM	Signal	*57.8* *61.5*	*E* *E*
16. Cedar Avenue (NS) / Slover Avenue (EW)	County	D	AM PM	Signal	34.3 *155.5*	C *F*

Source: Webb 2016
Notes: Boldface indicates unacceptable LOS.
OFL = Overflow conditions, Delay > 200 sec

2035 With Project Conditions

Roadway Segment Average Daily Traffic Volumes

The year 2035 with project estimated ADT for roadways within the study area is presented in Table 5-13-11.

Table 5.13-11 2035 With Project ADT Volumes

Roadway Segment	ADT
Valley Boulevard between Sierra Avenue and Palmetto Avenue	32,460
Valley Boulevard between Palmetto Avenue and Alder Avenue	24,320
Valley Boulevard between Alder Avenue and Locust Avenue	27,930
Valley Boulevard between Locust Avenue and Cedar Avenue	29,610
Valley Boulevard between Cedar Avenue and Cactus Avenue	23,200
Sierra Avenue between Slover Avenue and I-10 Ramps	52,690
Sierra Avenue between I-10 Ramps and Valley Boulevard	71,450
Sierra Avenue between Valley Boulevard and San Bernardino Avenue	46,490
Alder Avenue between Valley Boulevard and Marygold Avenue	14,670
Alder Avenue between Marygold Avenue and San Bernardino Avenue	17,240
Locust Avenue between Valley Boulevard and Marygold Avenue	8,970
Cedar Avenue between Slover Avenue and I-10 Ramps	34,210
Cedar Avenue between I-10 Ramps and Valley Boulevard	54,480
Cedar Avenue between Valley Boulevard and Bloomington Avenue	43,670
Cedar Avenue between Bloomington Avenue and San Bernardino Avenue	27,800

Source: Webb 2016.

Intersection Levels of Service

Table 5.13-12 provides the projected delays and levels of service at the study area intersections under year 2035 with project conditions. These levels of service vary from LOS B to F. The year 2035 with project AM and PM peak hour intersection turning movement volumes are shown on Figure 5-E and Figure 5-F, respectively, of the traffic impact analysis (Appendix G). The levels of service are based on the existing geometrics for the study intersections. Future circulation improvements were not assumed in this analysis since they are not guaranteed to be constructed. The level of service calculation worksheets are provided in the traffic impact analysis. The project is expected to have a significant impact at the following 10 intersections:

1) Sierra Avenue (NS) / San Bernardino Avenue (EW). AM Peak Hour LOS will degrade from an acceptable LOS C to unacceptable LOS D, and PM Peak Hour delay will increase from an unacceptable 47.0 seconds to 47.9 seconds.

2) Sierra Avenue (NS) / Valley Boulevard (EW). PM Peak Hour LOS will degrade from an acceptable LOS C to unacceptable LOS D.

4) Sierra Avenue (NS) / Slover Avenue (EW). PM Peak Hour delay will increase from an unacceptable 38.6 seconds to 38.7 seconds.

7) Alder Avenue (NS) / Marygold Avenue (EW). AM Peak Hour delay will increase from an unacceptable 29.5 seconds to 52.4 seconds, and PM Peak Hour delay will increase from an unacceptable 128.2 seconds to 175.6 seconds.

8) Alder Avenue (NS) / Valley Boulevard (EW). Intersection is expected to operate in overflow conditions (delay greater than 200 seconds) in both AM and PM Peak Hours.

9) Locust Avenue (NS) / Marygold Avenue (EW). PM Peak Hour LOS will degrade from an acceptable LOS C to unacceptable LOS E.

13) Cedar Avenue (NS) / Valley Boulevard (EW). PM Peak Hour LOS will degrade from an acceptable LOS D to unacceptable LOS E.

14) Cedar Avenue (NS) / I-10 Westbound Ramps (EW). AM Peak Hour delay will increase from an unacceptable 119.6 seconds to 134.4 seconds, and PM Peak Hour delay will increase from an unacceptable 80.4 seconds to 93.6 seconds.

15) Cedar Avenue (NS) / I-10 Eastbound Ramps (EW). AM Peak Hour delay will increase from an unacceptable 57.8 seconds to 70.7 seconds, and PM Peak Hour delay will increase from an unacceptable 61.5 seconds to 84.5 seconds.

16) Cedar Avenue (NS) / Slover Avenue (EW). PM Peak Hour delay will increase from an unacceptable 155.5 seconds to 175.3 seconds.

Table 5.13-12 Intersection Levels of Service, 2035 Plus Project Conditions

Intersection	Jurisdiction	LOS Standard	Peak Hour	Without Project			With Project		
				Traffic Control	Delay (sec)	LOS	Traffic Control	Delay (sec)	LOS
1. Sierra Avenue (NS) / San Bernardino Avenue(EW)	Fontana	C	AM	Signal	34.9	C	Signal	35.6	D
			PM		47.0	D		47.9	D
2. Sierra Avenue (NS) / Valley Boulevard(EW)	Fontana	C	AM	Signal	25.2	C	Signal	27.4	C
			PM		32.9	C		41.8	D
3. Sierra Avenue (NS)/ I-10 Ramps (EW)	Caltrans	D	AM	Signal	31.8	C	Signal	37.7	D
			PM		31.7	C		35.2	D
4. Sierra Avenue (NS)/ Slover Avenue(EW)	Fontana	C	AM	Signal	30.6	C	Signal	30.6	C
			PM		38.6	D		38.7	D
5. Palmetto Avenue (NS) / Valley Boulevard(EW)	Fontana	C	AM	Signal	31.0	C	Signal	23.6	C
			PM		21.9	C		20.5	C
6. Alder Avenue (NS) / San Bernardino Avenue(EW)	Fontana/ County	C	AM	Signal	19.8	B	Signal	20.6	C
			PM		21.5	C		22.2	C
7. Alder Avenue (NS) / Marygold Avenue(EW)	Fontana/ County	C	AM	All-way stop	29.5	D	AWSC	52.4	F
			PM		128.2	F		175.6	F
8. Alder Avenue (NS) / Valley Boulevard(EW)	Fontana/ County	C	AM	Signal	OFL	F	Signal	OFL	F
			PM		OFL	F		OFL	F
9. Locust Avenue (NS) / Marygold Avenue(EW)	County	D	AM	All-way stop	11.0	B	AWSC	12.2	B
			PM		22.0	C		37.4	E
10. Locust Avenue (NS) / Valley Boulevard(EW)	County	D	AM	Signal	32.5	C	Signal	29.3	C
			PM		23.3	C		27.8	C
11. Cedar Avenue (NS) / San Bernardino Avenue(EW)	County	D	AM	Signal	28.3	C	Signal	29.0	C
			PM		27.5	C		27.5	C
12. Cedar Avenue (NS) / Bloomington Avenue(EW)	County	D	AM	Signal	18.7	B	Signal	19.5	B
			PM		15.7	B		16.5	B
13. Cedar Avenue (NS) / Valley Boulevard(EW)	County	D	AM	Signal	25.8	C	Signal	41.0	D
			PM		49.1	D		56.4	E
14. Cedar Avenue (NS) / I-10 Westbound Ramps (EW)	Caltrans	D	AM	Signal	119.6	F	Signal	134.4	F
			PM		80.4	F		93.6	F
15. Cedar Avenue (NS) / I-10 Eastbound Ramps (EW)	Caltrans	D	AM	Signal	57.8	E	Signal	70.7	E
			PM		61.5	E		84.5	F
16. Cedar Avenue (NS) / Slover Avenue (EW)	County	D	AM	Signal	34.3	C	Signal	34.4	C
			PM		155.5	F		175.3	F

Source: Webb 2016.
Notes: Boldface indicates unacceptable LOS.
Gray shading indicates significant impact.

Freeway Mainline

In addition to the two freeway interchanges that would exceed Caltrans service standards – Cedar Avenue and I-10 Eastbound/Westbound Ramps (see Table 5.13-12); the project trips could impact I-10 freeway mainline segments adjacent to the project area. Based on the environmental assessment prepared for the Interstate 10-Cedar Avenue Interchange, the opening year with the interchange project would result in significant impacts to four freeway mainline segments (Caltrans 2012). The following four segments would operate at LOS F:

- Eastbound Sierra Avenue on-ramp to Cedar Avenue off-ramp (PM peak hour)
- Eastbound Cedar Avenue on-ramp to Riverside Avenue off-ramp (PM peak hour)
- Westbound Riverside Avenue on-ramp to Cedar Avenue off-ramp (AM peak hour)
- Westbound Cedar Avenue on-ramp to Sierra Avenue off-ramp (AM peak hour)

Caltrans requirements are described in the Guide for the Preparation of Traffic Impact Studies (Caltrans 2001), which covers the information needed for Caltrans to review the impacts on state highway facilities, including freeway segments. The Guide states that "Caltrans endeavors to maintain a target LOS at the transition between LOS 'C' and LOS 'D' on state highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS." The Guide also states that where "an existing State highway facility is operating at less than the appropriate target LOS, the existing measure of effectiveness should be maintained."

Caltrans also prepares comprehensive planning documents, including Corridor System Management Plans and Transportation Concept Reports (TCR), which are long-range planning documents that establish a planning concept for state facilities. The Corridor System Management Plans and TCRs identify a "concept" LOS, or "target" LOS, for the applicable highway facility. A deficiency or need for improvement is triggered when the actual LOS falls below the concept LOS.

The project would add a substantial amount of traffic on I-10 and would have the potential to cumulatively degrade levels of service on the I-10 and on nearby Caltrans freeway interchanges. Therefore, trip generation related to future development that would be accommodated by the Specific Plan would worsen traffic conditions on freeway mainline and interchanges. This would be a significant impact.

Conclusion

In summary, buildout of the Valley Corridor Specific Plan would result in significant impacts to three intersections and two Caltrans ramps during the existing plus project condition and eight intersections and two Caltrans ramps during the cumulative condition. The project would also impact four freeway mainline segments. Pursuant to Section 5.1.4, Required Studies, of the Specific Plan, future development projects that would generate 100 or more trips would be required to prepare a traffic study consistent with the County of San Bernardino Traffic Impact Study Guidelines. The study shall identify all traffic impacts, improvement timing, and design. Immediate and direct impacts shall be constructed prior to the issuance of occupancy permits. Incremental future impacts shall pay a fair share contribution prior to the issuance of building permits. Even with this requirement impacts would remain significant.

Impact 5.13-2: The proposed Specific Plan would be subject to the County of San Bernardino Regional Transportation Development Mitigation Plan Fee Schedule. Specific Plan buildout would not conflict with the San Bernardino County Congestion Management Program. [Threshold T-2]

Impact Analysis: The Congestion Management Program in effect in San Bernardino County was issued by the San Bernardino Associated Governments in 2007. Per San Bernardino Congestion Management Plan, Appendix A, "Jurisdictions that have implemented qualifying development mitigation programs that achieve

development contribution requirements established by the SANBAG Development Mitigation Nexus Study are not required to prepare [traffic impact analysis] reports for [congestion management agency] review."

The Valley Corridor Specific Plan lies within the City of Rialto sphere of influence and is subject to the County of San Bernardino Regional Transportation Development Mitigation Plan Fee Schedule. This report qualifies as a development mitigation program addressing traffic impacts established by the SANBAG Development Mitigation Nexus Study. Development projects consistent with the Valley Corridor Specific Plan are required to pay fair share fees established by the County of San Bernardino's Regional Transportation Development Mitigation Plan Report. Therefore, a CMP traffic impact analysis report is not required for this project. Impacts to CMP facilities are less than significant.

Impact 5.13-3:	Specific Plan implementation would not cause substantial hazards through an increase in air traffic levels or a change in the location of air traffic patterns. [Threshold T-3].

Impact Analysis: The nearest public-use airport to the project site is Rialto Municipal Airport, 3.5 miles to the north. The project is not in an area near Rialto Municipal Airport where land uses are regulated to minimize hazards to people on the ground from aircraft crashes. The Specific Plan would not cause a change in the directional patterns of aircrafts flying to and from any airport. No impacts would occur.

Impact 5.13-4:	Project circulation improvements have been designed to adequately address potentially hazardous conditions (sharp curves, etc.), potential conflicting uses, and emergency access. [Threshold T-4]

Impact Analysis: Specific Plan buildout would not add incompatible uses to area roadways. The San Bernardino County Department of Public Works Traffic Division reviews construction traffic control plans for projects in unincorporated County areas. The Traffic Division would not permit staging of vehicles or construction equipment or materials on County-maintained roads that would block emergency access to properties. Furthermore, the required roadway improvements would consist mostly of additional turn lanes and through lanes and would not create hazardous conditions. Impacts would be less than significant.

Impact 5.13-5:	The proposed project complies with adopted policies, plans, and programs for alternative transportation. [Threshold T-6]

Impact Analysis:

Pedestrian and Bicycle Facilities

Objectives for the Specific Plan include:

5. **Activity centers.** Develop pedestrian-friendly activity centers that offer shared places for community members to socialize, support, and learn from one another.

6. **Mobility.** Create safe spaces for pedestrians, cyclists, transit, and motor vehicles along Valley Boulevard and between surrounding neighborhoods while maintaining Valley Boulevard as a four-lane facility.

The full list of project objectives is in Chapter 3, *Project Description*, of this DEIR.

Pedestrian mobility along Valley Boulevard would be provided on minimum 10-foot-wide sidewalks. The proposed Valley Corridor/Commercial Land Use District—which would be mostly in the southeast quadrant of the project site—would feature an interconnected sequence of plazas, paseos, walkable streets, and distinct building designs to create a pedestrian-friendly town center or mercado area. Cyclist mobility along Valley Boulevard would be provided in minimum two-foot-wide Class II bike lanes, that is, striped lanes for one-way bike travel on the street that are marked with signs and pavement striping. Bicycle parking would be provided on commercial, industrial, and mixed-use properties along Valley Boulevard per the California Green Building Standards Code in effect at the time a development application is submitted. The Specific Plan would comply with plans for alternative transportation, and impacts would be less than significant.

5.13.4 Cumulative Impacts

Cumulative impacts are addressed in greater detail above in the 2035 Plus Project scenario. In summary, the project is expected to have significant impacts at 10 intersections and four freeway mainline segments.

5.13.5 Existing Regulations and Standard Conditions

Regional

- Congestion Management Program, San Bernardino Associated Governments

Local

- County of San Bernardino's Regional Transportation Development Mitigation Plan Report

5.13.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.13-2 (Congestion Management Program), 5.13-3 (air traffic patterns), 5.13-4 (hazardous conditions and emergency access), and 5.13-5 (adopted policies, plans, and programs for alternative transportation).

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.13-1** Buildout of the Valley Corridor Specific Plan would result in significant traffic impacts at several study area intersections, in both Existing Plus Project conditions and 2035 With Project conditions.

5.13.7 Mitigation Measures

Impact 5.13-1

T-1 Prior to issuance of occupancy permits for development projects that would be accommodated by the Valley Corridor Specific Plan, project applicants shall construct or pay fair share contributions to the County of San Bernardino (pursuant to the County of San Bernardino Traffic Impact Study Guidelines), toward the construction of the traffic improvements listed below. The fair-share payment for each project shall be calculated as the net increase in trip generation due to that project proportional to the entire net increase in trip generation due to Specific Plan buildout.

Existing Plus Project Conditions

- **Alder and Marygold Avenue:** Install traffic signal.
- **Sierra Avenue and San Bernardino Avenue:** Install one right-turn lane with overlap phase on the eastbound approach.
- **Sierra Avenue with Valley Boulevard:** Install one right-turn lane with overlap phase on the southbound approach.
- **Cedar and I-10 Westbound Ramps:** Install second left-turn lane and a third through lane on the northbound approach.
- **Cedar and I-10 Eastbound Ramps:** Install second left-turn lane and a third through lane on the southbound approach.

Cumulative Impacts (2035 Plus Project Conditions)

- **Locust Avenue and Marygold Avenue:** Convert one right-turn lane to a shared through and right-turn lane on the northbound approach.
- **Cedar Avenue and Valley Boulevard:** Install a third through lane on the northbound approach.
- **Cedar Avenue and Slover Avenue:** Install a second left-turn lane on the eastbound approach.
- **Sierra Avenue and San Bernardino Avenue (City of Fontana):**
  - Installation of one right-turn lane with overlap phase on the northbound approach
  - Installation of one right-turn lane on the southbound approach
  - Installation of one right-turn land on the eastbound approach
- **Sierra Avenue and Valley Boulevard (City of Fontana):**

- Installation of a third through lane on the northbound approach
- Installation of a third through lane on the eastbound approach

- **Sierra Avenue and Slover Avenue (City of Fontana):**
  - Installation of a fourth through lane and a right-turn lane with overlap phase on the northbound approach
  - Installation of one right-turn lane with overlap phase on the southbound approach
- **Alder Avenue and Valley Boulevard (County/City of Fontana):**
  - Installation of two left-turn lanes; a second through lane; and one right-turn lane with overlap phase on the northbound approach
  - Installation of one left-turn lane; a second through lane; and one right-turn lane with overlap phase on the southbound approach
  - Installation of a second left-turn lane and one right-turn lane with overlap phase on the eastbound approach
  - Installation of a second left-turn lane on the westbound approach
- **Cedar Avenue and I-10 Westbound Ramps:**
  - Add a second left-turn lane and a third through lane on northbound approach.
  - Add one right-turn lane with overlap phase on the southbound approach.
  - Modify shared left-turn, through, and right-turn lane to shared left-turn and right-turn lane (restrict through movement) on the westbound approach.
- **Cedar Avenue and I-10 Eastbound Ramps:**
  - Add a second left-turn lane and a third through lane on southbound approach

Table 5.13-13 Summary of Significant Impacts and Recommended Improvements

Intersection	Jurisdiction	Recommended Improvements[1]	
		Approach	Improvements
Existing Plus Project Conditions (Direct Impacts)			
1. Sierra Avenue (NS) / San Bernardino Avenue (EW)	City of Fontana	Eastbound	Add one right-turn lane with overlap phase
2. Sierra Avenue (NS) / Valley Boulevard (EW)	City of Fontana	Southbound	Add one right-turn lane with overlap phase
7. Alder Avenue (NS) / Marygold Avenue (EW)	County	Entire intersection	Install traffic signal
14. Cedar Avenue (NS) / I-10 Westbound Ramps (EW) [1]	Caltrans	Northbound	Add a second left-turn lane and a third through lane
15. Cedar Avenue (NS) / I-10 Eastbound Ramps (EW) [1]	Caltrans	Southbound	Add a second left-turn lane and a third through lane
2035 Plus Project Conditions (Cumulative Impacts)			
1. Sierra Avenue (NS) / San Bernardino Avenue (EW)	City of Fontana	Northbound	Add one right-turn lane with overlap phase
		Southbound	Add one right-turn lane
		Eastbound	Add one right-turn lane
2. Sierra Avenue (NS) / Valley Boulevard (EW)	City of Fontana	Northbound	Add a third through lane
		Eastbound	Add a third through lane
4. Sierra Avenue (NS) / Slover Avenue (EW)	City of Fontana	Northbound	Add a fourth through lane and a right-turn lane with overlap phase
		Southbound	Add one right-turn lane with overlap phase
		Eastbound	Add a third through lane and a right-turn lane with an overlap phase
7. Alder Avenue (NS) / Marygold Avenue (EW)	Fontana/County	Entire intersection	Install traffic signal [D]
8. Alder Avenue (NS) / Valley Boulevard (EW)	Fontana/County	Northbound	Add two left-turn lanes; a second through lane; and one right-turn lane with overlap phase
		Southbound	Add one left-turn lane; a second through lane; and one right-turn lane with overlap phase
		Eastbound	Add a second left-turn lane and one right-turn lane with overlap phase
		Westbound	Add a second left-turn lane
9. Locust Avenue (NS) / Marygold Avenue (EW)	County	Northbound	Convert one right-turn lane to a shared through and right-turn lane
13. Cedar Avenue (NS) / Valley Boulevard (EW)	County	Northbound	Add third through lane
14. Cedar Avenue (NS) / I-10 Westbound Ramps (EW)	Caltrans	Northbound	Add second left-turn lane and a third through lane [D]
		Southbound	Add one right-turn lane with overlap phase
		Westbound	Modify shared left-turn, through, and right-turn lane to shared left-turn and right-turn lane (restrict through movement)
15. Cedar Avenue (NS) / I-10 Eastbound Ramps (EW) [1]	Caltrans	Southbound	Add a second left-turn lane and a third through lane [D]
16. Cedar Avenue (NS) / Slover Avenue (EW)[1]	County	Eastbound	Add second left-turn lane

Source: Webb 2016.

Note: Recommendations mitigating cumulative impacts in the 2035 With Project conditions that are also recommended to mitigate direct impacts in Existing Plus Project conditions are identified as duplicates [D] where listed for 2035 Plus Project conditions.

1 Improvements to these Caltrans facilities are currently underway as part of Caltrans Interstate 10/Cedar Avenue Interchange Improvement Project; future development would pay fair share fees towards these improvements.

5.13.8 Level of Significance After Mitigation

Impact 5.13-1

Existing Plus Project Conditions

Table 5.13-14 provides the projected delays and levels of service at the study intersections under existing plus project conditions with improvements. With the improvements presented in Table 5.13-14, the study area intersections would either operate at an acceptable LOS or at the same or better overall level of delay prior to project traffic being added. The level of service calculation worksheets are provided in the traffic impact analysis in Appendix G.

However, San Bernardino County cannot ensure that all of the improvements in Mitigation Measure T-1 would be implemented because the intersections identified in Table 5.13-14 are under the jurisdiction of the city of Fontana or Caltrans; San Bernardino County does not have control over circulation improvements at those intersections. Thus, Impact 5.13-1 would remain significant and unavoidable for the Existing Plus Project scenario.

Table 5.13-14 Intersection Levels of Service, Existing Plus Project With Improvements

				Without Project			With Project			With Project With Improvements		
Intersection	Jurisdiction	LOS Std.	Peak Hour	Traffic Control	Delay (sec)	LOS	Traffic Control	Delay (sec)	LOS	Traffic Control	Delay (sec)	LOS
1. Sierra Avenue (NS) / San Bernardino Avenue (EW)	Fontana	C	AM PM	Signal	28.7 37.0	C D	Signal	29.0 39.3	C D	Signal	27.4 35.4	C D
2. Sierra Avenue (NS) / Valley Boulevard (EW)	Fontana	C	AM PM	Signal	27.9 36.6	C D	Signal	29.2 38.1	C D	Signal	28.9 36.4	C D
7. Alder Avenue (NS) / Marygold Avenue (EW)	Fontana / County	C	AM PM	All-way stop	11.7 22.9	B C	All-way stop	13.8 41.4	B E	Signal	13.3 21.6	B C
14. Cedar Avenue (NS) /I-10 Westbound Ramps (EW)	Caltrans	D	AM PM	Signal	67.5 33.8	E C	Signal	91.3 43.2	F D	Signal	66.7 32.6	E C
15. Cedar Avenue (NS) /I-10 Eastbound Ramps (EW)	Caltrans	D	AM PM	Signal	39.1 39.6	D D	Signal	55.7 54.8	E D	Signal	35.3 35.6	D D

Source: Webb 2016.
Notes: Boldface indicates unacceptable LOS.
Gray shading indicates significant impact.

2035 Plus Project Conditions (Cumulative Impacts)

After implementation of all of improvements identified in Mitigation Measure T-1, all cumulative traffic impacts would be less than significant, as shown below in Table 5.13-15. The level of service calculation worksheets are provided in the traffic impact analysis (see Appendix G).

Table 5.13-15 Intersection Levels of Service, 2035 Plus Project With Improvements

Intersection	Jurisdiction	LOS Std.	Peak Hour	Without Project			With Project			With Project With Improvements		
				Traffic Control	Delay (sec)	LOS	Traffic Control	Delay (sec)	LOS	Traffic Control	Delay (sec)	LOS
1. Sierra Avenue (NS) / San Bernardino Avenue (EW)	Fontana	C	AM PM	Signal	34.9 47.0	C D	Signal	35.6 47.9	D D	Signal	29.6 34.8	C C
2. Sierra Avenue (NS) / Valley Boulevard (EW)	Fontana	C	AM PM	Signal	25.2 32.9	C C	Signal	27.4 41.8	C D	Signal	26.7 34.2	C C
4. Sierra Avenue (NS) / Slover Avenue (EW)	Fontana	C	AM PM	Signal	30.6 38.6	C D	Signal	30.6 38.7	C D	Signal	28.8 35.0	C C
7. Alder Avenue (NS) / Marygold Avenue (EW)	Fontana / County	C	AM PM	All-way stop	29.5 128.2	D F	AWSC	52.4 175.6	F F	Signal	11.0 19.2	B B
8. Alder Avenue (NS) / Valley Boulevard (EW)	Fontana / County	C	AM PM	Signal	OFL OFL	F F	Signal	OFL OFL	F F	Signal	34.2 33.7	C C
9. Locust Avenue (NS) / Marygold Avenue (EW)	County	D	AM PM	AWSC	11.0 22.0	B C	AWSC	12.2 37.4	B E	AWSC	12.0 14.0	B B
13. Cedar Avenue (NS) / Valley Boulevard (EW)	County	D	AM PM	Signal	25.8 49.1	C D	Signal	41.0 56.4	D E	Signal	28.2 31.8	C C
14. Cedar Avenue (NS) /I-10 Westbound Ramps (EW)	Caltrans	D	AM PM	Signal	119.6 80.4	F F	Signal	134.4 93.6	F F	Signal	39.9 43.1	D D
15. Cedar Avenue (NS) /I-10 Eastbound Ramps (EW)	Caltrans	D	AM PM	Signal	57.8 61.5	E E	Signal	70.7 84.5	E F	Signal	40.9 51.8	D D
16. Cedar Avenue (NS) / Slover Avenue (EW)	County	D	AM PM	Signal	34.3 155.5	C F	Signal	34.4 175.3	C F	Signal	30.0 53.3	C D

Source: Webb 2016.
Notes: Boldface indicates unacceptable LOS.
Gray shading indicates significant impact.

However, San Bernardino County cannot ensure that all of the improvements would be implemented because the majority of intersections are within the jurisdiction of another agency and payment of fair share fees does not guarantee that the improvement would be implemented. Seven of the intersections are within the jurisdiction of either Fontana or Caltrans; San Bernardino County does not have control over the circulation improvements at those intersections. Therefore, Impact 5.13-1 would remain significant and unavoidable respecting cumulative impacts in the 2035 Plus Project scenario.

The Specific Plan update would increase traffic on I-10 and would worsen already congested traffic conditions on Caltrans freeway mainline and interchanges. Caltrans has authority over the state highway system, including freeways, interchanges, and arterial state routes. Therefore, there are no feasible mitigation measures in the City's control that would reduce impacts at Caltrans freeway mainline and interchanges. Impact 5.14-1 would remain ***significant and unavoidable***. However, it should be noted Caltrans Interstate 10/Cedar Avenue Interchange Improvement Project currently underway would implement the improvements identified to the Cedar Avenue/I-10 Westbound and Eastbound Ramps (see Tables 5.13-14 and 5.13-15, Intersection No. 14 and 15).

5.13.9 References

Albert A. Webb Associates. 2016, January 12.*Traffic Impact Analysis, Valley Corridor Specific Plan*.

California Department of Transportation (Caltrans). 2012, July. Interstate 10/Cedar Avenue Interchange Improvement (EA# 08-1A8300; Project No. 0800000579), Draft Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment.

5.14 UTILITIES AND SERVICE SYSTEMS

5.14.1 Wastewater Treatment and Collection

5.14.1.1 REGULATORY SETTING

Federal

Treating wastewater before effluent is discharged to Waters of the United States is required by the federal Clean Water Act, United States Code, Title 33, Sections 1251 et seq. The federal Clean Water Act is described in further detail in Section 5.7, *Hydrology and Water Quality*, of this DEIR.

5.14.1.2 ENVIRONMENTAL SETTING (WASTEWATER)

Wastewater Treatment

The City of Rialto provides wastewater treatment for portions of Bloomington and all of the City of Rialto. Wastewater flows from the project area discharge to the Rialto Wastewater Treatment Plant at 501 E. Santa Ana Avenue in the city of Rialto. Four out of the five plants at this treatment facility are currently operational. The four operational plants (Plants 2, 3, 4, and 5) have a design capacity of 11.1 million gallons per day (mgd) and a permitted capacity of 11.7 mgd. According to the 2013 Rialto Sewer Master Plan, average flows into the Rialto treatment facility are approximately 7 mgd (SAIC 2013). Therefore, there is approximately 4.1 mgd of available capacity dedicated to the projected buildout of the City of Rialto. The City of Rialto is currently in the process of modernizing its plant. Although the plant modernization is not intended to increase capacity it will enhance efficiency, and the City of Rialto Public Works Department has indicated that an alternative design to Plant 5 could consider plant expansion to provide future additional capacity (Eisenbeisz 2016). Selection of a design build alternative is anticipated Fall 2016. Additionally, Plant 1, when operational could offer additional wastewater treatment capacity of 1.6 mgd (SAIC 2013; Table 2-4 and Appendix D, Preliminary Design Report City of Rialto WWTP, Page SAIC 4-2).

Wastewater Collection

According to the 2013 Rialto Sewer Master Plan, the current Rialto wastewater service area includes the Specific Plan area east of Ayala Park (which generally aligns with Maple Avenue to the south and north). The area west of Ayala Park is not within Rialto's service area. The Rialto wastewater service area also includes the area of Bloomington between Santa Ana and Slover Avenues, and portions of Bloomington east of Maple Avenue north of Slover Avenue. Much of the unincorporated area of Bloomington, although within Rialto's sphere of influence, has not been considered in identifying design capacity or upgrade requirements in the 2013 Rialto Sewer Master Plan. These areas are typically serviced through an extraterritorial agreement with the landowners.

The Rialto wastewater system includes an existing 18-inch sewer line along Valley Boulevard that flows east and eventually to the City of Rialto's wastewater system, with flows ultimately terminating in the Rialto Wastewater Treatment Plant, approximately 1.8 miles southeast of the Specific Plan.

A County Service Area (CSA) for San Bernardino County has been established pursuant to Government Code § 25210.1 by the San Bernardino County Special Districts Department (Special Districts) to provide expanded service levels to unincorporated communities, CSA 70. A subset of CSA 70, CSA 70-BL, was created in 2013 to service the Valley Corridor Specific Plan area for the purpose of providing sewer service to the Affordable Bloomington development (190 housing units and institutional space, including a County branch library). Parcels outside of CSA 70-BL)—generally those east of Cedar Avenue (except for several restaurants)—although within the Rialto Sewer Service area are not connected to a sewer system. CSA 70 BL extends from San Bernardino Avenue on the north to the I-10 right-of-way on the south, from Alder Avenue on the west to Cedar Avenue on the east.

In 2015 CSA 70 BL completed an extension of 18-inch-diameter sewer line for approximately 5,120 feet along Valley Boulevard west of Cedar Avenue, following a 2013, an extraterritorial agreement between Special Districts and the City of Rialto to allow CSA 70 BL to connect to the Rialto wastewater system. The agreement addresses the operation and maintenance responsibilities of each party, fees and charges, monitoring of flow sent to Rialto, and other terms and conditions. The agreement allows connection of up to 419 equivalent dwelling units (EDUs) and provides a conversion rate of 270 gallons per day (gpd) per EDU. An EDU is a common unit used to measure sewage flow generated by all types of development (and therefore capacity needed). Affordable Bloomington (all three phases) will require approximately 280 EDUs, which will leave approximately 139 EDUs of sewer capacity (roughly equivalent to 139 to 174 housing units, 28 acres of nonresidential development, or some combination thereof). Most of the Bloomington community has been developed with septic tanks and leach field systems.

5.14.1.3 THRESHOLDS OF SIGNIFICANCE (WASTEWATER)

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-1 Would exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

U-2 Would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

U-5 Would result in a determination by the wastewater treatment provider which serves or may serve the project that is has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

5.14.1.4 ENVIRONMENTAL IMPACTS (WASTEWATER)

The following impact analysis addresses thresholds of significance for which the NOP disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.14-1: Wastewater treatment upgrades would be required to service project-generated wastewater; the existing sewer system is deficient and does not have adequate capacity to serve the build out of the Specific Plan. [Thresholds U-1, U-2 (part), and U-5]

Impact Analysis:

Wastewater Generation

The Valley Corridor Specific Plan proposes a total of 1,093 residential dwelling units and 168.5 acres of commercial and industrial sites development, generating an average of 1,663 EDUs (449,000 gpd) of sewer flow (see Table 5.14-1). Sewer flows are split between the area in CSA 70 BL west of Cedar, with 1,474 EDUs (398,000 gpd), and outside of CSA 70 BL east of Cedar, with 189 EDUs (51,000 gpd).

Table 5.14-1 Forecast Wastewater Generation

Land Use	Acres	Quantity and Units	Wastewater Generation (average day)		
			Per Unit	Total (gpd)	Total (EDUs)
Industrial Park	114.2	1,244,067 sf	100 gpd/1,000 sf	124,407	461
Commercial storage	12.5	203,709 sf	80 gpd/1,000 sf	16,297	60
Gas Sta. & Convenience	1.2	18 pumps and 9,655 sf	108	1,935	7
Single Family Detached	82.0	435 units	240 gpd/du	104,400	387
Condo /Townhomes	17.4	254 units	187 gpd/du	47,498	176
MF/Retail Sales/Service	26.1	404 units and 79,756 sf	187 / 100	83,524	309
Hotel	5.6	250 rooms	130 gpd/room	32,500	120
Restaurant	2.9	262 seats and 26,153 sf	30 gpd/seat	7,860	29
Retail Sales / Service	29.4	252,621 sf	100 gpd/1,000 sf	25,262	94
Commercial storage	2.7	66,466 sf	80 gpd/1,000 sf	5,317	20
Right-of-Way	60.5	—	—	—	—
Total	354.5	1,093 residential units 1,882,427 sf 250 hotel rooms	Not Applicable	448,999	1,663
Within County Service Area 70 (west of Cedar Avenue)	*325*	*Not Applicable*	*Not Applicable*	*397,933*	*1,474*
Balance of Specific Plan Area (east of Cedar Avenue)	*29.5*	*Not Applicable*	*Not Applicable*	*51,067*	*189*

Source: Albert A. Webb 2015.

Sewer Conveyance

Onsite

Buildout of the Specific Plan would generate additional average daily sewer demand of 1,663 EDUs (449,000 gpd). The majority of the project area is served by septic systems, and the existing sewer infrastructure is not adequate to service this additional demand. Albert A. Webb & Associates was consulted to determine the effect of additional sewer flows on the existing sewer conveyance system. A number of upgrades were

recommended, as detailed below. Since project buildout would require sewer system improvements, this is considered a significant impact.

Buildout of the Specific Plan requires additional connections to the 18-inch line along Valley Boulevard, an extension of the new 18-inch line to Alder Avenue, and new 8-inch and 12-inch lines to extend service to the north and south (see Table 5.14-2). The proposed sewer facilities have been sized to convey sewage from the Specific Plan to the existing Rialto trunk sewer at Valley Boulevard and Cedar Avenue. Additional extensions would be required to provide sewer service in CSA 70 BL north of the Specific Plan. The exact size and location of future sewer lines will depend on the density, intensity, and type of future development proposals. Planned infrastructure is shown on Figure 5.14-1, *Existing and Proposed Sewer System*. Analysis provided by Albert A. Webb & Associates in coordination with the city of Rialto determined that, with the proposed connections and lines, Rialto's sewer system is capable of accepting the expected additional flows created by new development in the Specific Plan. Therefore, project-generated wastewater would be adequately conveyed to the City of Rialto wastewater treatment plant following onsite and offsite infrastructure improvements.

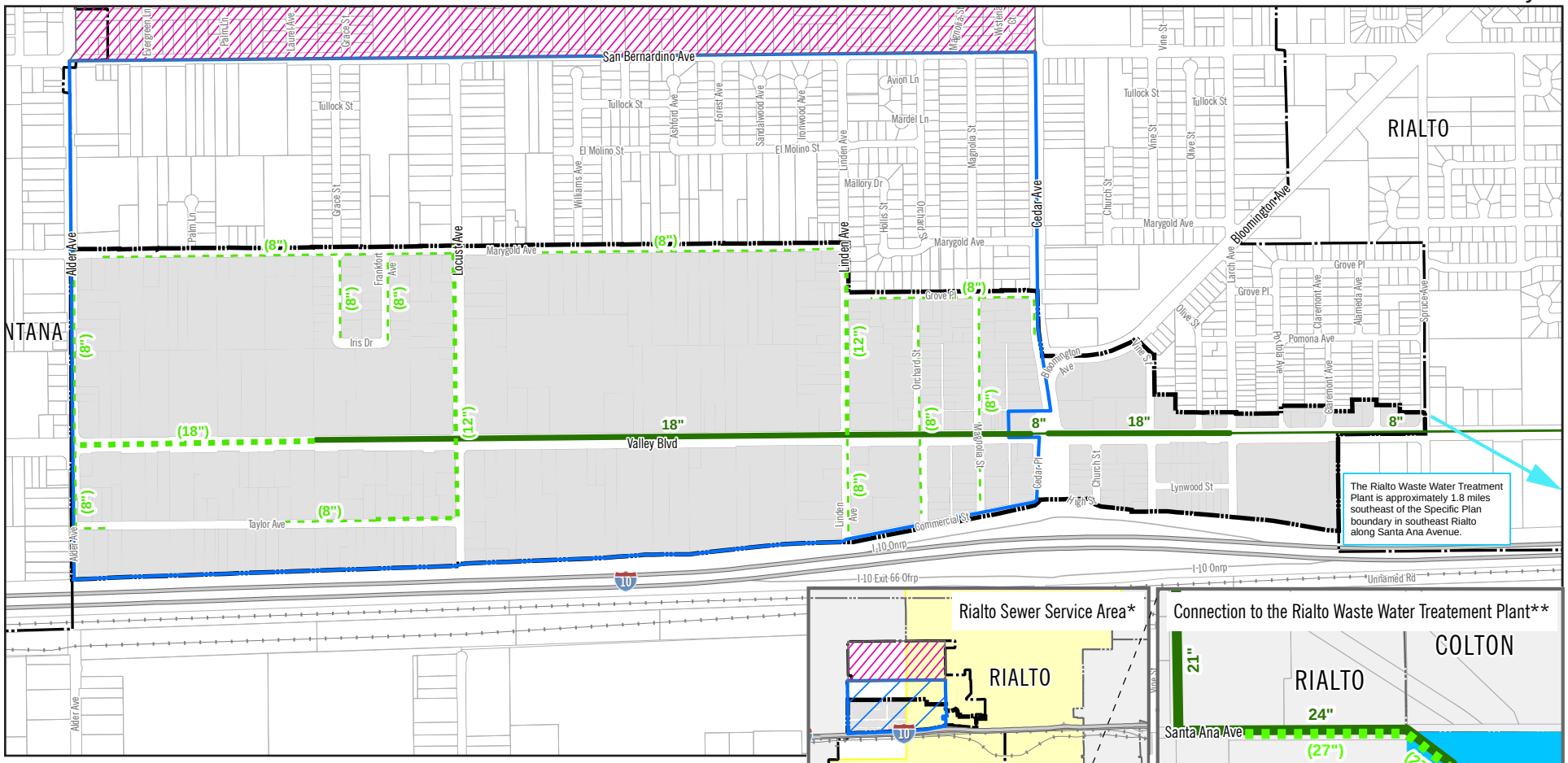
Table 5.14-2 Valley Corridor Specific Plan Sewer Improvements

Size	Direction	Location
18-inch	east–west	Valley Boulevard, between Alder Avenue and current termination at Affordable Bloomington
12-inch	north–south	Locust Avenue, between Marygold Avenue and Taylor Avenue
		Linden Avenue, between Marygold Avenue and Valley Boulevard
8-inch	east–west	Taylor Avenue, west from Locust Avenue
8-inch	north–south	Linden Avenue, between Valley Boulevard and Commercial Street
		Alder Avenue, between Marygold Avenue and Taylor Avenue
		Grace Street and Frankfort Avenue
		Orchard Street, between Commercial Street and (near) Grove Place
		Magnolia Street, between Commercial Street and Grove Place
		Cedar Avenue, between Bloomington Avenue and Grove Place
8-inch	east–west	Marygold Avenue, between Linden Avenue Street and (near) Alder Avenue
		Taylor Avenue, east from Alder Avenue and west from 12-inch line near Locust Avenue
		Grove Place, between Cedar Avenue and (near) Linden Avenue

Source: Albert A. Webb 2015.

Figure 5.14-1 - Existing and Proposed Sewer System

5. Environmental Analysis



Proposed Sewer Line
- (8") Proposed Sewer Line
- (12") Proposed Sewer Line
- (18") Proposed Sewer Line
- (27") Proposed Sewer Line**

Existing Sewer Lines
- 8" Existing Sewer Line
- 18" Existing Sewer Line

- CSA 70 Zone BL
- Potential Additional Tributary Area to CSA 70 Zone BL Sewer System
- Rialto Waste Water Treatment Plant
- Rialto Sewer Service Area*

- Valley Corridor Specific Plan Boundary
- Bloomington Community Boundary
- County Boundary

XX" Existing Line Size
(XX") Proposed Line Size

0 700
Scale (Feet)

*Rialto Sewer Service Area per City of Rialto Sewer Master Plan (April 2013)
** Proposed improvement to lines along Santa Ana Ave, and entering the Rialto Waste Water Treatment Plant are required independent of the Specific Plan. Depending on future development in Rialto and Bloomington, a larger pipe diameter may be required.

Base Map Source: ESRI, 2016; WEBB

5. Environmental Analysis
UTILITIES AND SERVICE SYSTEMS

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Offsite

According to a 2013 study prepared by SAIC to model sewer demand and capacity for Affordable Bloomington, the estimated capacity of the existing sewer system in Valley Boulevard is 419 EDUs, including the construction of the new 18-inch line west of Cedar to serve Affordable Bloomington. The capacity in Valley Boulevard is constrained by portions of downstream 24-inch-diameter gravity sewer in Riverside Avenue and Santa Ana Avenue. The existing system sewer line upgrades required to provide additional conveyance capacity to meet project demands, as follows:

- 24-inch east-west line along Santa Ana Avenue approximately 1,600 feet east of Riverside Avenue would be upgraded to a 27-line.

- 24-inch southeast-northwest line along Santa Ana Avenue connecting to the Rialto Wastewater Treatment Plant would be upgraded to a 27-line.

Rialto's 2013 Sewer Master Plan identifies these sewer system upgrades and indicates that they should be added 2018–2023 capital improvement program (CIP). Since a sewer main upgrade would be required to serve future growth within Rialto's service area in addition to the proposed project this is considered a significant impact.

Sewer Benefit Area and Connection Fee

Special Districts is considering the establishment of a sewer benefit area and sewer connection fee for the entire CSA 70 BL zone, beyond the addition of the Affordable Bloomington development and the Valley Corridor Specific Plan. The sewer generation from the entire CSA 70 BL is estimated to be 600,000 gpd (2,222 EDUs). It is anticipated that Special Districts and the City of Rialto will take the lead in defining the fees and required infrastructure within Rialto's system to provide sewer service to all of CSA 70 BL. If an agreement is executed, connection fees will be defined that would fund the required onsite and offsite sewer infrastructure to serve the Specific Plan area for both sewer conveyance and treatment capacity.

Wastewater Treatment

There is approximately 4.1 mgd of remaining treatment capacity at Rialto's wastewater treatment plant, which has a total permitted capacity of 11.7 mgd. As shown in Table 5.14-1, buildout of the Specific Plan would result in average daily wastewater generation of 448,999 gpd (0.45 mgd or 1,663 EDUs). This represents a small fraction of the available capacity at Rialto's wastewater treatment plant. However, Rialto Public Works Department has indicated that the remaining treatment capacity of 4.1 mgd is dedicated to future flows anticipated upon build out of the city of Rialto. Therefore, although Rialto can accommodate project sewer flows under current conditions, an agreement and funding mechanism will be required in order to expand sewer treatment capacity and provide long-term sewer treatment at the Rialto wastewater treatment plant. According to the city, Rialto's wastewater treatment plant could be upgraded to meet the demands of Specific Plan buildout at its current location without expanding its development footprint by refurbishing a dormant plant and bringing it online. Since future expansion of existing wastewater treatment facilities would be required to service the Specific Plan area at buildout, this is considered a significant impact.

The Rialto wastewater treatment plant is operated in compliance with the waste discharge requirements set forth by the RWQCB for that treatment facility. In order to provide sewer conveyance and treatment services to the project area beyond 419 EDUs and for areas outside of the sewer service area, an Extraterritorial Sewer Service Agreement between San Bernardino County and the city of Rialto would be required. The agreement would set forth an allowable daily maximum flow to the treatment facility.

5.14.1.5 CUMULATIVE IMPACTS (WASTEWATER)

The area considered for cumulative impacts is the city of Rialto Sewer Service Area, consisting of the city of Rialto and part of Bloomington. Future developments in the sewer service area would increase wastewater generation. The population of the city of Rialto is forecast to increase from 100,800 to 112,000 between 2010 and 2040, a net increase of 11,200, or about 11 percent of the 2012 population (SCAG 2016). Development and redevelopment projects in the City of Rialto pay development impact fees for sewage treatment pursuant to Rialto Municipal Code Section 3.33.250. Payment of such fees by projects in the city of Rialto would help fund any potential future expansions of wastewater treatment capacity needed for service within the city of Rialto. For service outside of Rialto, an extraterritorial agreement would identify funds to contribute to the projects proportionate share of improvements. Cumulative impacts would be less than significant, and project impacts on wastewater treatment capacity would not be cumulatively considerable.

5.14.1.6 EXISTING REGULATIONS AND STANDARD CONDITIONS (WASTEWATER)

Federal

- United States Code, Title 33, Sections 1251 et seq.: Clean Water Act
- Code of Federal Regulations Title 40 Parts 122 et seq.: National Pollutant Discharge Elimination System (NPDES)

5.14.1.7 LEVEL OF SIGNIFICANCE BEFORE MITIGATION (WASTEWATER)

Without mitigation, the following impacts would be potentially significant:

- **Impact 5.14-1** Buildout of the Valley Corridor Specific Plan would exceed the wastewater capacity of onsite and offsite sewer pipelines.

5.14.1.8 MITIGATION MEASURES (WASTEWATER)

USS-1 Prior to project approval, the project applicant shall submit water and sewer studies and identify the sizing and location of backbone facilities necessary to serve the proposed project, in accordance with San Bernardino County Development Code and City of Rialto standards. To address sewer infrastructure, the applicant shall demonstrate that it is either: 1) within the remaining 139 EDUs of sewer capacity, 2) entered into an extraterritorial agreement with Rialto that provides adequate capacity, or 3) that it has designed the project to treat wastewater on site, such as septic, batch treatment or other onsite treatment. Waste system upgrades required to deliver adequate water supplies to the site shall be constructed

prior to issuance of occupancy permits. The water and sewer plans shall be submitted to the San Bernardino County Land Use Services Planning Division, San Bernardino County Special Districts, and City of Rialto Public Works Department, in collaboration with the applicable water district, for review and approval. The design of facilities that serve the project shall be sufficient to meet the projected service demands.

5.14.1.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION (WASTEWATER)

Mitigation Measure USS-1 would reduce potential impacts associated with wastewater to a level that is less than significant. Therefore, no significant unavoidable adverse impacts relating to wastewater would remain.

5.14.2 Water Supply and Distribution Systems

5.14.2.1 ENVIRONMENTAL SETTING (WATER)

Regulatory Background

The following laws and regulations govern water supply and water reliability planning.

Federal

Clean Water Act

The federal Clean Water Act establishes regulatory requirements for potable water supplies including raw and treated water quality criteria. The County of San Bernardino is required to monitor water quality and conform to the regulatory requirements of the Clean Water Act.

Safe Drinking Water Act

The federal Safe Drinking Water Act is enforced by the US Environmental Protection Agency; it sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. The Safe Drinking Water Act requires many actions to protect drinking water and its sources, which include rivers, lakes, and groundwater.

State

Urban Water Management Planning Act

The Urban Water Management Planning Act of 1983, California Water Code Sections 10610 et seq., requires publicly or privately owned water suppliers that provide more than 3,000 acre-feet of water annually or supply more than 3,000 customers to prepare a plan that:

- Plans for water supply and assesses reliability of each source of water over a 20-year period in 5-year increments.
- Identifies and quantifies adequate water supplies, including recycled water, for existing and future demands, in normal, single-dry, and multiple-dry years.

- Implements 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 [SBX7-7]), which amends the act and adds new water conservation provisions to the Water Code.

Senate Bills 610 and 221, Water Supply Planning

To assist water suppliers, cities, and counties with integrated water and land use planning, the state passed Senate Bill (SB) 610 (Chapter 643, Statutes of 2001) and SB 221 (Chapter 642, Statutes of 2001), effective January 1, 2002. SB 610 and SB 221 are companion measures that improve the link between information about water supply availability and certain land use decisions made by cities and counties, promoting more collaborative planning between local water suppliers and cities and counties. Both statutes require detailed information regarding water availability to be provided to city and county decision makers prior to approval of specified large development projects. This detailed information must be included in the administrative record as the evidentiary basis for an approval action by the city or county on such projects. The statutes recognize local control and decision making regarding the availability of water for projects and the approval of projects. Under SB 610, water supply assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects subject to CEQA, as defined in Water Code Section 10912(a). Under SB 221, approval by a city or county of certain residential subdivisions requires an affirmative verification of sufficient water supply. SB 221 is intended as a fail-safe mechanism to ensure that collaboration on finding the needed water supplies to serve a new large subdivision occurs before construction begins.

The Urban Water Management Planning Act states that every urban water supplier that provides water to 3,000 or more customers or provides over 3,000 acre-feet of water annually should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of customers during normal, dry, and multiple dry years. Both SB 610 and SB 221 identify the Urban Water Management Plan (UWMP) as a planning document that can be used by a water supplier to meet the standards in both statutes. Thorough and complete UWMPs are foundations for water suppliers to fulfill the specific requirements of these two statutes, and they are important source documents for cities and counties as they update their general plans. Conversely, general plans are source documents as water suppliers update the UWMPs. These planning documents are linked, and their accuracy and usefulness are interdependent.

AB 3030, California Groundwater Management Act

The Groundwater Management Act (California Water Code §§ 10750 et seq.) provides guidance for applicable local agencies to develop a voluntary groundwater management plan in state-designated groundwater basins.

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.

Governor Brown's Executive Order B-29-15

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 drought throughout California. This declaration on January 17, 2014, urged Californians to reduce their water use by 20 percent and directed state officials to take all necessary actions to prepare for drought conditions by assisting farmers and communities that are economically impacted by dry conditions and state agencies to use less water and hire more firefighters. Governor Brown also gave state water officials more flexibility to manage supply throughout California under drought conditions.

In particular for local water agencies, the declaration orders that local urban water suppliers and municipalities implement their local water shortage contingency plans immediately in order to avoid or forestall outright restrictions that could become necessary later in the drought. Local water agencies should also update their legally required urban and agricultural water management plans, which help plan for extended drought conditions. The Department of Water Resources will make the status of these updates publicly available. (Office of Governor 2014).

On April 1, 2015, Governor Brown issued Executive Order B-29-15, finding that, among other things, "…conditions of extreme peril to the safety of persons and property continue to exist in California due to water shortage and drought conditions…" and ordering that, among other things, the "State Water Resources Control Board shall impose restrictions to achieve a statewide 25 percent reduction in potable urban water usage through February 28, 2016."

These restrictions will require water suppliers to California's cities and towns to reduce usage as compared to the amount used in 2013. These restrictions should consider the relative per capita water usage of each water suppliers' service area, and require that those areas with high per capita use achieve proportionally greater reductions than those with low use" (Office of Governor 2015).

Governor Brown's Executive Order B-29-15

Governor Brown issued Executive Order B-37-16 on May 9, 2016, including the following provisions:

- Making permanent several previous temporary prohibitions on wasteful outdoor water uses such as hosing off paved areas, washing automobiles with hoses not equipped with a shut-off nozzle, and watering lawns in a manner that causes runoff.

- Water providers' Water Shortage Contingency Plans must be strengthened to include plans for droughts lasting at least five years.

- The Department of Water Resources and the State Water Resources Control Board will require urban water suppliers to report water use, conservation, and enforcement monthly; and will develop new water efficiency targets for water suppliers.

The State Water Resources Control Board issued an emergency regulation on May 18, 2016, pursuant to Executive Order B-37-16 requiring water providers to certify that they had sufficient water supplies to meet

demands in their service areas for three consecutive dry years. This requirement replaced the mandatory water use reductions, averaging 25 percent compared to 2013 use, ordered by the SWRCB in July 2015 (SWRCB 2016).

Local

San Bernardino County Development Code

The following provisions from the County's Development Code focus on water supply impacts and conservation:

- Chapter 83.10 (Landscaping Standards). Includes measures to conserve water.
- Chapter 88.02 (Soil and Water Conservation)

Existing Conditions

The Marygold Mutual Water Company (MMWC) provides water to the portions of the site west of Linden Avenue. Fontana Water Company's service area also includes the project area west of Linden, however, it is expected that MMWC would provide service to this area. Fontana Water Company's mains in San Bernardino Avenue and Valley Boulevard extend east to Sierra Avenue, to MMWC's west service area boundary. MMWC may be able to tap Fontana Water Company's mains in an emergency. Fontana Water Company also has water lines within the project boundary that extend along Locust Avenue and Valley Boulevard.

West Valley Water District provides water service to the project area east of Linden. See Figure 5.14-2, *Existing and Proposed Water System*.

Marygold Mutual Water Company

The MMWC is a private company and water supplier that supplies potable water to residents and businesses in its service area, which is primarily from Linden Avenue on the east to Sierra Avenue on the west, and primarily from San Bernardino Avenue on the north to I-10 on the south.

The MMWC relies primarily on groundwater for service to its customers. In the past it has used connections from neighboring agencies for supply, but since construction two new two million gallon storage tanks, these connections—to the distribution systems of the City of Rialto Water Services and the West Valley Water District—represent only emergency supplies.

The MMWC is in the eastern portion of the Chino Groundwater Basin. Wells in this vicinity are generally drilled to a depth of about 700 feet. The depth to groundwater is generally about 350 feet below ground surface. Wells in the region can generally produce in the range of 1,000 to 2,000 gpm with an acceptable lowering of the water table.

Groundwater levels in the Chino Groundwater Basin are managed by the Chino Basin Watermaster, which monitors water levels, addresses water quality issues, obtains imported water supplies for replenishment of the basin when necessary, and monitors the withdrawals of all participating agencies.

The MMWC currently has two wells in service, Well 6 and Well 7. Well 6 can deliver up to 2,500 gallons per minute (gpm) into two 2-million-gallon storage tanks in MMWC's distribution system. Each tank serves as a standby for the other tank. The pump on Well 6 adjusts automatically to water levels in the tanks to keep the tanks full, since water use by MMWC customers varies. Well 7 can deliver up to 1,050 gpm and serves as backup to Well 6.

MMWC's distribution system is almost entirely looped so that water is available from two directions almost everywhere in the service area. In the event of a break, the location can be isolated with valves for repair while maintaining service to all other customers outside the break area. Most water mains range from 10 inches to 16 inches in diameter.

The San Bernardino Valley Municipal Water District (SBVMWD) is a regional agency whose service area includes the city of Rialto and the West Valley Water District. SBVMWD purchases imported water from the Metropolitan Water District of Southern California for resale to retail water agencies in its service area and for recharging groundwater basins, including the Chino Basin.

In summary, reliability of MMWC's water supplies are founded on:

- Redundancy regarding wells (Well 7 backing up Well 6)
- Redundancy respecting tanks (each tank functioning as a stand-in for the other)
- The looped design of the distribution system
- Management and replenishment of groundwater by the Chino Basin Watermaster
- Existing interconnections with the City of Rialto Water Services and West Valley Water District and potential future interconnection with the Fontana Water Company.

West Valley Water District

The West Valley Water District (WVWD) services the area east of Linden Avenue. WVWD's water supplies consist of local groundwater, local surface water, and imported water. WVWD's service area is in two sections that include parts of Rialto, Colton, Jurupa Valley, and Fontana and some areas of unincorporated San Bernardino County. The population in the district is over 65,000.

Groundwater

WVWD pumps groundwater from five subbasins of the Upper Santa Ana Valley Groundwater Basin: Chino, Rialto-Colton, Lytle Creek, Bunker Hill, and North Riverside.

Surface Water

WVWD has the right to up to 2,290 gpm of Lytle Creek water when it is available. WVWD can also purchase an additional 1,350 gpm, which is treated at the Oliver Roemer Water Filtration Facility through an agreement with the City of San Bernardino. The Roemer facility has capacity of 14.4 mgd.

Imported Water

WVWD receives water imported from northern California by the State Water Project (SWP) via the SBVMWD.

Recycled Water

WVWD does not plan to supply recycled water to customers through the 2015-2035 period. The City of Rialto is updating its recycled water master plan to investigate the expansion of its existing tertiary treatment plant and reclaimed water system as a way to supplement its water supply. WVWD will offer recycled water to customers if and when it is available and feasible.

Most wastewater collected within WVWD's service area is treated by Rialto at its 12-mgd treatment plant.

Planned Water Supply Projects

WVWD plans to increase groundwater production by 21,000 acre-feet per year (afy) by 2035 over the 32,000 afy production projected for 2035, shown in Table 5.14-3. WVWD plans to rehabilitate existing wells, drill new wells, and equip wells with wellhead treatment if required.

A future expansion of the Oliver Roemer Water Filtration Facility will increase its ultimate capacity by 6 mgd to 20.4 mgd, increasing WVWD's capacity to use raw imported water.[1]

Water Supply Summary

WVWD's actual 2010 water supplies and forecast supplies through 2035 are shown in Table 5.14-3.

Table 5.14-3 Water Supplies Summary, West Valley Water District (afy), Normal Water Conditions

	2010	2015	2020	2025	2030	2035
Existing Supplies						
Wholesale/Imported	0	7,000	7,000	7,000	7,000	7,000
Groundwater	15,822	32,000	32,000	32,000	32,000	32,000
Local Surface Water	5,383	5,500	5,500	5,500	5,500	5,500
Recycled Water	0	0	0	0	0	0
Transfers/Exchanges	0	0	0	0	0	0
Groundwater Banking	0	0	0	0	0	0
Total Existing Supplies	21,205	44,500	44,500	44,500	44,500	44,500
Planned Supplies						
Groundwater	0	3,500	11,500	16,500	21,000	21,000
Total Planned Supplies	0	3,500	11,500	16,500	21,000	21,000
Total Existing and Planned Supplies	21,205	48,000	56,000	61,000	65,500	65,500
Total Demands after Conservation	Not Available	23,964	27,526	32,143	34,646	38,109
Surplus/(Deficit)	Not Available	24,036	28,474	28,857	30,854	27,391

Source: Kennedy/Jenks 2012.

[1] WVWD's forecast supplies through planned supply projects during the 2015-2035 period consist only of groundwater (see Table 5.14-2).

Water Supply Reliability

WVWD forecast in its 2010 Urban Water Management Plan that its water supplies would be sufficient to meet water demands in normal, single-dry-year, and multiple-dry-year conditions through the 2015-2035 period, with a surplus remaining in each condition and in each year analyzed (Kennedy/Jenks 2012).

Imported Water

Average SWP water deliveries during the 10-year period from 2005 to 2014 were about 2.31 million afy. Approximately 74 percent of those deliveries, or 1.84 million afy average, were "Table A"[2] water apportioned to 29 SWP contracting agencies based on those agencies' payments of SWP costs. Remaining deliveries were in several categories of water available when supplies exceed Table A delivery commitments. The State Water Project Final Delivery Capability Report 2015 estimated SWP deliveries in average, wet-period and dry-period conditions. Drought scenarios analyzed included a single dry year (1977) and four multiple-year droughts ranging from two years to six years duration.

Maximum Table A water available for delivery from the Sacramento-San Joaquin Delta is 4.13 million afy. Table A deliveries in long-term average (1921-2003) conditions are estimated at 2.55 million afy, that is, 62 percent of maximum Table A deliveries. Table A deliveries in a single dry year (1977) are estimated at 454,000 afy, or 11 percent of maximum Table A deliveries. The greatest water supply constraints among the four multiple-dry-year scenarios analyzed were 1.165 million afy, or 28 percent of maximum Table A deliveries, during a two-year drought (1976-1977) (DWR 2015).[3]

Local Groundwater

Groundwater supplies in the five subbasins the WVWD produces groundwater from are considered reliable in normal, single-dry-year, and multiple-dry-year conditions. However, some WVWD wells have been impacted by arsenic, perchlorate, and volatile organic compounds. WVWD has implemented wellhead treatment as needed, and such treatment has been demonstrated to be cost-effective as a means of keeping wells in production. If additional groundwater contamination is identified, costs of treatment could increase (Kennedy/Jenks 2012).

Surface Water

WVWD estimated surface water supplies from Lytle Creek range from 5,500 afy in normal water year conditions to 2,130 afy, or 39 percent of normal-year supplies, in single-dry-year conditions. Water supplies in multiple-dry-year conditions are estimated to range from 69 percent of normal-year supplies in the first year of three consecutive dry years to 39 percent in the third year (Kennedy/Jenks 2012).

[2] Table A lists the maximum amount of water an agency is entitled to throughout the life of the contract. The Table A amount is each contractor's proportionate share, or "allocation," of the SWP water supply. However, actual deliveries of SWP water vary each year, based mainly on the amount of precipitation.

[3] Table A delivery commitments during severe drought conditions can be far smaller than the maximum amount of Table A water that could be available for delivery. For instance, Table A deliveries in 2014, an extreme drought year, were only 93,268 acre-feet, or about 2.6 percent of maximum Table A deliveries.

Water Distribution

There are water mains in most roadways in the project site. Pipe diameters range from 2 inches to 24 inches. See Figure 5.14-2.

Water Demands Onsite

Estimated existing water demand onsite is about 429,000 gpd, as shown in Table 5.14-4.

Table 5.14-4 Estimated Existing Water Demands Onsite

Land Use	Acres	Residential Units	Water Demand, gallons per day	
			Per unit[1]	Total
Commercial/Office	51.0		2,000	102,000
Public	1.3		2,000	2,600
Single Family detached	216.6	433	350	151,620
Condo /Townhomes	4.2	42	280	11,760
Mobile Home	15.5	124	280	34,720
Industrial Park	62.0		2,000	124,000
Agriculture/Ranches	2.5		1,000	2,500
Vacant Total	24.2		0	0
Park	6.0		0	0
Total	383.3	599	Not applicable	429,200

Source: Steven Andrews Engineering 2015.
[1] Water demand factors for the three residential land use types are per unit; all other factors are per acre.

5.14.2.2 THRESHOLDS OF SIGNIFICANCE (WATER)

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-2 Would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

U-4 Would not have sufficient water supplies available to serve the project from existing entitlements and resources, and new and/or expanded entitlements would be needed.

5.14.2.3 ENVIRONMENTAL IMPACTS (WATER)

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.14-2: There is adequate water supply to meet project demands, however, delivery systems are not adequate to serve build out of the Specific Plan. [Thresholds U-2 (part) and U-4]

Impact Analysis:

Project Water Demands

Water demand onsite at Specific Plan buildout is estimated as approximately 658,615 gpd, as shown in Table 5.14-5. The net increase in water demand due to Specific Plan buildout is estimated as approximately 229,415 gpd.

Table 5.14-5 Estimated Water Demands Onsite at Specific Plan Buildout

Proposed Zoning	Residential Units	Pump/Room/Seat	Thousand Square Feet	Water Demand, gallons per day	
				Per unit	Total
Proposed Specific Plan					
Industrial Park			1,244.1	130	161,729
Commercial storage			203.7	100	20,371
Gas Station & Convenience		18	9.7	2,000	36,000
Single Family detached	435			350	152,250
Condo /Townhomes	254			280	71,120
MF/Retail Sales/Service	404		79.8	280 / 130	123,488
Hotel		250		180	45,000
Restaurant		262	26.2	35	9,170
Retail Sales / Service			252.6	130	32,841
Commercial storage			66.5	100	6,647
Sub Total[1]	1,093	Not applicable	1,882.4	Not applicable	658,615
Existing Conditions					
Total Existing Demand from Table 5.14-4					429,200
Net Increase					
					229,415

Source: Steven Andrews Engineering 2015.
[1] Right-of-way, which comprises 60.5 acres of the 354.5 acres of the Specific Plan area, is omitted from this table because it does not generate water demand.

Water Availability

The water providers supplying the project site have adequate forecast water supplies to meet projected water demands from Specific Plan buildout, and Specific Plan implementation would not require those providers to obtain new or expanded water supplies. Impacts would be less than significant.

MMWC prepared a domestic water availability study and report to assess the water demand and supply conditions with implementation of the Specific Plan. As shown in Table 5.14-5, the water demand for overall buildout of the proposed project is a projected net increase of 229,415 gpd (257 afy). Within the context of MMWC's projected groundwater consumption through 2035, the overall project demand represents just 0.13 percent of anticipated demands in its service area. MMWC has determined that it will be able to meet the project's water demand. (SAE 2015) In addition, implementation of the proposed Specific Plan would occur in phases so that the increased demand would be gradual over time.

Additionally, according to the San Bernardino Valley Regional UWMP, WVWD has adequate supplies to serve 100 percent of its customers during normal, dry year, and multiple dry year demand through 2035 with projected population increases and accompanying increases in water demand. If SBVMWD were to impose Stage 3 water restrictions, the WVWD could anticipate the potential supply shortfall of imported water and would implement its water supply contingency plan. This would balance demand against reduced supply by imposing water conservation measures and subsequent stages of demand reduction.

The water availability study and San Bernardino Valley Regional UWMP demonstrate that WBWD will have sufficient water supplies available during normal, single dry, and multiple dry years during a 20 year period to meet all projected water demands associated with its existing and future customers, including the proposed project. In the unlikely event of a water shortage, implementation of MMWC and WVWD's water supply contingency plan and emergency water conservation plan would ensure that sufficient water supplies were available to serve their customers, including the project and existing and future users. Therefore, the proposed project's impact on water supply is less than significant.

Water Conveyance

Some existing water mains in the portion of the project area west of Linden Avenue—in MMWC's service area—have insufficient capacity for project water demands. The project's net increase of 229,415 gpd would require upgrades to the existing network. Segments that exceed the capacity of the network would be a significant impact.

Table 5.14-6 shows the water system upgrades that would be required as part of the Specific Plan. All proposed water mains would be installed in roadways in soil previously disturbed by construction of the roadways and existing utilities. Figure 5.14-2, *Existing and Proposed Water System*, shows the improvements that would be required as a result of new development within the Specific Plan area.

Table 5.14-6 Proposed Water System Upgrades

Water Agency	Location	Existing Facility	Future Improvement
MMWC	Alder Avenue	6- to 10-inch line	12- to 18-inch line
MMWC	Marygold Avenue	6-inch line	12-inch line
FWC	Tayler, Alder, Locust Avenues	6-inch line	12-inch line

Source: Albert A. Webb 2015.
Abbreviations: MMWC = Marygold Mutual Water Company; FWC = Fontana Water Company

5.14.2.4 CUMULATIVE IMPACTS (WATER)

The areas to be analyzed for cumulative impacts are the service boundaries of the water providers, MMWC and WVWD. Cumulative water supplies and demands for the two water providers serving the project site are addressed above in Section 5.14.2.3. Both water providers have adequate water supplies to meet demands in Bloomington between 2015 and 2035 in normal year, single-dry-year, and multiple-dry-year conditions. In addition, implementation of demand management measures in future projects and water shortage contingency plans would further reduce additional water demand. No significant cumulative impact would occur, and buildout of the Specific Plan would not contribute to a cumulative impact on water supplies

However, the project would cumulatively contribute to deficiencies in the water conveyance system. As the proposed project and other projects in the service area are developed, they will be required to improve or pay fair share fees toward upgrading the water system, as necessary.

5.14.2.5 EXISTING REGULATIONS AND STANDARD CONDITIONS (WATER)

Federal

- United States Code, Title 33, Sections 1251 et seq.: Clean Water Act

State

- California Water Code Sections 10610 et seq.: Urban Water Management Planning Act
- Senate Bill X7-7 (2009): Water Conservation Act of 2009
- Senate Bill (SB) 610 (Chapter 643, Statutes of 2001) and SB 221 (Chapter 642, Statutes of 2001): Water Supply Assessments
- California Water Code Sections 10750 et seq.: California Groundwater Management Act
- Governor's Executive Order B-29-15

5.14.2.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION (WATER)

Without mitigation, the following impacts would be potentially significant:

- **Impact 5.14-2** There is adequate water supply to meet project demands, however, delivery systems are not adequate to serve build out of the Specific Plan.

5.14.2.7 MITIGATION MEASURES (WATER)

USS-1 Prior to project approval, the project applicant shall submit water and sewer studies and identify the sizing and location of backbone facilities necessary to serve the proposed project, in accordance with San Bernardino County Development Code and City of Rialto

standards. To address sewer infrastructure, the applicant shall demonstrate that it is either: 1) within the remaining 139 EDUs of sewer capacity, 2) entered into an extraterritorial agreement with Rialto that provides adequate capacity, or 3) that it has designed the project to treat wastewater on site, such as septic, batch treatment or other onsite treatment. Waste system upgrades required to deliver adequate water supplies to the site shall be constructed prior to issuance of occupancy permits. The water and sewer plans shall be submitted to the San Bernardino County Land Use Services Planning Division, San Bernardino County Special Districts, and City of Rialto Public Works Department, in collaboration with the applicable water district, for review and approval. The design of facilities that serve the project shall be sufficient to meet the projected service demands.

5.14.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION (WATER)

Mitigation Measure USS-1 would reduce potential impacts associated with water supply and conveyance to a level that is less than significant. Therefore, no significant unavoidable adverse impacts relating to wastewater would remain.

5.14.3 Storm Drainage Systems

Impacts to storm drainage systems are analyzed in Section 5.7, *Hydrology and Water Quality*, and are not analyzed further in this section.

5.14.4 Solid Waste

5.14.4.1 ENVIRONMENTAL SETTING (SOLID WASTE)

Regulatory Background

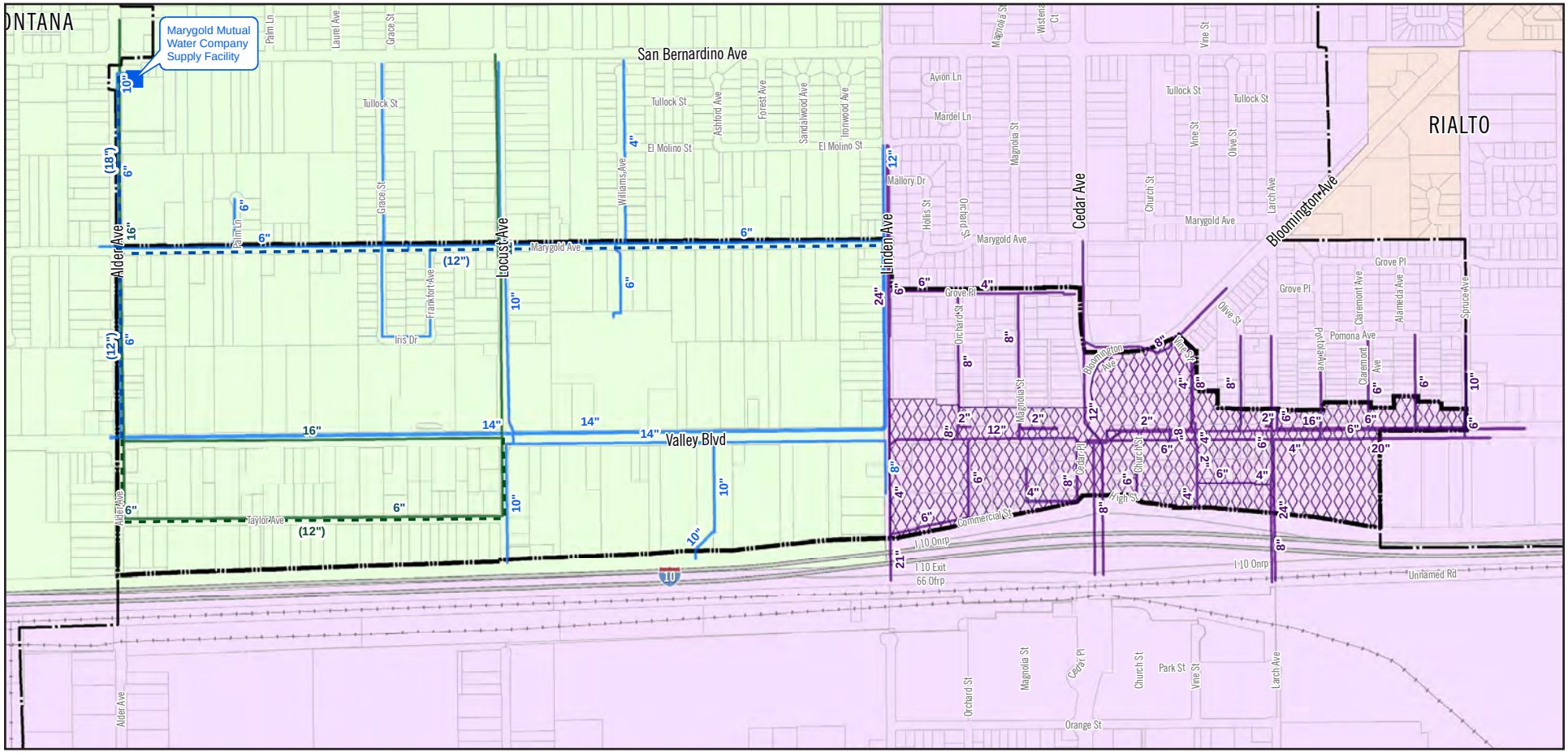
Federal

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.

Figure 5.14-2 - Existing and Proposed Water System

5. Environmental Analysis



Existing Water Lines
- West Valley Water District
- Marygold Mutual Water Company
- Fontana Water Company

Proposed Water Lines
- Marygold Mutual Water Company
- Fontana Water Company

- Site Specific Improvement for Fire Service
- West Valley Water District
- Marygold Mutual Water Company & Fontana Water Company
- Fontana Water Company
- City of Rialto
- Valley Corridor Specific Plan Boundary
- Bloomington Community Boundary

XX" Existing Line Size
(XX") Proposed Line Size

0 700
Scale (Feet)

Base Map Source: ESRI, 2016; WEBB

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State

Assembly Bills 939 and 341

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.

AB 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 1826

AB 1826 (Public Resources Code §§ 42649.8 et seq.) requires businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. Multifamily dwellings are not required to have a food waste diversion program.

California Green Building Standards Code

Section 5.408 (Construction Waste Reduction, Disposal, and Recycling) of the 2013 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.

Existing Conditions

Solid Waste Collection

EDCO Disposal Services collects solid waste from Bloomington (DPW 2015). EDCO's service to Bloomington uses a three-can system—EDCO provides two cans for trash and recyclables, and green waste is collected from residents' trash containers (Koontz 2015).

Solid Waste Disposal

Municipal solid waste from Bloomington is hauled to the Mid-Valley Landfill in Rialto. Recyclables and green waste are hauled to the Agua Mansa Materials Recovery Facility in Jurupa Valley in Riverside County (Koontz 2015).

The Mid-Valley Landfill has remaining capacity of about 67.5 million tons; maximum permitted disposal capacity of 7,500 tons; average daily disposal capacity in 2013 of 2,337 tons; residual daily disposal capacity of 5,163 tons; and an estimated closing date of 2033 (CalRecycle 2015a; CalRecycle 2015b).

The Agua Mansa facility has maximum permitted throughput of 4,000 tons per day (CalRecycle 2015c).

Construction and Demolition Debris

Three facilities for construction and demolition debris processing and/or disposal are mapped within approximately two miles of the project site on the Facility Information Toolbox maintained by the California Department of Resources Recovery and Recycling.

- SCOR Industries Medium Volume CDI Facility, 2321 S Willow Avenue, Rialto, about 0.9 mile to the southeast
- Holliday Inertwaste Site, 249 E Santa Ana Avenue in Rialto, about 1.5 mile to the southeast
- RAMCO: Recycled Aggregate Materials Co., 250 E Santa Ana Avenue, Rialto, about 1.5 mile to the southeast (CalRecycle 2016a)

Solid Waste Diversion and Recycling

There are 49 solid waste diversion programs in unincorporated areas of San Bernardino County, including composting; material recovery facilities and transfer stations; household hazardous waste collection; public education programs; recycling; source reduction programs for businesses, governments, and schools; special waste materials programs such as construction and demolition debris and tires; and biomass-to-energy transformation (CalRecycle 2015d).

Compliance with AB 939 is measured in part by comparing actual disposal amounts from residents and businesses with target amounts; actual amounts at or below targets are consistent with AB 939. In 2013, the latest year for which data are available, target disposal amounts for unincorporated areas of San Bernardino County were 6.2 pounds per person per day (ppd) for residents and 43.3 ppd for employees. Actual disposal rates in 2013 were 4.6 ppd for residents and 29.9 ppd for employees, consistent with AB 939 (CalRecycle 2015d).

5.14.4.2 THRESHOLDS OF SIGNIFICANCE (SOLID WASTE)

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-6 Would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

U-7 Would not comply with federal, state, and local statutes and regulations related to solid waste.

5.14.4.3 ENVIRONMENTAL IMPACTS (SOLID WASTE)

The following impact analysis addresses thresholds of significance for which the NOP disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.14-3: Existing and/or proposed facilities would be able to accommodate project-generated solid waste and comply with related solid waste regulations. [Thresholds U-6 and U-7]

Impact Analysis:

Solid Waste Generation and Landfill Capacity

Specific Plan buildout is forecast to generate a total of about 32,285 pounds of solid waste per day and a net increase of about 17,704 pounds—or 8.9 tons—per day, as shown in Table 5.14-7. Mid-Valley Landfill has residual disposal capacity of about 5,163 tons per day. There is adequate landfill capacity at the Mid-Valley Landfill for project-generated solid waste, and impacts would be less than significant.

Construction and Demolition Debris

Demolition of some of the existing buildings onsite and construction of buildings pursuant to the Specific Plan would generate construction and demolition debris. There are three facilities for construction and demolition debris processing and/or disposal within approximately 1.5 miles of the project area. In addition, the Mid-Valley Sanitary Landfill accepts construction and demolition debris. There is adequate construction and demolition debris processing and disposal capacity in the project region for the amount of debris that would be generated by project buildout.

Solid Waste Diversion

Commercial and multifamily land uses developed or redeveloped pursuant to the Specific Plan would provide storage spaces for recyclable materials and for organic wastes pursuant to AB 341 and AB 1826.

Table 5.14-7 Estimated Solid Waste Generation

Land Use District	Land Use[1, 2]	Quantity	Solid Waste Generation, pounds per day	
			Per Unit[3]	Total
Proposed Land Use Districts				
Mixed Use	Residential units (detached and attached), 10–40 units/acre	404 units	5.31	2,145
	Commercial	79,756 sf	0.013	1,037
Bloomington Enterprise	Light Industrial	1,244,067 sf	0.013	16,173
Commercial	Retail and Service Commercial	492,138 sf	0.013	6,398
Low & Med Residential	Detached and townhome units, ≤ 10 units/acre	435 units	10	4,350
	Commercial	66,466 sf	0.013	864
Med & High Residential	Residential units (detached and attached), 10–24 units/acre	254 units	5.31	1,349
	Total	Not applicable	Not applicable	32,285
Existing Land Uses				
	Detached residential and mobile home	445 units	10	4,450
	Multifamily residential	80 units	5.31	425
	Retail	172,256 sf	0.006	1,034
	Service Commercial	77,152 sf	0.018	1,389
	General Office	12,524 sf	0.006	75
	Industrial	401,539 sf	0.0132	5,300
	Commercial Storage and Open Storage	270,176 sf	0.006[4]	1,621
	Community Facility and Church	41,066 sf	0.007	287
	Total	Not applicable	Not applicable	14,581
Net Increase				17,704

[1] Where multiple nonresidential uses are listed per district, square footage is divided evenly between such uses.
[2] Ancillary nonresidential uses are omitted from the table; square footages of such uses are combined into major nonresidential uses in that district.
[3] Source: CalRecycle 2015h
[4] No generation factor for storage uses is available; solid waste generation by storage uses is assumed to be minimal. The generation factor used here for storage uses is that for warehousing, which is assumed to be a conservative estimate.

5.14.4.4 CUMULATIVE IMPACTS (SOLID WASTE)

The area considered for cumulative impacts to solid waste disposal is the portion of San Bernardino County in the Upper Santa Ana River Valley. Solid waste disposal facilities in that region include the Mid-Valley Sanitary Landfill, the Pennsylvania Street Inert Landfill, the Holliday Inertwaste Site, the Agua Mansa Landfill, and the California Street Landfill (CalRecycle 2016b). Other development and redevelopment projects in the region would increase solid waste generation. There is adequate solid waste disposal capacity in the region to

accommodate solid waste from other projects. Cumulative impacts on solid waste disposal capacity would be less than significant, and project impacts would not be cumulatively considerable.

5.14.4.5 EXISTING REGULATIONS AND STANDARD CONDITIONS (SOLID WASTE)

Federal

- United States Code Title 42, Sections 6901 et seq.: Resource Conservation and Recovery Act

State

- California Public Resources Code 40050 et seq.: Integrated Solid Waste Management Act of 1989
- Assembly Bill 341 (Chapter 476, Statutes of 2011)
- California Public Resources Code Sections 42649.8 et seq.
- Title 24, California Code of Regulations, Part 11 (California Green Building Standards Code), Section 5.408

5.14.4.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION (SOLID WASTE)

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.14-3 (solid waste) would be less than significant.

5.14.4.7 MITIGATION MEASURES (SOLID WASTE)

No mitigation measures are required.

5.14.4.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION (SOLID WASTE)

Impacts would be less than significant.

5.14.5 Other Utilities/Energy

5.14.5.1 ENVIRONMENTAL SETTING (OTHER UTILITIES/ENERGY)

Regulatory Background

California Building and Energy Efficiency Standards

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission in June 1977 and are updated triennially (Title 24, Part 6, of the California Code of Regulations). 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 May 31, 2012, the California Energy Commission adopted the 2013 Building and Energy Efficiency Standards, which

went into effect on January 1, 2014. Buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

California Green Building Standards Code: CALGreen

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. CALGreen (California Code of Regulations, Title 24, Part 11) was adopted as part of the California Building Standards Code. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[4] The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011, and were updated most recently in 2013.

Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (California Code of Regulations Title 20, §§ 1601–1608) were adopted by the California Energy Commission on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally and non–federally regulated appliances.

Existing Conditions

Electricity

The project site is in the service area of Southern California Edison (SCE). Total electricity consumption in SCE's service area was 99,243 gigawatt-hour (GWH) per year in 2013 and is forecast to increase to 113,612 GWH in 2024 (CEC 2014); one GWH is equivalent to one million kilowatt-hours. Sources of electricity sold by SCE in 2014, the latest year for which data are available, were:

- 24 percent renewable, consisting mostly of geothermal and wind
- 3 percent large hydroelectric
- 27 percent natural gas
- 6 percent nuclear
- 40 percent unspecified sources—that is, not traceable to specific sources (SCE 2015)

Electric transmission lines pass through the site north-south along Linden Avenue; a second set of transmission lines extends east-west along San Bernardino Avenue about 0.25 mile north of the site.

Existing Electricity Demand Onsite

Existing electricity demand onsite is approximately 17 million kilowatt-hours per year (kWhr/yr); demands per land use type are listed in Table 5.14-8.

[4] The green building standards became mandatory in the 2010 edition of the code.

Table 5.14-8 Estimated Existing Electricity Demand Onsite

Land Use	Estimated Electricity Demand, kWhr/yr
Apartments Midrise	319,369
Automobile Care Center	563,932
City Park	0
Convenience Market with Gas Pumps	138,527
Free-Standing Discount Store	366,473
General Office Building	252,110
Government (Civic Center)	335,846
High Turnover (Sit Down Restaurant)	1,076,450
Home Improvement Superstore	37,162
Hotel	929,570
Industrial Park	4,724,380
Mobile Home Park	991,770
Parking Lot	2,319,130
Place of Worship	129,828
Regional Shopping Center	1,824,900
Single Family Housing	2,127,380
Unrefrigerated Warehouse-No Rail	859,172
Total	16,995,999

Natural Gas

The project site is in the service area of the Southern California Gas Company (SCGC). Total natural gas supplies available to SCGC are forecast to remain constant at 3,875 million cubic feet per day (MMCF/day) from 2015 through 2035. Natural gas demand in SCGC's service area is estimated to decline slightly from 2,711 MMCF/day in 2016 to 2,647 MMCF/day in 2035 (CEGU 2014). The nearest SCGC transmission pipeline to the project site is in Merrill Avenue about 1.25 miles to the north (SCGC 2015).

Existing Natural Gas Demand Onsite

Existing natural gas use onsite is about 28.5 million kBTU per year; demands per land use type are listed in Table 5.14-9.

Table 5.14-9 Estimated Existing Natural Gas Demand Onsite

Land Use	Estimated Natural Gas Demand, kBTU/yr
Automobile Care Center	1,657,560
City Park	0
Convenience Market with Gas Pumps	21,627
Free-Standing Discount Store	57,213
General Office Building	93,954
Government (Civic Center)	125,160
High Turnover (Sit Down Restaurant)	5,556,270
Home Improvement Superstore	5,802
Hotel	2,962,950
Apartments Mid Rise	1,021,010
Industrial Park	1,760,640
Mobile Home Park	4,037,670
Parking Lot	0
Place of Worship	381,601
Regional Shopping Center	284,900
Single Family Housing	9,841,000
Unrefrigerated Warehouse-No Rail	678,152
Total	28,485,508

5.14.5.2 THRESHOLDS OF SIGNIFICANCE (OTHER UTILITIES/ENERGY)

Although not specifically in Appendix G of the CEQA Guidelines, 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:

U-8 Would increase demand for other public services or utilities. According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

5.14.5.3 ENVIRONMENTAL IMPACTS (OTHER UTILITIES/ENERGY)

The following impact analysis addresses thresholds of significance for which the NOP disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.14-4: Existing and planned electricity and natural gas supplies would be able to accommodate project-generated utility demands. [Threshold U-8]

Impact Analysis:

Electricity

Projected electricity demands onsite at Specific Plan buildout are about 36 million kWhr/yr, for a net increase of approximately 19 million kWhr/yr. Demands at buildout per land use type are listed in Table 5.14-10, *Estimated Electricity Demands at Project Buildout*. SCE forecasts that it will have adequate electricity supplies through 2024 to meet project-generated electricity demands, and project buildout would not require SCE to obtain new or expanded electricity supplies. Impacts would be less than significant.

Table 5.14-10 Estimated Electricity Demand Onsite at Project Buildout

Land Use	Estimated Electricity Demand, kWhr/yr
Apartments Midrise	1,484,940
Condo/Townhouse	1,151,050
Convenience Market with Gas Pumps	151,759
High Turnover (Sit Down Restaurant)	1,358,490
Hotel	6,396,060
Industrial Park	14,930,400
Parking Lot	2,319,130
Regional Shopping Center	4,826,160
Single Family Housing	3,341,750
Total	35,959,739

Natural Gas

Projected natural gas demands at Specific Plan buildout are about 47.9 million kBTU/yr, that is, a net increase of approximately 19.4 million kBTU/yr. Projected natural gas use per land use type is listed in Table 5.14-11. SCGC forecasts that it will have adequate natural gas supplies through 2035 to meet project-generated demands, and project buildout would not require SCGC to obtain new or expanded natural gas supplies. Impacts would be less than significant.

Table 5.14-11 Estimated Natural Gas Demand Onsite at Project Buildout

Land Use	Estimated Natural Gas Demand, kBTU/yr
Condo/Townhouse	3,171,050
Convenience Market with Gas Pumps	23,764
High Turnover (Sit Down Restaurant)	7,122,210
Hotel	15,776,000
Industrial Park	4,421,580
Parking Lot	0
Apartments Mid Rise	3,384,590
Regional Shopping Center	651,465
Single Family Housing	13,364,200
Total	47,914,859

5.14.5.4 CUMULATIVE IMPACTS (OTHER UTILITIES/ENERGY)

The area considered for cumulative impacts to electricity supplies and transmission and to natural gas supplies and transmission are the service areas of Southern California Edison and the Southern California Gas Company, respectively. SCE and SCGC estimate that they will have sufficient electricity and natural gas supplies, respectively, to meet demands in their service areas (CEC 2014; CEGU 2014). Thus, cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

5.14.5.5 EXISTING REGULATIONS AND STANDARD CONDITIONS (OTHER UTILITIES/ENERGY)

State

- Title 24, California Code of Regulations, Part 6: Energy Efficiency Standards for Buildings
- Title 24, California Code of Regulations, Part 11: California Green Building Standards Code
- Title 20, California Code of Regulations, Sections 1601 et seq: Appliance Efficiency Regulations

5.14.5.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION (OTHER UTILITIES/ENERGY)

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.14-4 (energy) would be less than significant.

5.14.5.7 MITIGATION MEASURES (OTHER UTILITIES/ENERGY)

No mitigation measures are required.

5.14.5.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION (OTHER UTILITIES/ENERGY)

Impacts would be less than significant.

5.14.5.9 REFERENCES

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6. Significant Unavoidable Adverse Impacts

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:

Air Quality

- **Impact 5.2-1 (Conflict with Air Quality Management Plan):** Buildout of the project would generate slightly more growth than the existing general plan; therefore, the project would be inconsistent with the South Coast Air Quality Management District's (SCAQMD) air quality management plan.

  Mitigation measures applied for Impact 5.2-2 and Impact 5.2-3 would reduce the proposed project's regional construction-related and operational-phase criteria air pollutant emissions to the extent feasible. However, given the potential increase in growth and associated increase in criteria air pollutant emissions, the proposed project would continue to be potentially inconsistent with the assumptions in the air quality management plan. Therefore, Impact 5.2-1 would remain significant and unavoidable.

- **Impact 5-2-2 (Construction Emissions):** Construction activities associated with the project would generate a substantial increase in short-term criteria air pollutant emissions that exceeds the threshold criteria and would cumulatively contribute to the nonattainment designations of the South Coast Air Basin (SoCAB).

  Construction activities associated with the buildout of the project would generate criteria air pollutant emissions that would exceed SCAQMD's regional significance thresholds, would contribute to the nonattainment designations of the SoCAB, and would contribute to known health effects from poor air quality. These include worsening of bronchitis, asthma, and emphysema; a decrease in lung function; premature death of people with heart or lung disease; nonfatal heart attacks; irregular heartbeat; decreased lung function; and increased respiratory symptoms. Mitigation Measures AQ-1 through AQ-3 would reduce criteria air pollutants generated from project-related construction activities. Buildout of the proposed project would occur over a period of approximately 20 years or longer.

  Construction time frames and equipment for individual site-specific projects are not available at this time. Although likely that significant phasing of new development will occur over decades, there is a potential for multiple developments to be constructed at any one time, resulting in significant construction-related emissions. Therefore, despite adherence to Mitigation Measures AQ-1 through AQ-3, project-level and cumulative impacts under Impact 5.2-2 would remain significant and unavoidable.

6. Significant Unavoidable Adverse Impacts

- **Impact 5.2-3 (Operational Emissions):** Long-term operation of the project would generate a substantial increase in criteria air pollutant emissions that exceed the threshold criteria and would cumulatively contribute to the nonattainment designations of the SoCAB.

  Buildout of the proposed land use plan would generate additional vehicle trips and area sources of criteria air pollutant emissions that exceed SCAQMD's regional significance thresholds and would contribute to the nonattainment designations of the SoCAB and to known health effects from poor air quality. Incorporation of Mitigation Measures AQ-4 through AQ-6 would reduce operation-related criteria air pollutants generated from stationary and mobile sources. Mitigation Measures AQ-5 and AQ-6 would encourage and accommodate use of alternative-fueled vehicles and nonmotorized transportation. However, despite adherence to Mitigation Measures AQ-4 through AQ-6, project-level and cumulative impacts identified under Impact 5.2-3 would remain significant and unavoidable due to the magnitude of land use development associated with the proposed project.

- **Impact 5.2-4 (Construction Emissions/Sensitive Receptors):** Construction activities related to buildout of the proposed project could expose sensitive receptors to substantial pollutant concentrations.

  Mitigation Measures AQ-1 and AQ-2 applied for Impact 5.2-2 would reduce the proposed project's regional construction emissions and therefore also reduce the project's localized construction-related criteria air pollutant emissions to the extent feasible. However, because existing sensitive receptors may be close to project-related construction activities, construction emissions generated by individual development projects have the potential to exceed SCAMQD's localized significance thresholds. Because of the scale of development activity associated with buildout of the project, for this broad-based Specific Plan it is not possible to determine whether the scale and phasing of individual projects would result in the exceedance of the localized emissions thresholds and contribute to known health effects. Therefore, project-level and cumulative impacts under Impact 5.2-4 would remain significant and unavoidable.

- **Cumulative Impact:** The proposed project would generate toxic air contaminants that could contribute to elevated levels of risk in the larger Bloomington community. While individual projects would achieve the project-level risk thresholds of 10 per million, they would contribute to the high levels of risk in the larger Bloomington community. Based on the results of the MATES°IV analysis, cancer risk within the Valley Boulevard Specific Plan measures at 342 per million over a 70-year lifetime (SCAQMD 2015c). Therefore, the project's cumulative contribution to health risk is significant and unavoidable.

Greenhouse Gas Emissions

- **Impact 5.5-1 (GHG Emissions):** Buildout of the Valley Corridor Specific Plan would generate a substantial increase in GHG emissions compared to existing conditions and would have a significant impact on the environment.

  Mitigation Measures AQ-4 through AQ-6 would encourage and accommodate use of alternative-fueled vehicles and nonmotorized transportation and ensure that GHG emissions from the buildout of the proposed project would be minimized. However, additional federal, state, and local measures would be

necessary to reduce GHG emissions under the proposed project to meet the long-term GHG reduction goals under Executive Order S-3-05 and Executive Order B-30-15. Based on SCAQMD's 2020 efficiency target, this would equate to 2.4 $MTCO_2e$/SP (metric tons of CO_2-equivalent emissions per service population) at the project buildout year. The buildout GHG emissions inventory for the proposed project would generate 10.7 $MTCO_2e$/SP and would exceed the efficiency target of 2.4 $MTCO_2e$/SP. The new Executive Order B-30-15 requires the California Air Resources Board to prepare another update to the Scoping Plan to address the 2030 target for the state. At this time, there is no plan past 2020 that achieves the long-term GHG reduction goal established under Executive Order S-3-05 or the new Executive Order B-30-15. As identified by the California Council on Science and Technology, the state cannot meet the 2050 goal without major advancements in technology. Since no additional statewide measures are currently available, Impact 5.5-1 would remain significant and unavoidable.

Noise

- **Impact 5.9-1:** Noise from construction activities from implementation of projects in the Specific Plan area could result in substantial impacts to sensitive receptors. Mitigation Measure N-1 would reduce potential noise impacts during construction to the extent feasible. However, due to the potential for proximity of construction activities to sensitive uses and the potential longevity of construction activities, Impact 5.9-1 (construction noise) would remain significant and unavoidable.

- **Impact 5.9-3:** Noise-sensitive uses could be exposed to elevated noise levels from Specific Plan–related roadway sources. Mitigation Measure N-4 would reduce potential interior noise impacts to future noise-sensitive receptors below the thresholds. However, there are no feasible or practical mitigation measures available to reduce project-generated traffic noise to less than significant levels for existing residences along the affected roadway. Thus, traffic noise would remain a significant and unavoidable impact for the roadway segment of Locust Avenue between Valley Boulevard and San Bernardino Avenue.

Transportation/Traffic

Impact 5.13-1

Existing Plus Project Conditions

Table 6-1 provides the projected delays and levels of service at the study intersections under existing plus project conditions with improvements. With the improvements presented in Table 6-1, the study area intersections would either operate at an acceptable LOS or at the same or better overall level of delay prior to project traffic being added. The level of service calculation worksheets are provided in the traffic impact analysis in Appendix G.

However, San Bernardino County cannot ensure that all of the improvements in Mitigation Measure T-1 would be implemented because the intersections identified in Table 6-1 are under the jurisdiction of the city of Fontana or Caltrans; San Bernardino County does not have control over circulation improvements at those intersections. Thus, Impact 5.13-1 would remain significant and unavoidable for the Existing Plus Project scenario.

6. Significant Unavoidable Adverse Impacts

Table 6-1 Intersection Levels of Service, Existing Plus Project With Improvements

Intersection	Jurisdiction	LOS Std.	Peak Hour	Without Project			With Project			With Project With Improvements		
				Traffic Control	Delay (sec)	LOS	Traffic Control	Delay (sec)	LOS	Traffic Control	Delay (sec)	LOS
1. Sierra Avenue (NS) / San Bernardino Avenue (EW)	Fontana	C	AM PM	Signal	28.7 37.0	C D	Signal	29.0 39.3	C D	Signal	27.4 35.4	C D
2. Sierra Avenue (NS) / Valley Boulevard (EW)	Fontana	C	AM PM	Signal	27.9 36.6	C D	Signal	29.2 38.1	C D	Signal	28.9 36.4	C D
7. Alder Avenue (NS) / Marygold Avenue (EW)	Fontana / County	C	AM PM	All-way stop	11.7 22.9	B C	All-way stop	13.8 41.4	B E	Signal	13.3 21.6	B C
14. Cedar Avenue (NS) /I-10 Westbound Ramps (EW)	Caltrans	D	AM PM	Signal	67.5 33.8	E C	Signal	91.3 43.2	F D	Signal	66.7 32.6	E C
15. Cedar Avenue (NS) /I-10 Eastbound Ramps (EW)	Caltrans	D	AM PM	Signal	39.1 39.6	D D	Signal	55.7 54.8	E D	Signal	35.3 35.6	D D

Source: Webb 2016.
Notes: Boldface indicates unacceptable LOS.
Gray shading indicates significant impact.

2035 Plus Project Conditions (Cumulative Impacts)

After implementation of all of improvements identified in Mitigation Measure T-1, all cumulative traffic impacts would be less than significant, as shown below in Table 6-2. The level of service calculation worksheets are provided in the traffic impact analysis (see Appendix G).

Table 6-2 Intersection Levels of Service, 2035 Plus Project With Improvements

Intersection	Jurisdiction	LOS Std.	Peak Hour	Without Project			With Project			With Project With Improvements		
				Traffic Control	Delay (sec)	LOS	Traffic Control	Delay (sec)	LOS	Traffic Control	Delay (sec)	LOS
1. Sierra Avenue (NS) / San Bernardino Avenue (EW)	Fontana	C	AM PM	Signal	34.9 47.0	C D	Signal	35.6 47.9	D D	Signal	29.6 34.8	C C
2. Sierra Avenue (NS) / Valley Boulevard (EW)	Fontana	C	AM PM	Signal	25.2 32.9	C C	Signal	27.4 41.8	C D	Signal	26.7 34.2	C C
4. Sierra Avenue (NS) / Slover Avenue (EW)	Fontana	C	AM PM	Signal	30.6 38.6	C D	Signal	30.6 38.7	C D	Signal	28.8 35.0	C C
7. Alder Avenue (NS) / Marygold Avenue (EW)	Fontana / County	C	AM PM	All-way stop	29.5 128.2	D F	AWSC	52.4 175.6	F F	Signal	11.0 19.2	B B
8. Alder Avenue (NS) / Valley Boulevard (EW)	Fontana / County	C	AM PM	Signal	OFL OFL	F F	Signal	OFL OFL	F F	Signal	34.2 33.7	C C
9. Locust Avenue (NS) / Marygold Avenue (EW)	County	D	AM PM	AWSC	11.0 22.0	B C	AWSC	12.2 37.4	B E	AWSC	12.0 14.0	B B
13. Cedar Avenue (NS) / Valley Boulevard (EW)	County	D	AM PM	Signal	25.8 49.1	C D	Signal	41.0 56.4	D E	Signal	28.2 31.8	C C

Table 6-2 Intersection Levels of Service, 2035 Plus Project With Improvements

Intersection	Jurisdiction	LOS Std.	Peak Hour	Without Project			With Project			With Project With Improvements		
				Traffic Control	Delay (sec)	LOS	Traffic Control	Delay (sec)	LOS	Traffic Control	Delay (sec)	LOS
14. Cedar Avenue (NS) /I-10 Westbound Ramps (EW)	Caltrans	D	AM PM	Signal	119.6 80.4	F F	Signal	134.4 93.6	F F	Signal	39.9 43.1	D D
15. Cedar Avenue (NS) /I-10 Eastbound Ramps (EW)	Caltrans	D	AM PM	Signal	57.8 61.5	E E	Signal	70.7 84.5	E F	Signal	40.9 51.8	D D
16. Cedar Avenue (NS) / Slover Avenue (EW)	County	D	AM PM	Signal	34.3 155.5	C F	Signal	34.4 175.3	C F	Signal	30.0 53.3	C D

Source: Webb 2016.
Notes: Boldface indicates unacceptable LOS.
Gray shading indicates significant impact.

However, San Bernardino County cannot ensure that all of the improvements would be implemented because the majority of intersections are within the jurisdiction of another agency and payment of fair share fees does not guarantee that the improvement would be implemented. Seven of the intersections are within the jurisdiction of either Fontana or Caltrans; San Bernardino County does not have control over the circulation improvements at those intersections. Therefore, Impact 5.13-1 would remain significant and unavoidable respecting cumulative impacts in the 2035 Plus Project scenario.

The Specific Plan update would increase traffic on I-10 and would worsen already congested traffic conditions on Caltrans freeway mainline and interchanges. Caltrans has authority over the state highway system, including freeways, interchanges, and arterial state routes. Therefore, there are no feasible mitigation measures in the City's control that would reduce impacts at Caltrans freeway mainline and interchanges. Impact 5.14-1 would remain significant and unavoidable. However, it should be noted Caltrans Interstate 10/Cedar Avenue Interchange Improvement Project currently underway would implement the improvements identified to the Cedar Avenue/I-10 Westbound and Eastbound Ramps (see Tables 5.13-14 and 5.13-15, Intersection No. 14 and 15).

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 (EIR) 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). This chapter identifies potential alternatives to the proposed project and evaluates them, as required by CEQA.

Key provisions of the CEQA Guidelines on alternatives (§§ 15126.6[a] through [f]) are summarized below to explain the foundation and legal requirements for the alternatives analysis in the EIR.

- "The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or 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 (NOP) is published, and at the time the environmental analysis is commenced, as well as what would reasonably be 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])

- "For alternative locations, "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, this analysis:

- Describes the alterative,
- Analyzes the impact of the alternative as compared to the proposed project,
- Identifies the impacts of the project that would be avoided or lessened by the alternative,
- Assesses whether the alternative would meet most of the basic project objectives,
- Evaluates the comparative merits of the alternative and the project.

Per the CEQA Guidelines Section 15126.6(d), additional significant effects of the alternatives are discussed 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:

- **Objective 1: Maintenance.** Pursue strategies that focus first and foremost on maintaining and improving existing private and community assets.

- **Objective 2: Investments and partnerships.** Leverage recent county investments in infrastructure and community facilities to attract investment and stimulate new partnerships.

- **Objective 3: Infrastructure.** Establish a comprehensive infrastructure program that outlines future system needs and identifies the resources necessary to finance and implement the program.

- **Objective 4: Economic opportunity**. Generate new job opportunities for entrepreneurs and established businesses in a wide variety of industries.

- **Objective 5: Activity centers.** Develop pedestrian-friendly activity centers that offer shared places for community members to socialize, support, and learn from one another.

- **Objective 6: Mobility.** Create safe spaces for pedestrians, cyclists, transit, and motor vehicles along Valley Boulevard and between surrounding neighborhoods while maintaining Valley Boulevard as a four-lane facility.

- **Objective 7: Housing options.** Provide new opportunities and mix of housing types to meet various lifestyle choices and economic segments.

- **Objective 8: Health and wellness.** Enhance the health and wellness of the community's minds, bodies, and economy through the creative design and regulation of public and private spaces.

- **Objective 9: Open space.** Relocate Ayala Park to functionally complement the new community library, better serve existing and new neighborhoods, and provide increased opportunities for physical activity through interconnected open space and exercise nodes or paths.

- **Objective 10: Historic heart of the community.** Encourage the revitalization of the core area encompassing the historic Bloomington town site.

- **Objective 11: Aesthetics.** Improve the image, wayfinding, and sustainable design of Bloomington and the corridor along Valley Boulevard and Interstate 10.

7.2 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

The following is a discussion of the land use alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this Draft EIR (DEIR).

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. The key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (Guidelines § 15126[5][B][1]). In general, any development of the size and type proposed by the project would have substantially the same impacts on air quality, land use/planning, noise, population/housing, public services, recreation, transportation/traffic, and utilities/service systems. Without a site-specific analysis, impacts on aesthetics, biological resources, cultural resources, geology/soils, hazards/hazardous materials, hydrology/water quality, and mineral resources cannot be evaluated.

The purpose of the proposed Specific Plan is to attract development that generates economic vitality to positively transform the Valley Corridor and the area around it in Bloomington to a more vibrant and livable space. The proposed Specific Plan is designed to improve connectivity, mobility, infrastructure, public health, and economic opportunities around the corridor. The objectives of the proposed Specific Plan are unique to the area; therefore, other sites were not considered.

7.3 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Based on the criteria in Section 7.1.1, the following three alternatives have been 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 significant effects of the project. These alternatives are analyzed in detail in the following sections.

- No Project/Current Zoning Alternative
- Business Park Focus Alternative
- Concentrated Specific Plan Area Alternative

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. However, only impacts found significant and unavoidable are used in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project. Impacts involving air quality, greenhouse gas emissions, noise, and traffic were found to be significant and unavoidable. Section 7.7 identifies the environmentally superior alternative. The preferred land use alternative (i.e., proposed project) is analyzed in detail in Chapter 5 of this DEIR.

7.3.1 Alternatives Comparison

The statistical comparison in Table 7-1 provides a summary of general socioeconomic buildout projections determined by the four land use alternatives, including the proposed Specific Plan. It is important to note that these are not growth projections. That is, they do not anticipate what is likely to occur by a certain time horizon, but provide a buildout scenario that would only occur if all of the Specific Plan area were to develop to the probable capacities yielded by the land use alternatives. The following statistics were developed as a tool to understand better the differences between the alternatives analyzed. Table 7-1 identifies dwelling unit, population and employment projections, and the jobs-housing ratio for each of the alternatives.

Table 7-1 Buildout Statistical Summary

	Proposed Project	Alternative 1: No Project/Current Zoning	Alternative 2: Business Park Focus	Alternative 3: Concentrated Specific Plan Area
Dwelling Units	1,093	439	737	820
Population	4,073	1,771	2,917	2,981
Employment	1,890	2,170	1,797	1,877
Jobs-to-Housing Ratio	1.72	4.94	2.44	2.29

7.4 NO PROJECT/CURRENT ZONING ALTERNATIVE

The No Project/Current Zoning Alternative assumes that the Valley Corridor Specific Plan would not be adopted, and the County of San Bernardino Development Code and General Plan (including the Bloomington Community Plan) would remain in effect. Pursuant to CEQA Guidelines Section 15126.6(e)(3)(A), when a project is the revision of an existing regulatory plan, the "no project" alternative assumes continuation of the existing plan, policy, or operation into the future. Therefore, this alternative assumes that new development and redevelopment would continue in the project area consistent with the adopted land use designations. Buildout of the No Project/Current Zoning Alternative would result in 439 residential units and 1,877,825 square feet of nonresidential land uses. Compared to the proposed project, buildout of the existing zoning would result in a reduction of 654 residential units and an increase of 4,603 square feet of nonresidential uses. Note that this alternative also results in a reduction of residential units compared to existing conditions (approximately 86 fewer units than on-ground at the time of this analysis). Figure 7-1 shows the No Project/Current Zoning Alternative land uses.

7.4.1 Aesthetics

Under the No Project/Current Zoning Alternative, development would be consistent with the County of San Bernardino Development Code and General Plan. Specifically, the zoning includes:

- Bloomington/Service Commercial on both sides of Valley Boulevard from Alder Avenue and past Locust Avenue
- Bloomington/General Commercial-Sign Control Primary along most parcels on Valley Boulevard east of Locust Avenue
- Bloomington/Single Residential around Iris Drive, Frankfort Avenue, Grove Place, and most of Orchard and Magnolia Streets north of Valley Boulevard
- Three Bloomington/Institutional properties
- Numerous Bloomington/Single Residential 20,000 square feet Minimum properties, primarily along Marygold Avenue and Alder Avenue (north of Valley Boulevard)

Compared to the project, buildout under this alternative would result in lower building heights. The aesthetic quality of development projects would be similar to the existing buildings in height, scale, and quality. The character would be automobile-related commercial uses, strip commercial shopping centers, and some industrial uses along Valley Boulevard, and large-lot single-family detached homes to the north. Unlike the proposed Specific Plan, new development under this alternative would not be required to incorporate building articulation, common space amenities, and public open space design features that would encourage pedestrian accessibility, community health, and public safety. Aesthetic impacts would be less than significant under this alternative. However, impacts would be greater than the proposed project because the aesthetic quality of the area would be significantly enhanced by the Valley Corridor Specific Plan.

7.4.2 Air Quality

Under this alternative, demolition, grading, soil export, and building construction would continue to occur as individual projects are approved in accordance with the General Plan and Development Code. Therefore, short-term construction impacts would be similar to the proposed project.

Operational impacts would be less than the project because buildout of the No Project/Current Zoning Alternative would result in an overall decrease in vehicle trips. However, development would not occur with the guidance of a comprehensive plan for the area that encourages pedestrian and cyclist activity, and therefore reliance on cars would be perpetuated. The reduction in residential units in an area with existing and potential employment opportunities would result in the loss of potential to increase internal trip capture, which may offset the decrease in vehicle trips as compared to the project. The decrease in traffic would reduce air emissions; however, the emissions would still exceed the SCAQMD thresholds, and impacts would remain significant and unavoidable.

7.4.3 Biological Impacts

This alternative would allow development and redevelopment to occur in accordance with the current zoning. The allowable development footprint and amount of excavation required to build out the area would be similar to the proposed project. Therefore, impacts to biological resources would be similar to the proposed project. As with the proposed project, mitigation measures would be required to reduce impacts to less than significant.

7.4.4 Cultural Resources

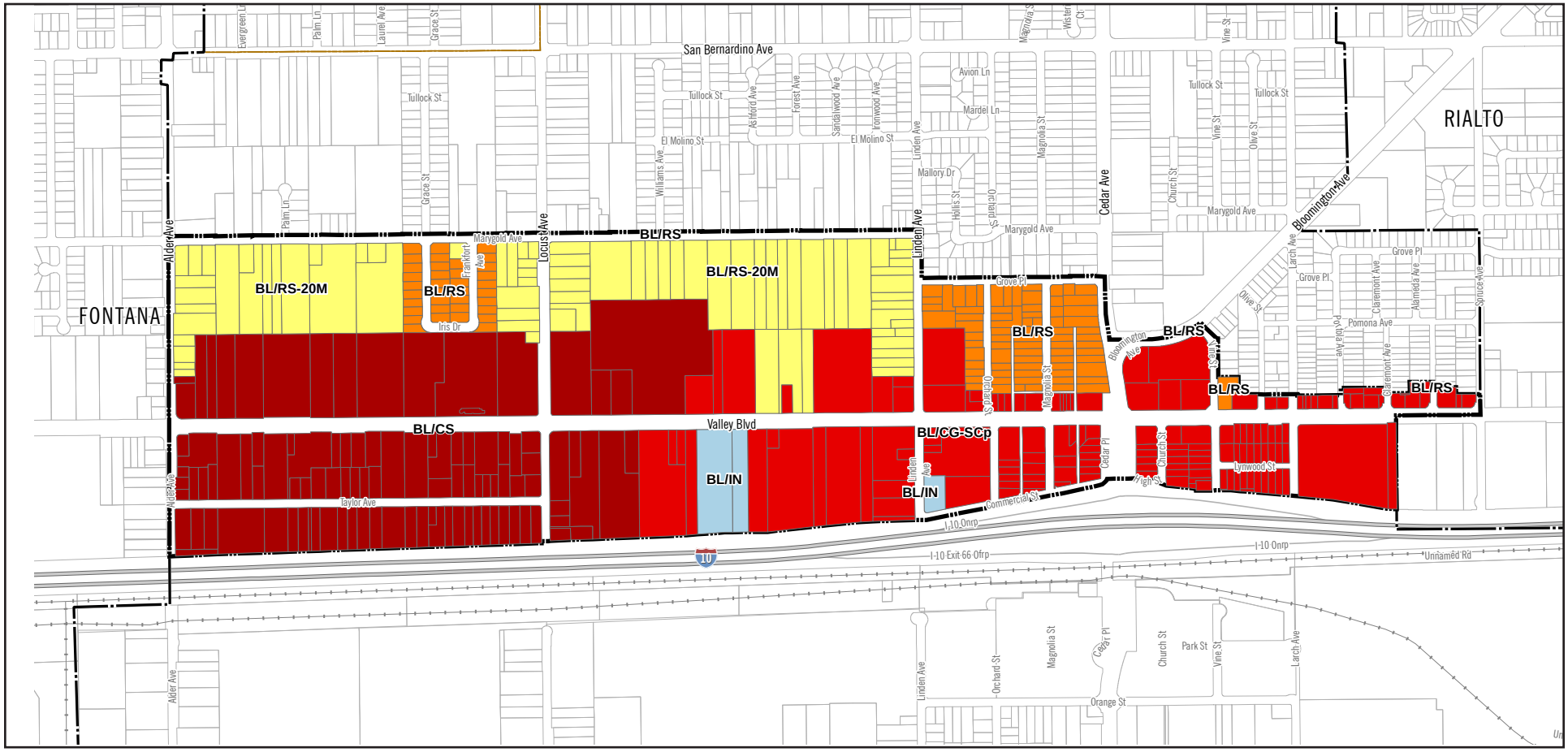
This alternative would allow development and redevelopment in accordance with the current zoning. The allowable development footprint and amount of excavation required to build out the area would be similar to the proposed project and result in a similar potential to encounter archeological or paleontological resources during grading. Therefore, impacts to cultural resources would be similar to the proposed project. As with the proposed project, mitigation measures would be required to reduce impacts to less than significant.

7.4.5 Greenhouse Gas Emissions

Under this alternative, redevelopment of the project area in accordance with current zoning would generate less GHG emissions compared to the proposed project because it would reduce vehicle trips. This alternative is substantially more jobs-rich than the existing jobs-housing ratio and, similar to the proposed project, would reduce vehicle miles traveled by placing jobs near existing housing. Therefore, GHG emissions would be less than the proposed project, but would still result in a significant impact unavoidable impact.

Figure 7-1 - Alternative 1: No Project / Current Zoning

7. Alternatives to the Proposed Project



Land Use Districts

- BL/RS-20M, Bloomington/Single Residential - 20,000 square feet Minimum
- BL/RS, Bloomington/Single Residential
- BL/CG-SCp, Bloomington/General Commercial-Sign Control Primary
- BL/CS, Bloomington/Service Commercial
- BL/IN, Bloomington/Institutional

Valley Corridor Specific Plan

Bloomington Community Boundary

BL/CG-SCp
- Detailed Designation if applicable (SCp = Sign Control Primary)
- Land Use Designation (CG = General Commercial)
- Area Designation (BL = Bloomington)

Note: Land Use Districts do not apply to federal or state owned property or to the right of way.

0 700
Scale (Feet)

Base Map Source: ESRI, 2016

7. Alternatives to the Proposed Project

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7.4.6 Hazards and Hazardous Materials

Past and present uses and activities in the project area have known or suspected contamination of soils. Development and redevelopment in accordance with the current zoning would result in similar impacts to health and safety related to the presence of known or suspected contamination. Future development has the potential to be exposed to suspected sites, and demolition activities may expose construction workers to asbestos-containing materials or lead-based paints. This alternative would result in the same impacts related to hazards and hazardous materials as the proposed project. As with the proposed project, mitigation measures would be required to reduce impacts to less than significant.

7.4.7 Hydrology and Water Quality

The majority of the project area is currently developed. Development and redevelopment in accordance with the No Project/Current Zoning Alternative would result in a similar amount of impervious surfaces as the proposed project. However, it should be noted that residential projects generally have a greater proportion of pervious surfaces, reducing runoff flows. Therefore, the reduction in residential uses under this alternative could result in increased impacts related to stormwater runoff.

Short-term construction-related and long-term water quality would be similar to the proposed project, because future projects under this alternative would be required to comply with the Construction General Permit—which requires implementation of a Storm Water Pollution Prevention Plan for projects of one acre or more—and prepare a water quality management plan for all projects that meet the thresholds. Therefore, this alternative would be less than significant. Overall, this alternative would have similar hydrology and water quality impacts as the proposed project.

7.4.8 Land Use and Relevant Planning

Unlike the proposed project, this alternative would not require approval of a specific plan, development code amendment, or a general plan amendment. However, this alternative would not meet the community's land use goals in the adopted Bloomington Community Plan (part of the County of San Bernardino General Plan) to the same degree as the proposed project. This alternative would not result in improved development quality, open space, and public safety. This alternative would not provide a catalyst for revitalizing the corridor. As a result, impacts related to land use would be greater, but still less than significant.

7.4.9 Noise

Under this alternative, grading and construction noise would be similar to the proposed project since development would continue to be allowed in accordance with the current zoning. Stationary noise sources associated with new commercial and industrial development would have the potential to increase noise levels at adjacent properties, similar to the proposed project.

The proposed project identified a significant impact at Locust Avenue (between Valley Boulevard and Marygold Avenue). Operational traffic-related noise would be less since this alternative would generate less vehicle trips. Overall, noise impacts would be less than the proposed project.

7.4.10 Population and Housing

This alternative would reduce residential units by 654 units, resulting in a reduction of 2,302 residents. Similar to the proposed project, this alternative would not induce substantial population growth since it would be consistent with regional growth projections, and it would assist in providing a more balanced jobs-housing balance in Bloomington.

However, this alternative would result in 86 fewer residential units than existing conditions, which could displace people and housing. As a result, this alternative would have slightly greater impacts than the proposed project.

7.4.11 Public Services

The No Project/Current Zoning Alternative would result in less-intense development than the proposed project, resulting in 2,302 fewer residents. The reduction in overall development intensity would reduce demands placed on public service providers such as fire, police, schools, libraries, and other government facilities. This alternative would reduce impacts to public services compared to the proposed project, although impacts were determined to be less than significant.

7.4.12 Recreation

Compared to the proposed project, this alternative would generate fewer residents in the area. Fewer residents would generate less demand for recreational facilities and services. Therefore, impacts related to recreation would be reduced under this alternative and would remain less than significant. However, the existing park facilities in the proposed Specific Plan area are subject to real and perceived safety concerns. The proposed Specific Plan provides the mechanism to create new and safer public parks and recreation facilities, and this alternative does not. Overall, impacts to recreation under this alternative would be similar to the proposed project.

7.4.13 Transportation and Traffic

Buildout of this alternative would result in a reduction of 654 residential units and an increase in 4,603 nonresidential square feet. This alternative would generate approximately 4,000 fewer vehicle trips than the proposed project. The reduction of vehicle trips on study area roadways would reduce significant traffic impacts. The proposed project would result in significant traffic impacts at five intersections during the existing-plus-project scenario and ten intersections at buildout. This alternative would reduce the severity of impacts at these intersections. Impacts would be less than the proposed project but would remain significant and unavoidable.

7.4.14 Utilities and Service Systems

The No Project/Current Zoning Alternative would result in less intense development than the proposed project, resulting in 2,302 fewer residents. The reduction in overall development intensity would reduce demands on water, sewer, and storm drain infrastructure. Fewer residents would generate less solid waste and

wastewater, and would make less demand on water supplies. This alternative would have reduced impacts on utilities and service systems. As with the proposed project, impacts related to utilities and service systems under this alternative would be less than significant with mitigation measures.

7.4.15 Conclusion

Ability to Reduce Impacts

The No Project/Current Zoning Alternative would reduce impacts related to air quality, GHG emissions, noise, public services, recreation, transportation/traffic, and utilities and service systems due to the reduction in the overall intensity of development. Impacts related to aesthetics, land use and planning, and population and housing would be slightly greater than the proposed project. Due to the similar development footprint of this alternative, there would be similar impacts to biological resources, cultural resources, hazards and hazardous materials, and hydrology and water quality. Significant unavoidable impacts related to air quality, GHG emissions, noise, and transportation/traffic would remain under this alternative.

Ability to Achieve Project Objectives

This alternative would not achieve the following project objectives:

- **Objective 2: Investments and partnerships.** Leverage recent county investments in infrastructure and community facilities to attract investment and stimulate new partnerships.
- **Objective 3: Infrastructure.** Establish a comprehensive infrastructure program that outlines future system needs and identifies the resources necessary to finance and implement the program.
- **Objective 4: Economic opportunity**. Generate new job opportunities for entrepreneurs and established businesses in a wide variety of industries.
- **Objective 5: Activity centers.** Develop pedestrian-friendly activity centers that offer shared places for community members to socialize, support, and learn from one another.
- **Objective 6: Mobility.** Create safe spaces for pedestrians, cyclists, transit, and motor vehicles along Valley Boulevard and between surrounding neighborhoods while maintaining Valley Boulevard as a four-lane facility.
- **Objective 7: Housing options.** Provide new opportunities and mix of housing types to meet various lifestyle choices and economic segments.
- **Objective 8: Health and wellness.** Enhance the health and wellness of the community's minds, bodies, and economy through the creative design and regulation of public and private spaces.

- **Objective 9: Open space.** Relocate Ayala Park to functionally complement the new community library, better serve existing and new neighborhoods, and provide increased opportunities for physical activity through interconnected open space and exercise nodes or paths.

- **Objective 10: Historic heart of the community.** Encourage the revitalization of the core area encompassing the historic Bloomington town site.

This alternative has the potential to achieve one project objective:

- **Objective 1: Maintenance.** Pursue strategies that focus first and foremost on maintaining and improving existing private and community assets.

However, the proposed Specific Plan provides greater direction on public and private asset improvements than possible through the current zoning.

7.5 BUSINESS PARK FOCUS ALTERNATIVE

The Business Park Focus Alternative was selected to reduce transportation-related impacts but still create economic opportunities and attract investments in the community. This alternative assumes there will be less Valley Corridor/Mixed Use and Valley Corridor/Commercial than in the proposed Specific Plan; it assumes that approximately 175 acres would be Valley Corridor/Business Enterprise instead of only 114 acres. Buildout would allow for 737 residential units and 1,987,856 square feet of nonresidential uses, primarily in the Valley Corridor/Business Enterprise district (1,802,154 square feet). Compared to the proposed project, buildout of this alternative would result in a reduction of 356 residential units and an addition of 105,428 nonresidential square feet. Figure 7-2 shows the Business Park Focus Alternative land uses.

7.5.1 Aesthetics

Aesthetics impacts would be the same in this alternative, because the maximum building height is 60 feet/5 stories for Valley Corridor/Business Enterprise, Valley Corridor/Mixed Use, and Valley Corridor/Commercial districts. Additionally, the minimum building setback requirements are almost identical for these three land use districts. This alternative would permit development and redevelopment of the Valley Corridor area, similar to the proposed project. Impacts would be similar.

7.5.2 Air Quality

This alternative would result in a reduction of 356 residential units and an addition of 105,428 nonresidential square feet, resulting in an overall decrease in building square footage.[1] Therefore, construction impacts would be reduced.

[1] Overall reduction in building square footage calculated by assuming 1,000 square feet per dwelling unit based on CalEEMod.

Figure 7-2 - Alternative 2: Business Park Focus

7. Alternatives to the Proposed Project

*Valley Corridor Open Space (VC/OS) is a floating designation and will be applied to parcels as parkland and plaza space are built.
Note: Land Use Districts do not apply to federal or state owned property or to the right of way.

Base Map Source: ESRI, 2016

7. Alternatives to the Proposed Project

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Operational impacts would be less than the project because buildout of the Business Park Focus Alternative would result in an overall decrease in vehicle trips. The decrease in traffic would reduce air emissions; however, the emissions would still exceed the SCAQMD thresholds, and impacts would remain significant and unavoidable

7.5.3 Biological Impacts

The allowable development footprint and amount of excavation required to build out the area would be similar to the proposed project. Therefore, impacts to biological resources would be similar to the proposed project. As with the proposed project, mitigation measures would be required to reduce impacts to less than significant.

7.5.4 Cultural Resources

The allowable development footprint and amount of excavation required to build out the area would be similar to the proposed project and result in a similar potential to encounter archeological or paleontological resources during grading. Therefore, impacts to cultural resources would be similar to the proposed project. As with the proposed project, mitigation measures would be required to reduce impacts to less than significant.

7.5.5 Greenhouse Gas Emissions

Under this alternative, redevelopment of the project area would generate less GHG emissions compared to the proposed project because it would reduce vehicle trips and total building square footage. This alternative is more jobs-rich than the existing jobs-housing ratio and, similar to the proposed project, would reduce vehicle miles traveled by placing jobs near existing housing. Therefore, GHG emissions would be less than the proposed project, but would still result in a significant, unavoidable impact.

7.5.6 Hazards and Hazardous Materials

Past and present uses and activities in the project area have known or suspected contamination of soils. Development and redevelopment in accordance with this alternative would result in similar impacts to health and safety related to the presence of known or suspected contamination. Future development has the potential to be exposed to suspected sites, and demolition activities may expose construction workers to asbestos-containing materials or lead-based paints. This alternative would result in the same impacts related to hazards and hazardous materials as the proposed project. As with the proposed project, mitigation measures would be required to reduce impacts to less than significant.

7.5.7 Hydrology and Water Quality

The majority of the project area is currently developed. Development and redevelopment in accordance with the Business Park Focus Alternative would result in a similar amount of impervious surfaces as the proposed project. However, it should be noted that residential projects generally have a greater proportion of pervious

surfaces, reducing runoff flows. Therefore, the reduction in residential uses under this alternative could result in increased impacts related to stormwater runoff.

Short-term construction-related and long-term water quality would be similar to the proposed project, because future projects under this alternative would be required to comply with the Construction General Permit—which requires implementation of a Storm Water Pollution Prevention Plan for projects of one acre or more—and prepare a water quality management plan for all projects that meet the thresholds. Therefore, this alternative would be less than significant. Overall, this alternative would have similar hydrology and water quality impacts as the proposed project.

7.5.8 Land Use and Relevant Planning

Land use and planning impacts of this alternative would be similar to those of the proposed project; this alternative would require all of the discretionary permits required for the proposed project by the County of San Bernardino. As under the proposed project, approval of a Specific plan, Development Code amendment, and General Plan amendment would be required. Impacts would be similar to the proposed project and less than significant.

7.5.9 Noise

Under this alternative, grading and construction noise would be less than the proposed project since this alternative would have reduced allowable building square footage. This alternative would have increased noise impacts related to stationary noise sources due to the increase in allowable commercial and light industrial uses. Additionally, the proposed residential uses to the north would have greater exposure to stationary sources.

The proposed project identified a significant impact at Locust Avenue (between Valley Boulevard and Marygold Avenue). Operational traffic-related noise would be less since this alternative would generate fewer vehicle trips. Overall, noise impacts would be less than the proposed project.

7.5.10 Population and Housing

This alternative decreases residential development potential by approximately 356 units. This 33 percent decrease in potential housing units would decrease population in the project area by 1,156 residents, for a total of 2,917 residents instead of the 4,073 projected by the proposed Specific Plan. The jobs-housing ratio of this alternative at buildout would be 2.44, which is more jobs-rich than the proposed Specific Plan's jobs-housing ratio of 1.73. Similar to the proposed project, this alternative would be consistent with regional growth projections, and it would assist in providing a more balanced jobs-housing balance in Bloomington. Impacts would be similar to the proposed project.

7.5.11 Public Services

Because implementation of this alternative would result in fewer housing units than the project area, it would generate fewer residents. Compared to the project, this alternative would reduce the number of residents by

1,156, which would generate less demand for fire protection, police, school, and library services. Therefore, public service impacts would be reduced. As with the proposed project, impacts related to public services would be less than significant.

7.5.12 Recreation

Compared to the proposed project, this alternative would generate 1,156 fewer residents in the project area, resulting in a reduced demand for recreational facilities and services. The potential for deterioration of existing parks and recreational facilities would be reduced due to less demand. However, the existing park and recreation facilities in the Specific Plan area have safety issues and are in need of relocation and redesign. The proposed Specific Plan provides a funding mechanism to create new, safer parks and recreational facilities in better locations. With fewer residential units, it would be more challenging to fund new park and recreational facilities. Overall, impacts would be similar to the proposed project.

7.5.13 Transportation and Traffic

Transportation and traffic impacts would be reduced in this alternative due to the 33 percent reduction in residential units and their associated trips on study area roadways. The proposed project would result in significant traffic impacts at five intersections during the existing-plus-project scenario and ten intersections at buildout. This alternative would reduce the severity of impacts at these intersections. Impacts would be less than the proposed project but would remain significant and unavoidable.

7.5.14 Utilities and Service Systems

Utilities and service systems impacts would be reduced by this alternative due to an overall reduction in residents. The reduction in overall development intensity would reduce demands on water, sewer, and storm drain infrastructure. Fewer residents would generate less solid waste and wastewater and would have less demand for water supplies. This alternative would have reduced impacts on utilities and service systems. As with the proposed project, impacts related to utilities and service systems under this alternative would be less than significant with mitigation measures.

7.5.15 Conclusion

Ability to Reduce Impacts

The Business Park Focus Alternative would reduce impacts related to air quality, GHG emissions, noise, public services, transportation/traffic, and utilities and service systems due to the reduction in the overall intensity of development–reduced building square footage and vehicle trips. Impacts to the other eight environmental impact categories would be similar to the proposed project.

Ability to Achieve Project Objectives

This alternative would achieve most of the objectives of the proposed project. It would achieve the following three objectives to a lesser degree due to the reduction in residential units and therefore a reduction in park fees:

- **Objective 7: Housing options.** Provide new opportunities and mix of housing types to meet various lifestyle choices and economic segments

- **Objective 8: Health and wellness.** Enhance the health and wellness of the community's minds, bodies, and economy through the creative design and regulation of public and private spaces.

- **Objective 9: Open space.** Relocate Ayala Park to functionally complement the new community library, better serve existing and new neighborhoods, and provide increased opportunities for physical activity through interconnected open space and exercise nodes or paths.

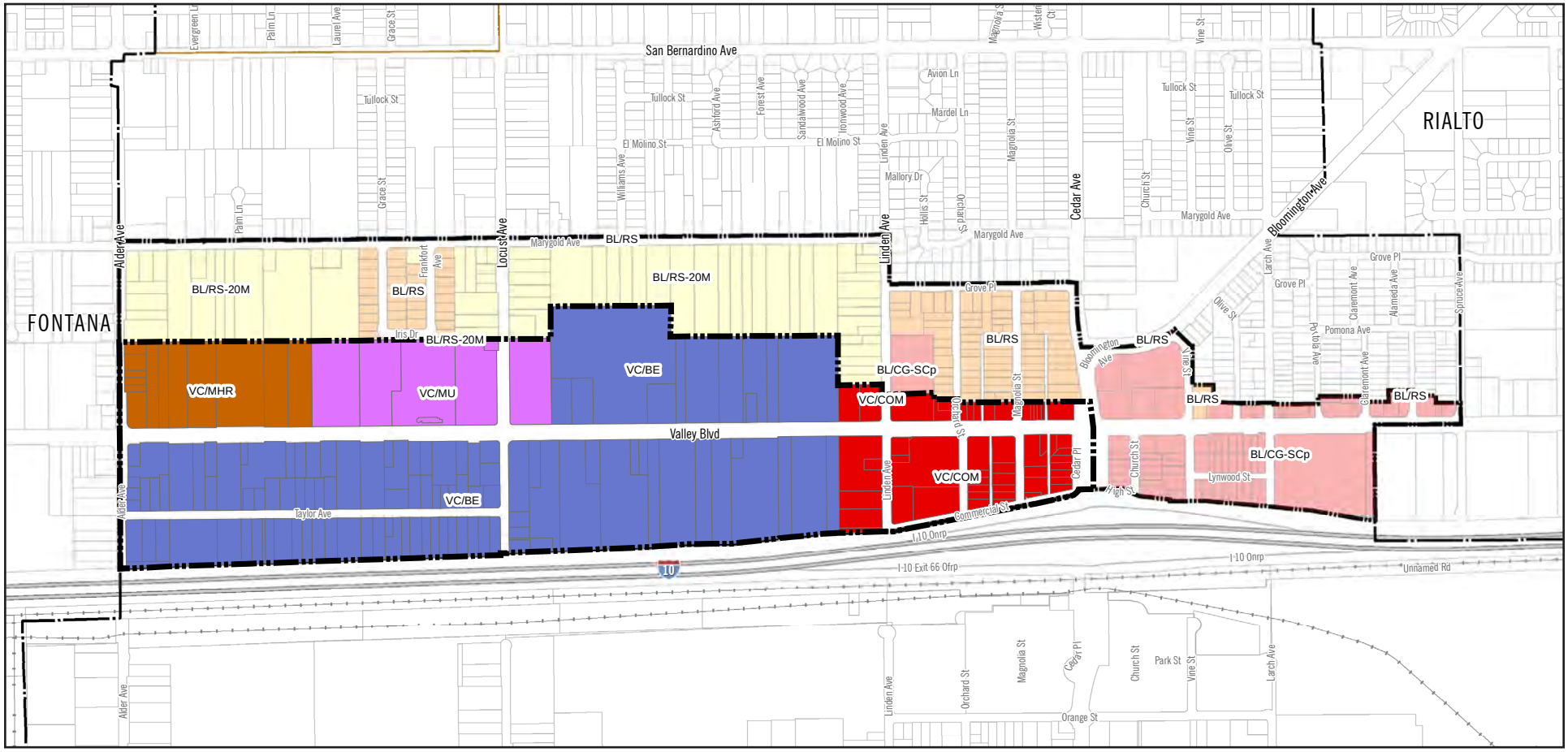
7.6 CONCENTRATED SPECIFIC PLAN ALTERNATIVE

The Concentrated Specific Plan Area Alternative was selected to reduce environmental impacts of the proposed project by reducing the intensity of development as well as the development footprint. This alternative limits the extent of the proposed Specific Plan to parcels primarily along Valley Boulevard between Alder Avenue and Cedar Place, keeping the existing zoning for parcels east of Cedar Place and those along Grove Place and Marygold Avenue. This alternative development area has the potential to generate 820 residential units and 1,741,167 square feet of nonresidential buildings. Compared to the proposed project, buildout of the Concentrated Specific Plan Area Alternative would result in a reduction of 273 residential units, 1,092 residents, and 141,261 nonresidential square feet. Figure 7-3 shows the Concentrated Specific Plan Area Alternative land uses.

7.6.1 Aesthetics

Aesthetics impacts would be somewhat reduced by this alternative. The maximum permitted heights in the Valley Corridor/Low & Medium Residential and Valley Corridor/Commercial districts are the same as in the BL/BL/CG-SCp districts (current zoning). However, the maximum permitted building heights in the BL/RS-20M and BL/RS zones would be reduced to 35 feet, compared to 50 feet permitted in the Valley Corridor/Mixed Use district. This alternative would permit development and redevelopment adjacent to Valley Boulevard, similar to the proposed project. Impacts would be similar but slightly less due to the reduction in building heights.

Figure 7-3 - Alternative 3: Concentrated Specific Plan Area



Land Use Designations

- VC/MHR, Valley Corridor Medium/High Residential
- VC/MU, Valley Corridor Mixed Use
- VC/COM, Valley Corridor Commercial
- VC/BE, Valley Corridor Bloomington Enterprise
- VC/OS, Valley Corridor Open Space*
- BL/RS-20M, Bloomington/Single Residential - 20,000 square feet Minimum
- BL/RS, Bloomington/Single Residential
- BL/CG-SCp, Bloomington/General Commercial-Sign Control Primary

- Alternative 3: Concentrated Specific Plan Area
- Valley Corridor Specific Plan
- Bloomington Community Boundary

VC/MHR
- Land Use Designation (MHR= Medium/High Residential)
- Area Designation (VC = Valley Corridor)

0 700
Scale (Feet)

*Valley Corridor Open Space (VC/OS) is a floating designation and will be applied to parcels as parkland and plaza
Note: Current county designated Land Use Zoning Districts do not apply to federal or state owned property or to the

Base Map Source: ESRI, 2016

7. Alternatives to the Proposed Project

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7.6.2 Air Quality

This alternative would reduce both construction and operational emissions of the proposed project due to the reduction in permitted development. However, it is expected that emissions of some air pollutants would remain above regional thresholds. Air quality impacts of this alternative would remain significant and unavoidable.

7.6.3 Biological Impacts

This alternative would permit development and redevelopment around Valley Boulevard, but not in the entire Valley Corridor Specific Plan area. Biological resources impacts would be slightly less under this alternative since the development area would be reduced. New development would be focused adjacent to Valley Boulevard between Alder Avenue and Cedar Place. As with the proposed project, potential impacts to cultural resources would be less than significant with mitigation measures.

7.6.4 Cultural Resources

This alternative would permit development and redevelopment around Valley Boulevard, but not in the entire Valley Corridor Specific Plan area. Cultural resources impacts would be slightly less under this alternative since the development area would be reduced. New development would be focused adjacent to Valley Boulevard between Alder Avenue and Cedar Place. As with the proposed project, potential impacts to cultural resources would be less than significant with mitigation measures.

7.6.5 Greenhouse Gas Emissions

Under this alternative, redevelopment of the project area would generate less GHG emissions compared to the proposed project because it would reduce vehicle trips and total building square footage. This alternative is more jobs-rich than the existing jobs-housing ratio and, similar to the proposed project, would reduce vehicle miles traveled by placing jobs near existing housing. Therefore, GHG emissions would be less than the proposed project, but would still result in a significant, unavoidable impact

7.6.6 Hazards and Hazardous Materials

Hazards and hazardous materials impacts of this alternative would be reduced compared to those of the proposed project due to the reduction in development area and the lower numbers of residents and workers that could be exposed to hazardous materials, which could be present in site soils. However, redevelopment of residential properties in the northern portion of the Specific Plan area and commercial east of Cedar Place would not occur; therefore, cleanup of potential hazardous materials on those properties would also not occur. A number of septic tank systems would continue to operate instead of being replaced with an upgraded sewer system. Overall, hazards and hazardous materials impacts would be greater than the proposed project.

7.6.7 Hydrology and Water Quality

The majority of the project area is currently developed. Development and redevelopment in accordance with the Concentrated Specific Plan Area Alternative would result in a similar amount of impervious surfaces as the proposed project. However, this alternative would focus development adjacent to Valley Boulevard, reducing the development footprint. As a result, this alternative would reduce runoff flows and associated impacts to storm drain infrastructure.

Short-term construction-related and long-term water quality would be greater than the proposed project, because several older properties do not currently treat stormwater runoff and would continue as they are currently operating. Since future projects under this alternative would be required to comply with the Construction General Permit—which requires implementation of a Storm Water Pollution Prevention Plan for projects of one acre or more—and water quality management plan, redevelopment would have a beneficial impact on water quality. This alternative would have slightly greater impacts since less development area would be treated for water quality.

7.6.8 Land Use and Relevant Planning

Land use and planning impacts of this alternative would be similar to those of the proposed Specific Plan. This alternative would require all of the discretionary permits required for the proposed project by the County of San Bernardino.

7.6.9 Noise

Under this alternative, grading and construction noise would be less than for proposed project because this alternative would have less allowable building square footage. The proposed project identified a significant impact at Locust Avenue (between Valley Boulevard and Marygold Avenue). Operational traffic-related noise would be less since this alternative would generate less vehicle trips. Overall, noise impacts would be less than the proposed project.

7.6.10 Population and Housing

This alternative would increase population onsite to a total of 2,981, or 1,092 less than the proposed Specific Plan. The jobs-housing ratio at buildout of this alternative would be 2.29, which is more jobs-rich than the proposed project with a jobs-housing ratio of 1.73. Similar to the proposed project, this alternative would be consistent with regional growth projections, and it would assist in providing a more balanced jobs-housing ratio in Bloomington. Impacts would be similar to the proposed project.

7.6.11 Public Services

Because implementation of this alternative would result in fewer housing units than the proposed project, it would generate fewer residents. This alternative would result in a reduction of 1,092 residents compared to the project. This reduction would generate less demand for fire protection, police, school, and library services.

Therefore, public service impacts would be reduced. As with the proposed project, impacts related to public services would be less than significant.

7.6.12 Recreation

Compared to the proposed project, this alternative would generate 1,092 fewer residents in the project area, resulting in less demand for recreational facilities and services. The deterioration of existing parks and recreational facilities would be slower due to reduced demand. Therefore, impacts related to recreation would be reduced under this alternative. However, the existing park and recreation facilities in the Specific Plan area have safety issues and are in need of relocation and redesign. The proposed Specific Plan provides a funding mechanism to create new, safer parks and recreational facilities in better locations. With fewer residential units, it would be more challenging to fund new park and recreational facilities. Overall, impacts would be similar to the proposed project.

7.6.13 Transportation and Traffic

Transportation and traffic impacts would be reduced in this alternative due to the 27 percent reduction in residential units and associated trips. Similar to the project, transportation and traffic impacts of the proposed project would require mitigation measures and result in significant, unavoidable impacts.

7.6.14 Utilities and Service Systems

Utilities and service systems impacts would be reduced by this alternative due to an overall reduction in residents. Fewer residents would generate less solid waste and wastewater and would have less demand for water supplies. Impacts of the project related to utilities and service systems would remain less than significant with mitigation measures incorporated.

7.6.15 Conclusion

Ability to Reduce Impacts

The Concentrated Specific Plan Area Alternative would reduce impacts related to aesthetics, air quality, biological resources, cultural resources, GHG emissions, noise, public services, transportation/traffic, and utilities and service systems due to the reduced development area and allowable intensity. Impacts to land use and planning and recreation would be similar to the proposed project. Impacts related to hazards and hazardous materials and water quality would be greater than the proposed project.

Ability to Achieve Project Objectives

This alternative would achieve most of the objectives of the proposed project. It would achieve the following objectives to a lesser degree due to the reduction in residential and commercial development potential:

- **Objective 4: Economic opportunity**. Generate new job opportunities for entrepreneurs and established businesses in a wide variety of industries.

- **Objective 7: Housing options.** Provide new opportunities and mix of housing types to meet various lifestyle choices and economic segments.

- **Objective 8: Health and wellness.** Enhance the health and wellness of the community's minds, bodies, and economy through the creative design and regulation of public and private spaces.

- **Objective 9: Open space.** Relocate Ayala Park to functionally complement the new community library, better serve existing and new neighborhoods, and provide increased opportunities for physical activity through interconnected open space and exercise nodes or paths.

- **Objective 10: Historic heart of the community.** Encourage the revitalization of the core area encompassing the historic Bloomington town site.

7.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the "environmentally superior alternative," and in cases where the "No Project" Alternative is environmentally superior to the proposed project, the environmentally superior development alternative must be identified. One alternative has been identified as "environmentally superior" to the proposed project:

- Concentrated Specific Plan Area

The Concentrated Specific Plan Area Alternative would reduce impacts related to aesthetics, air quality, biological resources, cultural resources, GHG emissions, noise, public services, transportation/traffic, and utilities and service systems due to the reduced development area and allowable intensity. Impacts to land use and planning and recreation would be similar to the proposed project. Impacts related to hazards and hazardous materials and water quality would be greater than the proposed project. Significant and unavoidable impacts would remain for impacts related to air quality, GHG emissions, and transportation traffic.

Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: "(i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts" (Guidelines § 15126.6[c]).

Table 7-2 shows how the impacts of the alternatives compare to the proposed project's impacts.

Table 7-2 Comparison of Alternatives to the Proposed Project

Environmental Resource Area	Project	No Project/Current Zoning Alternative	Business Park Focus Alternative	Concentrated Specific Plan Area Alternative
Aesthetics	LTS	+	=	=
Air Quality	S/U	–	–	–
Biological Resources	LTSM	=	=	–
Cultural Resources	LTSM	=	=	–
GHG	S/U	–	–	–
Hazards and Hazardous Materials	LTSM	=	=	+
Hydrology and Water Quality	LTSM	=	=	+
Land Use and Planning	LTS	+	=	=
Noise	S/U	–	–	–
Population and Housing	LTS	+	=	–
Public Services	LTS	–	–	–
Recreation	LTS	–	=	=
Transportation and Traffic	S/U	–	–	–
Utilities and Service Systems	LTSM	–	–	–

LTS = Less Than Significant
LTSM = Less Than Significant with Mitigation
S/U = Significant and Unavoidable
(+) = Impact considered greater when compared with the proposed project.
(0) = Impact considered neutral when compared with the proposed project.
(–) = Impact considered less when compared with the proposed project.

7. Alternatives to the Proposed Project

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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 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." Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant, and were therefore not discussed in detail in the Draft EIR.

Impacts to agriculture and forest resources, geology and soils, and mineral resources were determined to be less than significant during scoping for the EIR.

For each of the aforementioned resources, the following sections provide a brief description of existing conditions; list thresholds of significance; and briefly analyze impacts.

8.1 AGRICULTURE AND FOREST RESOURCES

AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	
a) 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
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact

8. Impacts Found Not to Be Significant

8.1.1 Explanations

Thresholds a, d, and e: Direct and indirect impacts to mapped Farmland and to forest land

The entire site is mapped as Urban and Built-Up Land on the California Important Farmland Finder maintained by the Division of Land Resource Protection, and there is no mapped important farmland onsite. The nearest mapped important farmland to the site is Farmland of Statewide Importance about 1.1 miles to the south (DLRP 2015).

There are no agricultural or forest uses onsite. The site is nearly built out with a variety of residential, commercial, and industrial uses, with a few scattered vacant lots. No agricultural uses are shown onsite on historical aerial photographs and topographic maps dating to 1976.

Specific Plan buildout would not directly or indirectly convert mapped important Farmland to nonagricultural uses, or forest land to nonforest uses. No impact would occur.

Thresholds b and c: Impacts to zoning for agricultural or forest uses, and to Williamson Act contracts

There is no zoning for agricultural or forest uses onsite. Zoning onsite includes classifications for residential, commercial, and institutional uses.

Williamson Act contracts restrict the use of privately owned land to agriculture and compatible open-space uses under contract with local governments; in exchange, the land is taxed based on actual use rather than potential market value. There are no Williamson Act contracts in effect onsite.

Specific Plan buildout would not conflict with zoning for agricultural or forest uses or with a Williamson Act contract. No impact would occur.

8.2 GEOLOGY AND SOILS

VI. GEOLOGY AND SOILS. Would the project:		
a)	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.	No Impact
ii)	Strong seismic ground shaking?	Less Than Significant
iii)	Seismic-related ground failure, including liquefaction?	Less Than Significant
iv)	Landslides?	No Impact
b)	Result in substantial soil erosion or the loss of topsoil?	Less Than Significant
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less Than Significant
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	Less Than Significant

e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No Impact

8.2.1 Explanations

Threshold a-i: Surface rupture of a known earthquake fault

There is no hazard of surface rupture of a known active fault onsite because the nearest such fault to the site is the San Jacinto Fault Zone about 4.9 miles to the northeast. Specific Plan buildout would not subject people or structures to hazards from surface rupture of a known active fault. No impact would occur.

Threshold a-ii: Strong ground shaking

The energy released by an earthquake is measured as moment magnitude. The moment magnitude scale is logarithmic; therefore, each one-point increase in magnitude represents a tenfold increase in amplitude of the waves as measured at a specific location and a 32-fold increase in energy. That is, a magnitude 7 earthquake produces 100 times (10 x 10) the ground motion amplitude of a magnitude 5 earthquake. The probable magnitudes of earthquakes that could be generated by each of the relevant faults are:

- San Jacinto Fault Zone: 6.5–7.5
- Cucamonga Fault: 6.0–7.0
- Red Hill Fault: 6.0–7.0
- San Andreas Fault Zone: 6.8–8.0
- Chino Fault: 6.0–7.0
- Elsinore Fault Zone: 6.5–7.5 (SCEDC 2014a)

Strong ground shaking is likely to occur within the design lifetimes of buildings that would be developed pursuant to the Specific Plan.

Requirements for geotechnical investigations for subdivisions requiring tentative and final maps and for other specified types of structures are in California Health and Safety Code Sections 17953 to 17955 and in Section 1802 of the California Building Code (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 expansiveness.

Geotechnical investigations would be required for projects developed in conformance with the Specific Plan. Structures for human occupancy must be designed to meet or exceed CBC standards for earthquake resistance. The CBC's provisions for earthquake safety are based on factors including occupancy type, the types of soil and rock onsite, and the strength of ground motion with specified probability of occurring at that site. The geotechnical investigation for a project would calculate seismic design parameters, pursuant to CBC requirements, that must be used in the design of the proposed building. Projects developed or

redeveloped pursuant to the Specific Plan would comply with seismic safety requirements of the CBC and requirements for geotechnical investigations in the CBC and the Health and Safety Code. The CBC is updated on a three-year cycle; the current 2013 CBC took effect on January 1 2014. Impacts would be less than significant.

Threshold a-iii: Seismic ground failure, including liquefaction

Liquefaction refers to loose, saturated sand or silt deposits that behave as a liquid and lose their load-supporting capability when strongly shaken. Loose granular soils and silts that are saturated by relatively shallow groundwater are susceptible to liquefaction.

The depth to groundwater at a well near the southwest corner of Cedar and the Union Pacific Railroad tracks, across the I-10 south of the site, was 265 feet below ground surface in the spring of 2014 (DWR 2015). Groundwater elevation contours under the project area in spring 2012 ranged from about 750 feet above mean sea level in the western part to about 825 feet above mean sea level in the east part; that is, about 350 feet below ground surface in the west to about 275 feet below ground surface in the east (Wildermuth 2012).

The site is not in a zone of required investigation for liquefaction hazard mapped by the California Geological Survey (CGS 1977). Liquefaction potential in subsurface site soils is expected to be low due to the depth to groundwater. Impacts would be less than significant.

Threshold a-iv: Earthquake-induced landslides

The site is flat, with a south-southeast slope of about 1.4 percent grade. The site is not in a landslide susceptibility area mapped in the San Bernardino County General Plan (San Bernardino County 2007). Developments pursuant to the Specific Plan would not expose people or structures to hazards from earthquake-induced landslides. No impact would occur.

Threshold b: Erosion

Projects developed or redeveloped pursuant to the Specific Plan would disturb substantial amounts of soil and could greatly accelerate erosion if effective soil erosion techniques were not used.

Such projects would be required to prepare and implement Storm Water Pollution Prevention Plans specifying best management practices (BMPs) to be used to minimize water pollution, including erosion control and sediment control BMPs. Erosion control BMPs prevent soil particles from being detached from the soil surface and transported by water or wind. Sediment control BMPs filter out soil particles that have been detached and transported in water. Soil erosion impacts would be less than significant after implementation of required erosion control and sediment control BMPs.

Threshold c: Ground subsidence

The major cause of ground subsidence is withdrawal of groundwater. The site is not mapped in a large area of subsidence by the California Department of Water Resources or the Chino Basin Watermaster (DWR

2015; Wildemuth 2015). Historical subsidence has occurred in the southwest part of the Chino Subbasin about 15 miles west of the site; a groundwater management plan is now in effect to minimize subsidence in that area (Wildemuth 2015). Therefore, substantial ground subsidence is not expected to result from development or redevelopment projects undertaken pursuant to the Specific Plan. Impacts would be less than significant.

Threshold c: Collapsible soils

Collapsible soils shrink upon being wetted and/or being subject to a load. Geotechnical investigation reports often determine that the top few feet of soils are not suitable for supporting structures. Such soils can be artificial fill from previous development projects or can be native soils. Geotechnical reports typically recommend excavation and removal of existing near-surface soils to a few feet below the depths of proposed building foundations, and replacement of removed soils with engineered, moistened, and compacted fill soils.

Geotechnical investigation reports for projects undertaken pursuant to the Specific Plan would include testing of subsurface soil samples for soil strength and compressibility. Such reports would recommend remedial grading as needed to replace soils unsuitable for supporting structures with engineered, moistened, and compacted fill soils. Compliance with recommendations of geotechnical reports is required. Impacts would be less than significant.

Threshold d: Expansive soils

Expansive soils shrink or swell as the moisture content decreases or increases; the shrinking or swelling can shift, crack, or break structures built on such soils. Soils under the site are not expected to be expansive due to the coarse-grained soils (sand, gravel, and boulders) under the site. Geotechnical investigations for projects developed in conformance with the Specific Plan would test subsurface soil samples for expansion potential and would provide any needed recommendations to minimize hazards from expansive soils. Impacts would be less than significant.

Threshold e: Soils capable of supporting septic tanks

The great majority of existing land uses onsite use septic tanks and leach fields. Specific Plan buildout would include installation of sewer mains and laterals to convey wastewater from the site for treatment. Specific Plan buildout does not propose the use of septic tanks or other alternative wastewater disposal systems. The existing septic systems would eventually be replaced as sewer infrastructure becomes available. No impact would occur.

8.3 MINERAL RESOURCES

MINERAL RESOURCES. Would the project:		
a)	Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	No Impact
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact

8.3.1 Explanation

Thresholds a and b: Impacts to known valuable mineral resources and to mining sites designated in a land use plan

Most of the site is mapped Mineral Resource Zone 2 (MRZ-2) by the California Geological Survey; that is, geologic data indicate that significant Portland-cement concrete grade aggregate resources are present in those areas (CGS 2008).

The nearest active mine to the site mapped on the mines online website maintained by the Office of Mine Reclamation is the Rialto Plant, a sand and gravel mine about 1.7 miles to the southeast (OMR 2015). A second active mine, the Colton Plant and Quarry sand and gravel mine, is about 1.9 miles southeast of the project site (USGS 2015).

Although the site is mapped as containing significant aggregate resources, the site is almost entirely built out with urban uses and is thus unavailable for mining. Thus, Specific Plan buildout would not cause a loss of availability of mineral resources. Project buildout would not adversely affect operations of the nearest active mines to the site, as those mines are 1.7 and 1.9 miles from the site, respectively; and are beyond the I-10 freeway and West Colton Railyard from the site. No impact would occur.

No mines on or next to the site are identified in the San Bernardino County General Plan, and project buildout would not impact the availability of such a site.

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8. Impacts Found Not to Be Significant

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9. 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.

In the case of the Valley Corridor Specific Plan, implementation would cause the following significant irreversible changes:

- Future development that would be accommodated under the Valley Corridor Specific Plan 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. Future development 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 future development 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, schools, libraries, and sewer and water services) would also be required. The energy, infrastructure, and social service commitments would be long-term obligations in view of the low likelihood of returning the land to its original condition once it has been developed.

- Population growth related to project implementation would increase vehicle trips over the long term. Over the long term, emissions associated with such vehicle trips would continue to contribute to the South Coast Air Basin's nonattainment designation for ozone (O_3) and fine inhalable particulate matter ($PM_{2.5}$) under the California and National ambient air quality standards (AAQS), and nonattainment for coarse inhalable particulate matter (PM_{10}) and nitrogen dioxide (NO_2) under the California AAQS.

9. Significant Irreversible Changes Due to the Proposed Project

- Future development in accordance with the proposed project is a long-term irreversible commitment of vacant land to developed land in the Community of Bloomington.

The Valley Corridor Specific Plan is based on eleven guiding principles created after an extensive public engagement effort that included residents, the business community, local service providers, and other local stakeholders. These objectives would lead to a number of long-term benefits for the project area and the Bloomington community.

1. **Maintenance.** Pursue strategies that focus first and foremost on maintaining and improving existing private and community assets.

2. **Investments and partnerships.** Leverage recent county investments in infrastructure and community facilities to attract investment and stimulate new partnerships.

3. **Infrastructure.** Establish a comprehensive infrastructure program that outlines future system needs and identifies the resources necessary to finance and implement the program.

4. **Economic opportunity.** Generate new job opportunities for entrepreneurs and established businesses in a wide variety of industries.

5. **Activity centers.** Develop pedestrian-friendly activity centers that offer shared places for community members to socialize, support, and learn from one another.

6. **Mobility.** Create safe spaces for pedestrians, cyclists, transit, and motor vehicles along Valley Boulevard and between surrounding neighborhoods while maintaining Valley Boulevard as a four-lane facility.

7. **Housing options.** Provide new opportunities and mix of housing types to meet various lifestyle choices and economic segments.

8. **Health and wellness.** Enhance the health and wellness of the community's minds, bodies, and economy through the creative design and regulation of public and private spaces.

9. **Open space.** Relocate Ayala Park to functionally complement the new community library, better serve existing and new neighborhoods, and provide increased opportunities for physical activity through interconnected open space and exercise nodes or paths.

10. **Historic heart of the community.** Encourage the revitalization of the core area encompassing the historic Bloomington town site.

11. **Aesthetics.** Improve the image, wayfinding, and sustainable design of Bloomington and the corridor along Valley Boulevard and Interstate 10.

10. 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?

Adoption of the proposed project would change the current land use designations of the project area from Single Residential, Neighborhood Commercial, General Commercial, Service Commercial, and Institutional to five land use districts—Mixed Use, Bloomington Enterprise, Commercial, Low & Medium Residential, and Medium & High Residential. A detailed description of the existing and proposed land use categories is provided in Chapter 3, *Project Description*.

10. Growth-Inducing Impacts of the Proposed Project

The Specific Plan could ultimately support a total of 1,093 residential dwelling units, 4,073 residents, 1,882,428 square feet of nonresidential buildings space, and 1,890 jobs in the plan area. This would represent an additional 568 dwelling units, 1,857 new residents, 907,319 square feet of additional nonresidential building space, and approximately 1,413 new jobs in the plan area compared to existing conditions.

Although much of the project site is vacant or underutilized, its surrounding areas are currently developed with urban land uses. Buildout of the Valley Corridor Specific Plan would include infrastructure improvements and extensions, including roadways, storm drains, retention/detention basins, wastewater, potable water, recycled water, and dry utilities (e.g., natural gas, electric, telephone, and cable). These infrastructure improvements would connect to existing facilities within and adjacent to the project site to support the proposed residential and nonresidential land uses. Wastewater in the project site is currently served by septic systems. Implementation of the Specific Plan would eventually replace septic tanks by expanding adjacent sewer infrastructure into the site, removing an infrastructure-related limitation to growth.

Would this project result in the need to expand one or more public services to maintain desired levels of service?

As discussed in Section 5.11, *Public Services*, as the project area continues to develop, it would require further commitment of public services in the form of fire protection, police protection, schools, and other public services. The proposed project buildout is forecast to eventually result in demand for additional sheriff's deputies and firefighting personnel. The exact number of new staff positions created depends on the rate of growth, intensity of development, and mixture of uses, which will vary based on site specifics, market demand, development trends, and individual project design. Upon buildout, it is estimated that six additional deputy sheriffs will be needed to completely staff a twenty-four hour period. A new fire station may also be necessary to maintain adequate response times in northwest Bloomington (see Section 5.11). Increased demand for public safety and fire protection services would be addressed as the area grows and impact fees are collected by the County on a project-by-project basis. An increase in development in the County would require an increased commitment to public services that would be considered a long-term commitment in order to maintain a desired level of service.

Students in the project area are served by kindergarten through twelfth grade public schools in the Colton Joint Unified School District. California Senate Bill 50 commits impact fees from development to provide complete school facilities mitigation. Impact fees are applied to new development and redevelopment as needed to accommodate increased pressures on a variety of public services and facilities. An increase in development within the County would require an increased commitment to public services over the long term to maintain a desired level of service.

Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

During project construction, a number of design, engineering, and construction-related jobs would be created. These jobs would be available as site-specific development is proposed within the project site, lasting until the final development is completed. Timing for each individual development project would be

dependent on the development decisions of individual landowners; however, for purposes of the environmental analysis, full buildout of the proposed project is anticipated to take about 20 years.

Buildout of the project would result in an estimated total of 4,073 residents and 1,890 jobs. As the population grows and occupies new dwelling units, these residents would seek a variety of goods, services, and other economic opportunities within the project area (allowable land uses include retail, restaurants, hotels, and offices, among other nonresidential uses) and surrounding area. This would facilitate economic development and could, therefore, encourage the expansion of existing businesses or creation of new ones to address these needs. However, it is expected that many consumer needs of residents in the proposed project could be met by commercial and office developments also within the proposed project area.

Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

The project area is surrounded by urban development to the north, east, and west, and I-10 to the south. The Specific Plan guides development to revitalize an area that has sites that are significantly underutilized or vacant. Approval of the proposed Valley Corridor Specific Plan would not set a precedent that could encourage and facilitate other activities that could significantly affect the environment. Implementation of the propose project would result in changing the intensity and character of only the project area to be more urbanized than the existing use. As stated, buildout of the Valley Corridor Specific Plan would represent an additional 568 dwelling units, 1,857 new residents, 907,319 square feet of additional nonresidential building space, and approximately 1,413 new jobs in the plan area compared to existing conditions. However, this is not considered a precedent-setting action.

10. Growth-Inducing Impacts of the Proposed Project

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