Volume 1 of 2

County of San Bernardino
Land Use Services Dept.

Deep Creek Project
Draft Environmental
Impact Report

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RBF CONSULTING

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ACRONYMS AND SHORT FORMS

§ ..... Section
ACOE ..... U.S. Army Corps of Engineers
BMP ..... Best Management Practice
Caltrans ..... California Department of Transportation
CDFG ..... California Department of Fish and Game
CEQA ..... California Environmental Quality Act
CESA ..... California Endangered Species Act
CNDDB ..... California Natural Diversity Database
CNPS ..... California Native Plant Society
COUNTY ..... County of San Bernardino
DEIR ..... Draft Environmental Impact Report
du ..... dwelling units
e.g. ..... for example
EIR ..... Environmental Impact Report
Fire Department ..... County of San Bernardino Fire Department
General Plan ..... County of San Bernardino General Plan
HCP ..... Habitat Conservation Plan
I ..... Interstate (Highway)
i.e. ..... that is
MBTA ..... (Federal) Migratory Bird Treaty Act
MMRP ..... Mitigation Monitoring and Reporting Program
msl ..... mean sea level
NCCP ..... Natural Communities Conservation Plan
NOC ..... Notice of Completion
NOI ..... Notice of Intent
NOP ..... Notice of Preparation
PRC ..... Public Resources Code
Project ..... Deep Creek Project
ROW ..... right-of-way

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1.1 PROJECT SUMMARY

The proposed Deep Creek project is located in western San Bernardino County, east of the City of Hesperia, and south of the Town of Apple Valley in the southwestern Mojave Desert. The approximately 249-acre project site is located approximately 10 miles east-northeast of the interchange of Interstate 15 (I-15) and State Route 395 (SR-395). I-15 and SR-395 provide regional access to the project site (Refer to Figure 3.1 in Chapter 3 of this Draft EIR). The project site is bounded by Deep Creek Road on the west, Mockingbird Avenue on the east, Roundup Way on the north, and Burlington Northern and Santa Fe (BNSF) Railway tracks on the south, (Refer to Figure 3.2 of this Draft EIR).

The proposed project is a request for a General Plan Amendment to change the official land use district from AG-SCp (Agricultural with a primary sign control overlay) to RS-20m (Single Residential with a 20,000-square foot minimum parcel size) and a Tentative Tract 16569 for 202 single-family residential lots and 6 lettered lots to be developed in four phases on approximately 249 acres in an unincorporated area of San Bernardino County. The lot sizes will average approximately 43,051 square feet, with the median lot size being 43,948 square feet. Of the proposed 202 lots, 68 lots located on the upper terrace of the project site will measure less than an acre in size (0.74 acre minimum).

In addition to the construction of 202 residential units and six lettered lots, the project also includes the construction of a drainage corridor trending in a north-south direction through the western half of the project site. Additionally, the project proposes the construction of approximately 25,300 linear feet of new streets and a perimeter wall surrounding the project site. The proposed project will be developed in four phases (Phase 1, 54 lots; Phase II, 60 lots; Phase III, 46 lots; and Phase IV, 42 lots).

1.2 ENVIRONMENTAL IMPACT SUMMARY

Table 1-1
Environmental Impact Summary

IMPACT	MITIGATION MEASURE
4.1 Transportation and Circulation	
<u>Traffic</u> Impact 4.1-1: Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street	Refer to mitigation measures TRA-1 through TRA-4.

IMPACT	MITIGATION MEASURE
system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections). Determination: Less than Significant with Mitigation.	
Impact 4.1-1a: Main Street/Rock Springs Road Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Main Street/Rock Springs Road. Determination: Less than Significant with Mitigation.	TRA-1: To reduce impacts from implementation of the project to the Main Street/Rock Springs Road intersection, the Project Applicant shall pay their proportionate fair share to install a traffic signal.
Impact 4.1-1b: Apple Valley Road/Bear Valley Road Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Apple Valley Road/Bear Valley Road. Determination: Less than Significant with Mitigation.	TRA-2: To reduce impacts from implementation of the project to the Apple Valley Road/Bear Valley Road intersection, the Project Applicant shall pay their proportionate fair share to construct a second southbound through lane, reconstruct dual southbound right turn lanes into a single free right turn lane, construct two additional eastbound through lanes, and construct a fourth westbound through lane.
Impact 4.1-1c: Deep Creek Road/Bear Valley Road Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Deep Creek Road/Bear Valley Road. Determination: Less than Significant with Mitigation.	TRA-3: To reduce impacts from implementation of the project to the Deep Creek/Bear Valley Road intersection the Project Applicant shall pay their proportionate fair share to install a traffic signal, construct an additional eastbound through lane, and an additional westbound through lane.
Impact 4.1-1d: Kiowa Road/Bear Valley Road Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Kiowa Road/Bear Valley Road. Determination: Less than Significant with Mitigation.	TRA-4: To reduce impacts from implementation of the project to the Kiowa Road/Bear Valley Road intersection the Project Applicant shall pay their proportionate fair share to construct a second northbound exclusive left turn lane, add a right turn overlap phase, construct a third eastbound through lane, and construct a third westbound through lane.
<u>Future Year 2030 With Project Conditions</u> Impact 4.1-2: Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street	Refer to Mitigation Measures Impacts 4.1-2a through 4.1-2g.

IMPACT	MITIGATION MEASURE
system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections). Determination: Less than Significant with Mitigation.	
Impact 4.1-2a: Main Street/Rock Springs Road Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Main Street/Rock Springs Road. Determination: Less than Significant with Mitigation.	TRA-5: To reduce impacts from implementation of the project to the Main Street/Rock Springs Road intersection, the Project Applicant shall pay their proportionate fair share to install a traffic signal, add a northbound right turn overlap phase, construct a second southbound exclusive left turn lane, and add a westbound right turn overlap phase.
Impact 4.1-2b: Apple Valley Road/Bear Valley Road Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Apple Valley Road/Bear Valley Road. Determination: Less than Significant with Mitigation.	TRA-6 To reduce impacts from implementation of the project to the Apple Valley Road/Bear Valley Road intersection, the Project Applicant shall pay their proportionate fair share to construct a second southbound through lane, a single southbound free right turn lane, a third eastbound through lane, a second westbound left turn lane and pay a fair share contribution towards the construction of the Lemon Street Bridge across the Mojave River.
Impact 4.1-2c: Deep Creek Road/Bear Valley Road Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Deep Creek Road/Bear Valley Road. Determination: Less than Significant with Mitigation.	TRA-7: To reduce impacts from implementation of the project to the Deep Creek Road/Bear Valley Road intersection, the Project Applicant shall pay their proportionate fair share to install a traffic signal, construct a northbound left turn lane, construct a northbound right turn lane, construct a southbound left turn lane, and construct a southbound right turn lane.Refer to mitigation measure
Impact 4.1-2d: Deep Creek Road/Tussing Ranch Road Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Deep Creek Road/Tussing Ranch Road. Determination: Less than Significant with Mitigation.	TRA-8: To reduce impacts from implementation of the project to the Deep Creek/Tussing Ranch Road intersection the Project Applicant shall pay their proportionate fair share to install a traffic signal, construct a northbound left turn lane, construct a southbound left turn lane, construct an eastbound left turn lane, and construct a westbound left turn

IMPACT	MITIGATION MEASURE
	lane.
Impact 4.1-2e: Kiowa Road/Bear Valley Road Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Kiowa Road/Bear Valley Road. Determination: Less than Significant with Mitigation.	TRA-9: To reduce impacts from implementation of the project to the Kiowa Road/Bear Valley Road intersection the Project Applicant shall pay their proportionate fair share to construct a second northbound left turn lane and to construct a third westbound through lane.
Impact 4.1-2f: Deep Creek Road/Rock Springs Road Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Deep Creek Road/Rock Springs Road. Determination: Less than Significant with Mitigation.	TRA-10: To reduce impacts from implementation of the project to the Deep Creek Road/Rock Springs Road intersection the Project Applicant shall pay their proportionate fair share to construct a second eastbound through lane and construct a second westbound through lane.
Impact 4.1-2g: Kiowa Road/Rock Springs Road Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Kiowa Road/Rock Springs Road. Determination: Less than Significant with Mitigation.	TRA-11: To reduce impacts from implementation of the project to the Kiowa Road/Rock Springs Road intersection the Project Applicant shall pay their proportionate fair share to install a traffic signal.
Level of Service Impact 4.1-3: Exceed, either individually or cumulatively, an LOS standard established by the city, county, or State agency for designated roads or highways. Determination: Less than Significant with Mitigation.	Refer to mitigation measure TRA-1 through TRA-11.
Incompatible Design Features Impact 4.1-4: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Determination: Less Than Significant Impact.	No mitigation is required.
Emergency Access Impact 4.1-5: Result in inadequate emergency access. Determination: Less Than Significant Impact.	No mitigation is required.

IMPACT	MITIGATION MEASURE
Parking Impact 4.1-6: Result in inadequate parking capacity. Determination: Less Than Significant Impact.	No mitigation is required.
Alternative Transportation Impact 4.1-7: Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks). Determination: No Impact.	No mitigation is required.
Cumulative Impacts The proposed project would contribute to cumulative traffic impacts. Determination: Significant and Unavoidable Impact.	No mitigation is feasible.
4.2 Biological Resources	
Sensitive Species Impact 4.2-1: Implementation of the proposed project may have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. Level of Significance: Less than Significant with Mitigation.	BIO-1: Prior to approval of grading permits or any ground-disturbing activity, preconstruction surveys shall be conducted to determine if Burrowing Owls occupy the project site. If Burrowing Owls are observed during those surveys, the following measures shall be implemented: 1) Establish a setback of at least 250 feet from each owl burrow occupied within the past five years. 2) Preserve 6.5 acres of foraging habitat per burrowing owl pair, contiguous to the owl population. Configurations of foraging habitat in relation to owl burrows requires review and approval by the CDFG and USFWS. 3) Construction and other ground disturbances shall be prohibited within established setbacks and foraging habitat. Natural vegetation shall be maintained within the setback. The use of insecticides, herbicides, and fertilizers shall be not permitted within established setbacks.

IMPACT	MITIGATION MEASURE
	4) Setbacks shall be marked by brightly colored fencing or flagging throughout the construction process. Setbacks shall be indicated on recorded maps, whenever projects involve parcel or subdivision maps. 5) All setbacks and foraging habitat shall be preserved in perpetuity via recordation of a conservation easement.
	BIO-2: Prior to and within 30 days of the start of any land disturbance activities, a qualified biologist shall survey the project site to determine if desert tortoise are present. If desert tortoise are encountered the following measures shall be implemented: 1) Construction and other ground disturbances shall be prohibited within established setbacks and foraging habitat. Natural vegetation shall be maintained within the setback. The use of insecticides, herbicides, and fertilizers shall be not permitted within established setbacks. 2) Setbacks shall be marked by brightly colored fencing or flagging throughout the construction process. Setbacks shall be indicated on recorded maps, whenever projects involve parcel or subdivision maps. 3) All setbacks and foraging habitat shall be preserved in perpetuity via recordation of a conservation easement. 4) Construction shall halt within the setback of the desert tortoise until all desert tortoise are properly relocated in concurrence with protocol established by CDFG and USFWS.
	BIO-3: A qualified biologist shall be present at the project site during all land

IMPACT	MITIGATION MEASURE
	disturbance activities.
	BIO-4: A qualified biologist shall remain on-call during construction activities. If desert tortoise or burrowing owls are encountered during construction, construction activities shall be halted in the vicinity of the encounter and the biologist shall be called to the project site. All remediation recommendations made by the biologist shall be implemented by the project applicant.
	BIO-5: All personnel associated with the construction of the project site shall attend a worker education class. The class shall include, but not limited to, general information regarding the Mohave ground squirrel, desert tortoise, and burrowing owl; relevant Federal and State laws, and worker responsibilities when working in the Mohave Desert habitat.
	BIO-6: All grubbing, brushing, and/or tree removal will be conducted outside of the State identified nesting season (February 15 through September 1). The site will be evaluated by a qualified biologist prior to initiation of ground disturbance to determine the presence or absence of nesting birds. Bird nests will be avoided during the nesting season.
<u>Wildlife Corridors</u> Impact 4.2-2: Implementation of the proposed project may interfere substantially with the movement of any native or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites. Level of Significance: Less than Significant Impact.	No mitigation is required.

IMPACT	MITIGATION MEASURE
Conflicts with Local Policies Protecting Biological Resources Impact 4.2-3: Implementation of the proposed Project may result in a significant impact if the Project conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Level of Significance: Less than Significant Impact.	No mitigation is required.

1.3 SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2 (b) of the State *CEQA Guidelines* requires an EIR to "describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the Project is being proposed, notwithstanding their effect, should be described."

The proposed project would generate traffic that contributes to significant impacts on regional and local roadways. Future development projects have a responsibility to contribute a fair share toward mitigation through development fees. Application of the fees toward transportation measures would be the responsibility of several different agencies including the Town of Apple Valley, San Bernardino County, and the San Bernardino Association of Governments. Fee application decisions would reflect the most cost-effective ways to address conditions. Additionally, the congestion on these roads is an existing condition, the mitigation of which is not the sole responsibility of the Project Applicants. Finally, the necessary improvements to these roads must undergo extensive design and environmental review prior to construction. For these reasons, adequate mitigation is not available. Until the improvements are made, the impacts to the Regional and Local roadways would be significant and unavoidable.

No other significant and unavoidable impacts were identified for the proposed project with the exception of cumulative traffic impacts.

1.4 SUMMARY OF PROJECT ALTERNATIVES

This is a summary of project alternatives described in Section 7.0, *Alternatives to the Proposed Action*, which contains a detailed discussion. The project alternatives identified within Table 1-

2, *Comparison of Alternatives*, have been designed to alleviate identified environmental impacts, or were specifically requested for consideration during the preparation of the EIR.

Alternative 1, No Project Alternative, would result in the fewest significant impacts to traffic and biological resources. Implementation of Alternative 1 would reduce traffic trips and biological impacts, and meet the basic project objectives, including implementing housing on the project site. The project site would remain under current zoning, designated as Agricultural-Primary Sign Control Overlay, which would allow for the development of up to one unit per ten acres. Therefore, under the No Project Alternative, approximately 24 residences have the potential to be constructed on the project site in the future (249 acres divided by one residential unit per acre).

Per *CEQA Guidelines* Section 15126.6 (e) (2), should the No Project Alternative be selected as the environmentally superior alternative, then another alternative must be selected. Therefore, the Reduced Density Alternative would result in the fewest significant impacts to traffic and biological resources, while still meeting the basic project objectives. The Reduced Density Alternative would provide housing at a reduced rate, consistent with the Town of Apple Valley General Plan, and incorporate more open space than what is proposed as part of the project.

Table 1-2
Comparison of Alternatives

Topic	Alternative 1: No Project Alternative	Alternative 2: Reduced Density Alternative	Alternative 3: Open Space/Passive Recreational Facilities Alternative
Traffic and Circulation	<	<	<
Biological Resources	<	<	<

= Impact is equivalent to impact of proposed project (neither environmentally superior nor inferior).
< Impact is less than impact of proposed project (environmentally superior).
> Impact is greater than impact of proposed project (environmentally inferior).

Table 1-3, *Project Objectives Consistency Analysis*, identifies objectives consistency for each of the proposed alternatives.

Table 1-3
Project Objectives Consistency Analysis

Project Objective	Alternative 1: No Project Alternative	Alternative 2: Reduced Density Alternative	Alternative 3: Open Space/Passive Recreational Facilities Alternative
Create a balance between the existing scattered residential development in the immediate area of the project and the greater densities of the Town of Apple Valley, in whose sphere of influence the property lies.	**Consistent:** Alternative 1 could result in the development of up to 24 single-family units, which would maintain the semi – rural character of the area.	**Consistent:** Alternative 2 would result in the development of up to 94 residential units, which would maintain the semi-rural character of the area.	**Inconsistent:** Alternative 3 would result in the development of parks and/or passive recreational space and would not provide housing.
To efficiently utilize the project site while maintaining a minimum lot size of approximately ¾ of an acre, with an average lot size approaching one acre.	**Inconsistent:** Alternative 1 would maintain a minimum lot size of ten acres, which is much larger than what is identified in the project objectives.	**Inconsistent:** Alternative 2 would maintain an average lot size of 2.5 acres, which is larger than what is identified in the project objectives.	**Inconsistent:** Alternative 3 not provide housing on the project site.
To avoid more intense urbanization by providing homes with significantly larger lots than found in typical County subdivisions.	**Consistent:** Alternative 1 could result in the development of up to 24 single-family units, which would maintain the semi – rural character of the area. The average lot size would be ten acres, which would avoid intense urbanization.	**Consistent:** Alternative 2 would include larger lots than found in typical County subdivisions.	**Inconsistent:** Alternative 3 not provide housing on the project site.
To develop homes which will be compatible with, though not identical to, homes in the immediate vicinity which are located on larger lots.	**Inconsistent:** Alternative 1 could result in the development of homes similar in nature to those in the immediate vicinity of the project on larger lots.	**Inconsistent:** Alternative 2 could result in the development of homes similar in nature to those in the immediate vicinity of the project on larger lots.	**Inconsistent:** Alternative 3 not provide housing on the project site.
To build homes which will be adequately served by existing and enhanced infrastructure without adversely impacting the ongoing infrastructure needs of current area residents.	**Inconsistent:** Alternative 1 does not provide enhanced infrastructure for the project area.	**Inconsistent:** Alternative 2 would not provide enhanced infrastructure for the project area.	**Consistent:** Alternative 3 would not provide enhanced infrastructure for the project area nor would Alternative 3 provide housing.

1.4.1 NO PROJECT ALTERNATIVE

The No Project Alternative (Alternative 1) assumes that the proposed Deep Creek project would not occur, and the site would remain in its existing condition. The project site currently consists of vacant land that is covered mostly by grasslands and scattered with Joshua trees. Livestock occasionally graze on the project site. The project site would remain undeveloped with this alternative. No residential development, infrastructure, or landscaping would be implemented.

Implementation of the No Project Alternative would meet the majority of the project's objectives. However, the No Project Alternative would not provide additional housing in the project area. The No Project Alternative would not maintain a minimum lot size of approximately three-quarters of an acre. The No Project Alternative would also not provide enhanced infrastructure for the project site.

The No Project Alternative would result in additional impacts to traffic and circulation, but less than the proposed project, as roadway improvements proposed as part of the project would not occur. Should development occur under the existing General Plan land use designation, some impacts would occur relative to traffic and circulation, as additional trips would be generated. Similarly, biological resources may be impacted by development under the existing land use designation. However, it is anticipated that impacts to biological resources would be reduced when compared to the proposed project due to the reduced density of housing. For this reason, this alternative is being rejected.

1.4.2 REDUCED DENSITY ALTERNATIVE

The Reduced Density Alternative (Alternative 2) would include the development of up to 94 single-family residential units on the project site. This Alternative is based on the Town of Apple Valley's pre-zoning for the project site, which requires a 2.5 acre minimum parcel size. The acreage for this alternative has been calculated as follows: 249 acres minus 12 (5% of total acreage to be used for roads, infrastructure, etc) divided by 2.5 acres per residential unit.

Implementation of the Reduced Density Alternative would not meet many of the basic project objectives. The Reduced Density Alternative would not maintain a minimum lot size of approximately three-quarters of an acre. The Reduced Density Alternative would also not provide enhanced infrastructure for the project site.

The Reduced Density Alternative would result in reduced impacts to traffic and circulation and biological resources, because fewer residential units would be developed, thus decreasing the amount of traffic generated. In addition, fewer residences would be developed, thus increasing the amount of open space maintained on the project site. However, this Alternative would not fulfill the majority of the project objectives. For this reason, this alternative is being rejected.

1.4.3 OPEN SPACE/PASSIVE RECREATIONAL FACILITIES ALTERNATIVE

Under Alternative 3, the project site would either remain in natural open space or be utilized for park and/or passive recreational activities. This alternative does not anticipate large athletic fields, sport complexes, etc. Rather, this alternative assumes more passive recreational and open space uses such as parks, open fields, playgrounds, tot lots, etc. Additionally, portions of the project site could also remain in natural open space in an effort to further reduce potential impacts to biological resources.

The Open Space/Passive Recreation Alternative would not meet the basic project objectives. The Open Space/Passive Recreation Alternative would not include the construction of residential units that are compatible with existing development. The Open Space/Passive Recreation Alternative would also not include enhanced infrastructure improvements on or offsite. This Alternative would also not maintain a minimum lot size of three-quarters of an acre or more for residential units.

The Open Space/Passive Recreation Alternative would result in reduced impacts to traffic and circulation and biological resources, because no residential units would be developed, thus decreasing the amount of traffic generated. In addition, since no residences would be developed, an increase in the amount of open space maintained on the project site would occur.

1.4.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines requires that an Environmentally Superior Alternative be identified; that is, an alternative that would result in the fewest or least significant environmental impacts. If the No-Project Alternative is the environmentally superior alternative, State *CEQA Guidelines* Section 15126.6 (e)(2) requires that another alternative that could feasibly attain most of the basic Project's basic objectives be chosen as the environmentally superior alternative.

Alternative 1, No Project Alternative, would result in the fewest significant impacts to traffic and biological resources. Implementation of Alternative 1 would reduce traffic trips and biological impacts, but still meet the basic of the project objectives, including implementing housing on the project site. The No Project Alternative would not fulfill the project's objectives and would not result in housing on the project site, as discussed in section 1.4.1., above.

Per *CEQA Guidelines* Section 15126.6 (e) (2), should the No Project Alternative be selected as the environmentally superior alternative, then another alternative must be selected. Therefore, the Reduced Density Alternative would then result in the fewest significant impacts to traffic and biological resources, while still meeting the basic project objectives. The Reduced Density Alternative would provide housing at a reduced rate, consistent with the Town of Apple Valley General Plan, and incorporate more open space than what is proposed as part of the project.

1.5 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

Section 15123 of the *CEQA Guidelines* requires that an EIR contain a brief summary of the proposed actions and its consequences. Sections 15123(b)(2) and (3) also require that the EIR summary identify areas of controversy known to the lead agency, issues raised by agencies and the public, and issues to be resolved, including the choice among alternatives and whether, or how, to mitigate significant adverse physical impacts.

Based on County staff's review of available information and comments received from the general public and other public agencies in response to the Notice of Preparation, the following issues are considered to be either controversial or require further resolution prior to making an informed decision on the project:

1. Disagreement Among Experts

   This EIR contains substantial evidence to support all the conclusions presented herein. That is not to say that there will not be disagreements among various parties regarding these conclusions. Both the State *CEQA Guidelines*, and more particularly, case law clearly provide the standards for treating disagreements among experts. Where evidence and opinions of experts conflict on an issue concerning the environment, and the agency knows of these controversies in advance, the EIR must acknowledge the controversies, summarize the conflicting opinions of the experts, and include sufficient information to allow the public and decision makers to take intelligent account of the environmental consequences of their actions.

   It is also possible that evidence will be presented during the Draft EIR review that might create disagreement. Decision makers may consider this evidence during the public hearing process.

   In rendering a decision on a project where there is a disagreement among experts, decision makers are not obligated to select the most conservative, environmentally protective, or liberal viewpoint. They may give more weight to more than one expert than another, and need not resolve a dispute among experts. In their proceedings, they must consider the comments received and address objections, but need not follow said comments or objections so long as they state the basis for their decision and that decision is supported by substantial evidence.

2. Initial Study/Mitigated Negative Declaration

   The ability of the Initial Study/Mitigated Negative Declaration to adequately address all environmental impacts associated with the Project was called into question by members of the public. Deep Creek Agricultural Association (i.e., Deep Creek), an

unincorporated association of individuals with concerns related to the Project, filed a Petition for Writ of Mandate in San Bernardino County Superior Court seeking to set aside the approval of the Application, alleging a series of substantive and procedural failures to comply with CEQA. Among the claims asserted by Deep Creek in the Action were allegations that the County had failed to identify or properly mitigate environmental effects of the Project, including those related to land use, air quality, traffic, loss of agricultural land, water quality, sewage, biological resources, and noise.

The Judgment was entered in favor of Deep Creek on the basis that Deep Creek had "provided substantial evidence that a fair argument exists that the Project does not comply with [CEQA] because [the County] has inadequately studied the Project's traffic impacts." With respect to all other allegations of Deep Creek in the Action, the Court ruled in favor of the County. The County was required to prepare an environmental impact report to address the potential traffic impacts of the Project. The Judgment also stated that, pursuant to Public Resources Code § 21168.9, the only required additional analysis to be contained in the EIR is of traffic and circulation impacts.

Deep Creek filed a timely appeal of the Judgment to the Court of Appeal of the State of California, Fourth Appellate District (the "Court of Appeal"). Among the claims asserted by Deep Creek in the appeal were allegations that the Superior Court erred in requiring the County only to assess traffic impacts of the Project, and that the County should have been ordered to further identify and/or properly mitigate certain environmental effects of the Project. On March 24, 2008, the Court of Appeal determined that, in addition to assessing traffic impacts, the County must also provide additional analysis of the Project's impacts upon biological resources.

Pursuant to the judgments above, all comments received as part of the Notice of Preparation that are not related to traffic or biological resources are not addressed in this EIR. All other issues (i.e., other than traffic and biology) have been deemed (by the courts) to be adequately addressed in the previously prepared Initial Study/Mitigated Negative Declaration dated July 21, 2005.

3. Traffic and Circulation

The use of dirt roads in the vicinity of the proposed project; an increase in traffic; lack of public transportation; and dust related to construction activities.

4. Biology

Impacts to migratory birds; impacts to coyotes, snakes, bobcats, and ground owls; impacts to hunting grounds for species;

2.1 PURPOSE

According to Section 15121 of the State *CEQA Guidelines*, an EIR is an informational document that is written to inform public agency decision-makers and the public of the significant environmental effects of a proposed project. The purpose of an EIR is to:

- Analyze the environmental effects of a proposed project;
- Indicate mitigation measures to avoid or minimize the potentially significant environmental effects of a project; and,
- Identify alternatives to a project that would avoid or substantially lessen the significant effects.

The purpose of this Draft Environmental Impact Report (Draft EIR) for the Deep Creek project is to review the existing conditions of the project site, as they relate to traffic and circulation and biological resources; identify and analyze the potential environmental impacts as they pertain to traffic and circulation and biological resources, and then suggest feasible mitigation measures to reduce significant adverse environmental effects pertaining to traffic and circulation and biological resources, as described in Section 3.0, *Project Description.* This document will identify the potential environmental impacts resulting from the proposed project, related to traffic and circulation and biological resources, including temporary construction-related effects and the long-term effects associated with project buildout. The environmental impacts of the project are analyzed in the EIR to the degree of specificity appropriate in accordance with Section 15146 and Section 15183 of the State *CEQA Guidelines*.

On December 21, 2005, Deep Creek Agricultural Association ("Deep Creek"), an unincorporated association of individuals with concerns related to the project, filed *Deep Creek Agricultural Association v. County of San Bernardino (Lewis Operating Corporation et al.),* in the San Bernardino County Superior Court as Case No. SCV 133 201 (the "Action"). The Action was commenced with a Petition for Writ of Mandate seeking to set aside the approval of the Application, alleging a series of substantive and procedural failures to comply with CEQA. Among the claims asserted by Deep Creek in the Action were allegations that San Bernardino County had failed to identify or properly mitigate environmental effects of the project, including those related to land use, air quality, traffic, loss of agricultural land, water quality, sewage, biological resources, and noise.

On September 13, 2006, the Superior Court heard the arguments of the parties in the Action and announced its ruling. On November 2, 2006, a judgment (the "Judgment") reflecting the

previously-announced ruling was signed by the Court and subsequently entered. The Judgment was entered in favor of Deep Creek on the basis that Deep Creek had "provided substantial evidence that a fair argument exists that the project does not comply with [CEQA] because [the County] has inadequately studied the project's traffic impacts." With respect to all other allegations of Deep Creek in the Action, the Court ruled in favor of the County.

The judgment vacated all project approvals and directed that, if the County was to exercise "its lawful discretion to re-approve the project," the County must first prepare an environmental impact report ("EIR") to "address the potential traffic impacts of the project." The Judgment also stated that, pursuant to Public Resources Code § 21168.9, the only required additional analysis to be contained in the [EIR]…shall be an analysis of the potential traffic effects of the project."

Deep Creek filed a timely appeal of the Judgment to the Court of Appeal of the State of California, Fourth Appellate District (the "Court of Appeal"). Among the claims asserted by Deep Creek in the appeal were allegations that the Superior Court erred in requiring the County only to assess traffic impacts of the project, and that the County should have been ordered to further identify and/or properly mitigate certain environmental effects of the project. On March 24, 2008, the Court of Appeal determined that, in addition to assessing traffic impacts, the County must also provide additional analysis of the project's impacts upon biological resources.

The Superior Court of the State of California, County of San Bernardino, and the Court of Appeal have determined that the project may have significant environmental effects pertaining to traffic and biological impacts. Therefore, the County has initiated preparation of an EIR. The EIR will address potentially significant impacts associated with Transportation and Circulation and Biological Resources based upon court direction, written responses to this Notice of Preparation ("NOP"), public and agency comments on the NOP, public scoping meeting comments, consultation with potentially affected agencies, results of available technical studies, and research conducted throughout the EIR process. The EIR will only analyze potential transportation and circulation and biological resources impacts associated with implementation of the proposed project, in accordance with court direction.

2.2 COMPLIANCE WITH CEQA

The County of San Bernardino is the lead agency under the California Environmental Quality Act (CEQA), and is responsible for preparing an Environmental Impact Report (EIR) for the Deep Creek Project (State Clearinghouse No. 2005071104). This EIR has been prepared in conformance with CEQA (California Public Resources Code Section 21000 et seq.), California *CEQA Guidelines* (California Code of Regulations, Title 14, Section 15000 et seq.), and the rules, regulations, and procedures for implementation of CEQA, as adopted by the County of San

Bernardino. The principal *CEQA Guidelines* sections governing content of this document are Sections 15120 through 15132, Content of an EIR.

This EIR evaluates the issues and impacts identified as potentially significant in the Expanded Notice of Preparation and submitted Notice of Preparation public comment letters (see Appendix A, *Expanded Notice of Preparation and Public Comment Letters*). The Superior Court of the State of California, County of San Bernardino, has determined that the project may have significant environmental effects pertaining to traffic and biological impacts. Therefore, an EIR has been prepared to address potential traffic and biological impacts. As part of the review process, the Draft EIR is subject to a 45-day public review period by responsible and concerned agencies and interested parties. Following this period, responses to comments (received from these agencies and interested parties) will be prepared. The Final EIR will consist of revisions to the Draft EIR, containing any changes made based on those comments received, as well as copies of the comment letters and formal responses to those comments.

In accordance with Section 15121 of CEQA, the primary purpose of this EIR is to provide decision-makers and the public with specific information regarding the environmental effects associated with the proposed project, identify ways to minimize the significant effects of the project and describe reasonable alternatives to the project. Mitigation measures are provided, which may be adopted as Conditions of Approval in order to reduce the significance of impacts resulting from the project. In addition, this EIR is the primary reference document in the formulation and implementation of a mitigation-monitoring program for the proposed project.

It is not the purpose of an EIR to recommend either approval or denial of a project. Rather, the purpose of an EIR is to provide relevant information that will assist decision-makers in their decision to approve or deny a project. The County of San Bernardino, which has the principal responsibility for processing and approving the project, and other public agencies (i.e., Responsible and Trustee Agencies, refer to Section 3.7 of this EIR) that may use this EIR in the decision-making or permit process will consider the information in this EIR, along with other information that may be presented during the CEQA process.

Environmental impacts are not always mitigable to a level considered less than significant. In such cases, impacts are considered significant unavoidable impacts. In accordance with Section 15093(b) of the State *CEQA Guidelines*, if a public agency approves a project that has significant impacts that are not substantially mitigated (i.e., significant unavoidable impacts), the agency shall state in writing the specific reasons for approving the project, based on the Final EIR and any other information in the public record for the project. This is termed, per Section 15093 of the State *CEQA Guidelines*, a "Statement of Overriding Considerations."

This document analyzes the environmental effects of the project to the degree of specificity appropriate to the current proposed actions, as required by Section 15146 of the State *CEQA Guidelines*. The analysis considers the activities associated with the project to determine the short-term and long-term effects associated with their implementation. This EIR discusses both the direct and indirect impacts of this project, as well as the cumulative impacts associated with other past, present, and reasonably foreseeable future projects with regard to traffic and biological resources. CEQA requires preparation of an objective, full-disclosure document to inform agency decision-makers and the general public of the direct and indirect environmental effects of the proposed action; provide mitigation measures to avoid or substantially lessen the significant effects; and identify and evaluate reasonable alternatives that could avoid or substantially lessen one or more of such effects.

2.3 SCOPE OF THE EIR

The County of San Bernardino completed a Notice of Preparation (NOP) for the project on July 31, 2007, to identify the potential environmental impacts of the project. The County of San Bernardino distributed the NOP, which was filed with the State of California Office of Planning and Research on July 31, 2007 (refer to Appendix A, Notice of Preparation). The comment period closed on August 29, 2007, following the State-mandated 30-day Notice of Preparation review period.

Subsequent to the circulation of the NOP, on March 24, 2008, the Court of Appeal determined that, in addition to assessing traffic impacts, the County must also provide additional analysis of the project's impacts upon biological resources. Therefore, a revised NOP was circulated on February 3, 2009 to provide opportunity for public comment and input regarding the expanded scope of the EIR, which including both traffic and biological resources, pursuant to the March 2008 ruling of the Court of Appeal (refer to Appendix A, Notice of Preparation). The Revised NOP comment period closed on March 4, 2009, following the State-mandated 30-day Notice of Preparation review period.

This EIR addresses potential significant impacts in the following areas as identified by the Superior Court of the State of California, County of San Bernardino judgment and public and agency comments received on both NOP's regarding traffic and biological resources. Comments received on issues unrelated to traffic and biological resources were responded to by the County as being beyond the scope of review of the EIR and have not been included in this Draft EIR. For both environmental issues, the EIR first describes the environmental setting (current conditions), then discusses and analyzes the potential related impacts that could be caused as a result of project implementation. For each potential significant impact, the EIR specifies ways to mitigate the impact. In addition, the EIR contains a description of the project, description of the environmental setting, identification of cumulative impacts, and an analysis of alternatives to the project.

The Project Applicant and/or County shall implement all mitigation measures of the EIR found to be feasible by decision-makers, related to any impact found to be potentially significant. Project design features are incorporated into the discussion of mitigation measures in that they will be required to be implemented, or have an environmental equivalent. "Environmental equivalent" shall mean any measure or procedure, subject to the approval of the County that would have the same or superior result as the project design feature, and would have the same or superior effect on the environment. The County Land Use Services Division, in conjunction with any appropriate agencies or other County departments, shall determine the adequacy of any proposed environmental equivalent. Any costs associated with information or environmental documentation required to determine environmental equivalency shall be borne by the Project Applicant. As with mitigation measures, the County would ensure compliance with an environmental equivalent through the mitigation monitoring process.

2.4 ORGANIZATION OF THE EIR

The Draft EIR is organized into eleven chapters:

- Chapter 1 (Executive Summary) provides a brief project description and summary of the environmental impacts, and the mitigation measures for each impact.
- Chapter 2 (Introduction and Purpose) provides CEQA compliance information.
- Chapter 3 (Project Description) provides the project location, background and history, environmental setting (including on and offsite use), project characteristics, project objectives, project phasing, and permits and approvals that are required for the project.
- Chapter 4 (Environmental Analysis) describes the methodology for significance determination; identifies short-term and long-term environmental impacts of the project and their level of significance before mitigation; recommends feasible mitigation measures to reduce the significance of impacts; and identifies areas of unavoidable significant impacts after mitigation. This chapter also discusses those impacts by the combination of the proposed project and other projects in the vicinity. Pursuant to the Court's ruling, the environmental analysis included in this chapter is limited to traffic and biological resources.
- Chapter 5 (Additional Environmental Issues) summarizes additional environmental issues that may be affected by traffic and biological impacts generated by the proposed project. Information contained in this section is provided for the convenience of the reader, and summarizes and expands upon information contained in the previously prepared IS/MND.
- Chapter 6 (Growth Inducing Effects) analyzes the potential environmental consequences of the foreseeable growth and development that could be induced by implementation of the proposed project.

- Chapter 7 (Alternatives to the Proposed Project) analyzes alternatives to the proposed project.
- Chapter 8 (Significant Irreversible Environmental Changes) discusses the significant irreversible environmental changes that would be involved in the proposed project should it be implemented. These changes include, for example, uses of nonrenewable resources during the initial and continued phases of the project, because a large commitment of such resources makes their availability thereafter unlikely; primary and secondary impacts of a project that would generally commit future generations to similar uses.
- Chapter 9 (Effects Found Not to Be Significant) summarizes effects found not to be significant, less than significant, or less than significant with mitigation based on information contained in the Mitigated Negative Declaration (MND) previously prepared for the proposed project.
- Chapter 10 (Organizations and Persons Consulted) identifies the lead agency, preparers of the EIR, and all Federal, State, and local agencies, and other organizations, and individuals consulted during the preparation of the EIR.
- Chapter 11 (Bibliography) identifies reference sources utilized for the EIR.

Table 2-1, *CEQA Required Sections and Location in Draft EIR,* depicts the sections of the Draft EIR that are required and their location.

Table 2-1
CEQA Required Sections and Location in Draft EIR

Required EIR Section	Location in This Draft EIR	
	Chapter/Section	*Page*
Table of Contents (Section 15122)	Same	i
Summary (Section 15123)	Chapter 1	1.0-1
Introduction	Chapter 2	2.0-1
Project Description (Section 15124)	Chapter 3	3.0-1
Environmental Setting (Section 15125)	Section 3.2	3.0-1
Significant Environmental Effects of the Proposed Project (Section 15126(a))	Chapter 4	4.0-1
Significant Unavoidable Environmental Effects of the Proposed Project (Section 15126(b))	Chapter 4	4.0-2
Significant Irreversible Environmental Changes of the Proposed Project (Section 15126(c))	Chapter 8	8.0-1
Growth-Inducing Impact of the Proposed Project (Section 15126 (d))	Chapter 6	6.0-1
Mitigation Measures (Section 15126 (e))	Chapter 4	4.1-52, 4.2-31
Alternatives to the Proposed Project (Section 15126(f))	Chapter 7	7.0-1
Effects Found Not to Be Significant (Section 15128)	Chapter 9	9.0-1
Organizations and Persons Consulted (Section 15129)	Chapter 10	10.0-1
Cumulative Impacts (Section 15130)	Chapter 4	4.1-69, 4.2-36
Technical Appendices and other materials, including the Initial Study, Notice of Preparation, and comment Letters	Appendices	N/A

Based on significance criteria, the effects of the project have been categorized as either "less than significant" or "potentially significant." Mitigation measures are recommended for potentially significant impacts, to avoid or lessen impacts. In the event the project results in significant impacts with implementation of mitigation measures, the decision-makers are able to approve a project based on a Statement of Overriding Considerations. This determination would require the decision-makers to provide a discussion of how the benefits of the project outweigh identified unavoidable impacts. The California Environmental Quality Act (CEQA) *Guidelines* provide in part the following:

a) CEQA requires that the decision-maker balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project. If the benefits of the project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."

b) Where the decision of the public agency allows the occurrence of significant effects that are identified in the Final EIR but are not mitigated, the agency must state in writing the reasons to support its action based on the Final EIR and/or other information in the record. This statement may be necessary if the agency also makes the finding under Section 15091 (a)(2) or (a)(3) of the *CEQA Guidelines*.

c) If an agency makes a Statement of Overriding Considerations, the statement should be included in the record of the project approval and should be mentioned in the Notice of Determination (Section 15093 of the *CEQA Guidelines*).

2.5 USE OF THE EIR

It is the intent of this EIR to enable the County of San Bernardino and other responsible agencies and interested parties to evaluate the environmental impacts of the Deep Creek project (refer to Section 3.6, *Required Permits and Approvals*, for a list of responsible agencies having permit approval responsibilities for the project). This EIR will provide the County of San Bernardino with the information required to make an informed decision regarding project-related permits and approvals.

2.6 INCORPORATION BY REFERENCE

In accordance with *CEQA Guidelines*, Section 15150, this EIR incorporates by reference the following documents (available for review at the County of San Bernardino Land Use Services Department located at 385 North Arrowhead Avenue, San Bernardino, CA 92415):

County of San Bernardino General Plan (adopted March 13, 2007). The County of San Bernardino General Plan is a long-range policy-planning document that defines the framework by which the County's physical and economic resources are to be managed over time. The goals and policies contained in the General Plan are provided to guide the County's decision-makers. The seven State-mandated elements are included in the General Plan, including Land Use, Circulation, Housing, Conservation, Open Space, Safety, and Noise. In addition, the County of San Bernardino has chosen to address Economic Development, which is an optional element. Information contained within the General Plan was incorporated herein, because it is the primary source for County policies, objectives, and countywide planning analysis regarding circulation. The circulation element of the General Plan includes a discussion of the County Circulation Map, Congestion Management Program (CMP), scenic routes, public transportation, and circulation infrastructure. The Conservation Element of the General Plan includes a discussion of wildlife resources and biodiversity.

County of San Bernardino General Plan Final EIR (February 2007) (SCH # 2005101038). The General Plan EIR was prepared to assess the potential environmental impacts associated with the proposed General Plan. The EIR summarizes potential environmental impacts associated with implementation of the County's General Plan, including growth inducing and cumulative impacts. Information from the General Plan EIR is incorporated herein, since it contains intensive information pertaining to impacts associated with the implementation of County circulation policies and objectives.

Apple Valley General Plan Update (adopted 1998). The Apple Valley General Plan Update is the Town's long-term policy guide for the physical, economic, and environmental growth and renewal of the Town. The Apple Valley General Plan Update includes goals, policies, and objectives that are based on an assessment of current and future needs, as well as available resources. The General Plan Update is the principal tool for the Town to use when evaluating public and private building projects and municipal service improvements. The Transportation/Traffic Element of the General Plan includes a discussion of the roadway system and circulation infrastructure. The Open Space/Conservation Element of the General Plan includes a discussion of wildlife preservation and wildlife resources.

3.1 PROJECT LOCATION

The project site is located in western San Bernardino County, east of the City of Hesperia, and south of the Town of Apple Valley in the southwestern Mojave Desert; refer to Figure 3-1, *Regional Location Map*. The approximately 249-acre project site is located approximately 10 miles east-northeast of the interchange of Interstate 15 (I-15) and State Route 395 (SR-395). I-15 and SR-395 provide regional access to the project site. The project site is bounded by Deep Creek Road on the west, Mockingbird Avenue on the east, Roundup Way on the north, and Burlington Northern and Santa Fe (BNSF) Railway tracks on the south; refer to Figure 3-2, *Vicinity Map*. Major arterial roadways providing access to the project area include Bear Valley Road, Deep Creek Road, Rock Springs Road, and Apple Valley Road. The project site is located within the Town of Apple Valley's Sphere of Influence.

3.2 ENVIRONMENTAL SETTING

The project site is currently vacant and is covered mostly by grasslands and scattered Joshua trees (*Yucca brevifolia*). Three plant communities occur on the project site: Joshua Tree Woodland, Desert Dunes, and fallow Agricultural Land. The Joshua tree woodland, located at the southeast corner of the site is moderately disturbed by grazing livestock. The remainder of the site has been highly disturbed by intensive grazing, grading, and by weed abatement efforts. The project site sits on alluvium that has been terraced by mass grading and agricultural activities, altering the natural character of the project area. The project site is located approximately one mile east of the Mojave River and drains to the northeast; refer to Figure 3-3, *Aerial Site Map*.

Elevations onsite range from approximately 2,930 feet above mean sea level (msl) on the east to approximately 2,885 feet above msl on the west. The western two-thirds of the site are relatively flat with a very gentle fall toward the north-northwest. The eastern third of the site lies along the western edge of the alluvial fan of the desert region. The intersection of the alluvial fan and the Mojave River floodplain has created a north-south trending moderately steep bluff within the southern portion of the project site. The local climatic conditions in the project area are characterized by hot summers, mild winters, infrequent rainfall, and dry humidity. Rainfall in the project area averages 5.5 inches per year. July is the warmest month, with daily average temperatures of 79 degrees Fahrenheit. January is the coolest month, with a daily average temperature of 44 degrees Fahrenheit.

The project site is situated within an area of rural residential use, agricultural operations, and disturbed land. A single metal building is located onsite and the site is partially fenced. Cattle-related operations are located directly south of the project site. Refer to Table 3-1, *Existing Land Uses and Land Use Districts.*

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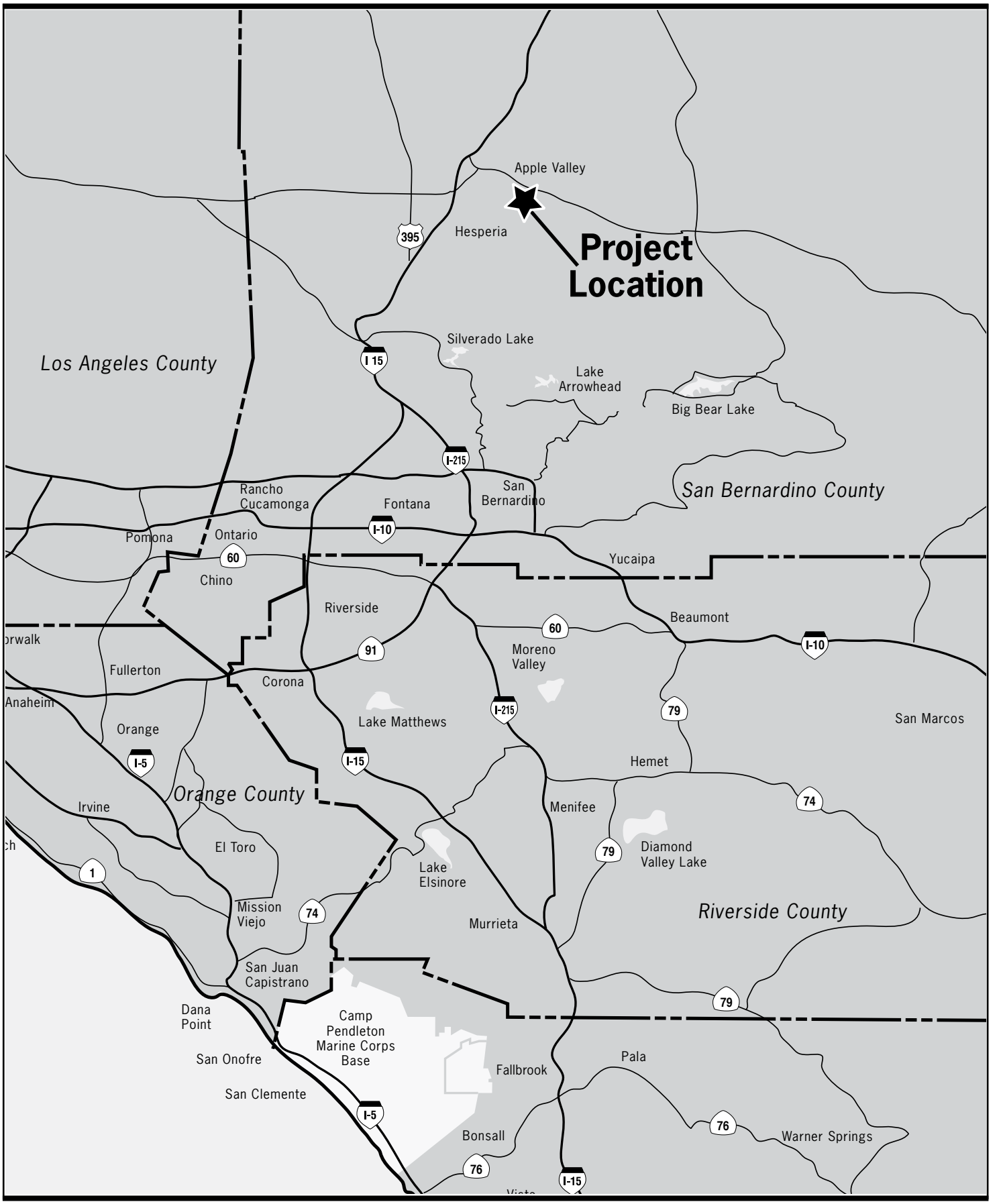

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Regional Location Map

Deep Creek EIR

Figure 3-1

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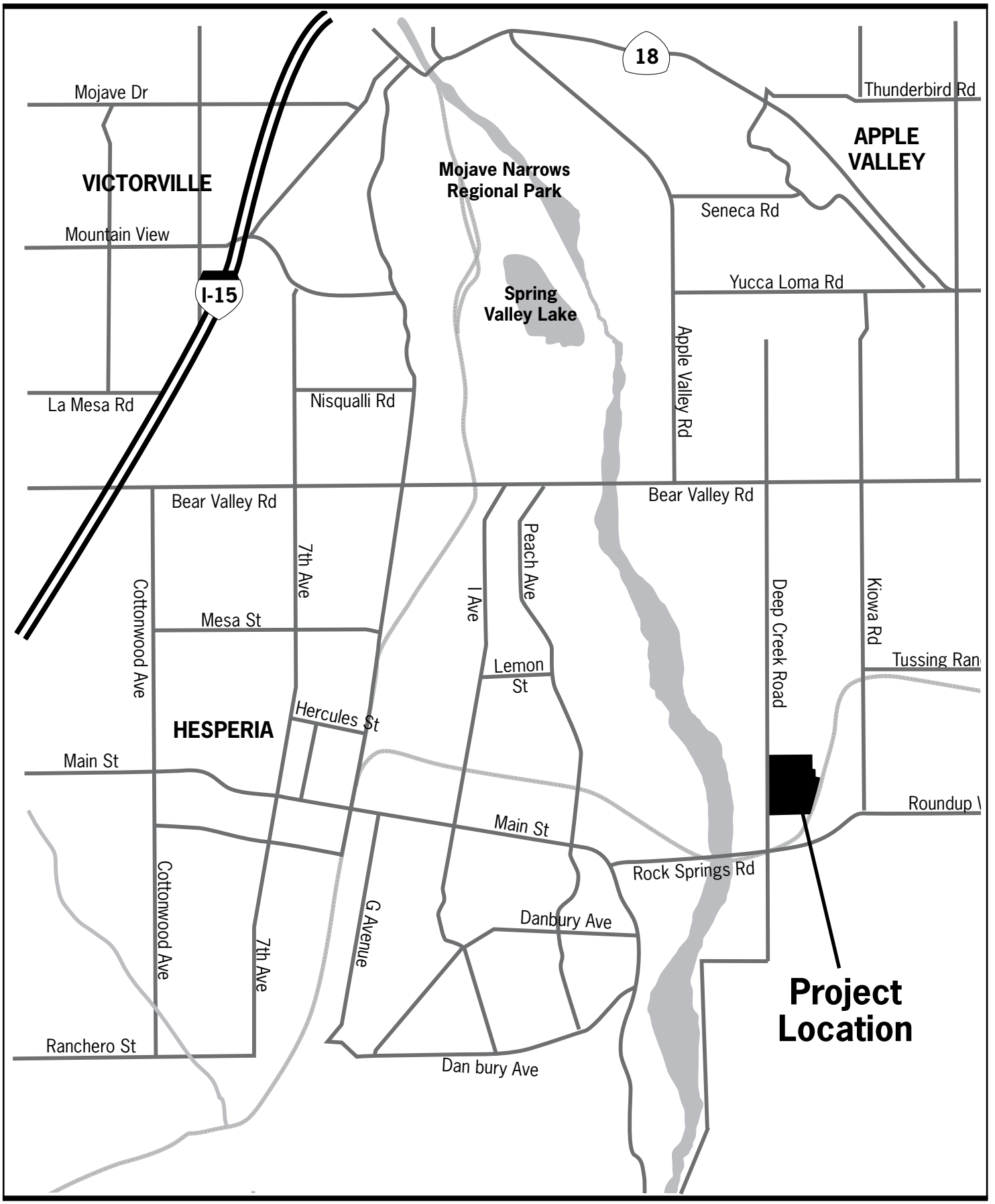

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Vicinity Map

Deep Creek EIR

Figure 3-2

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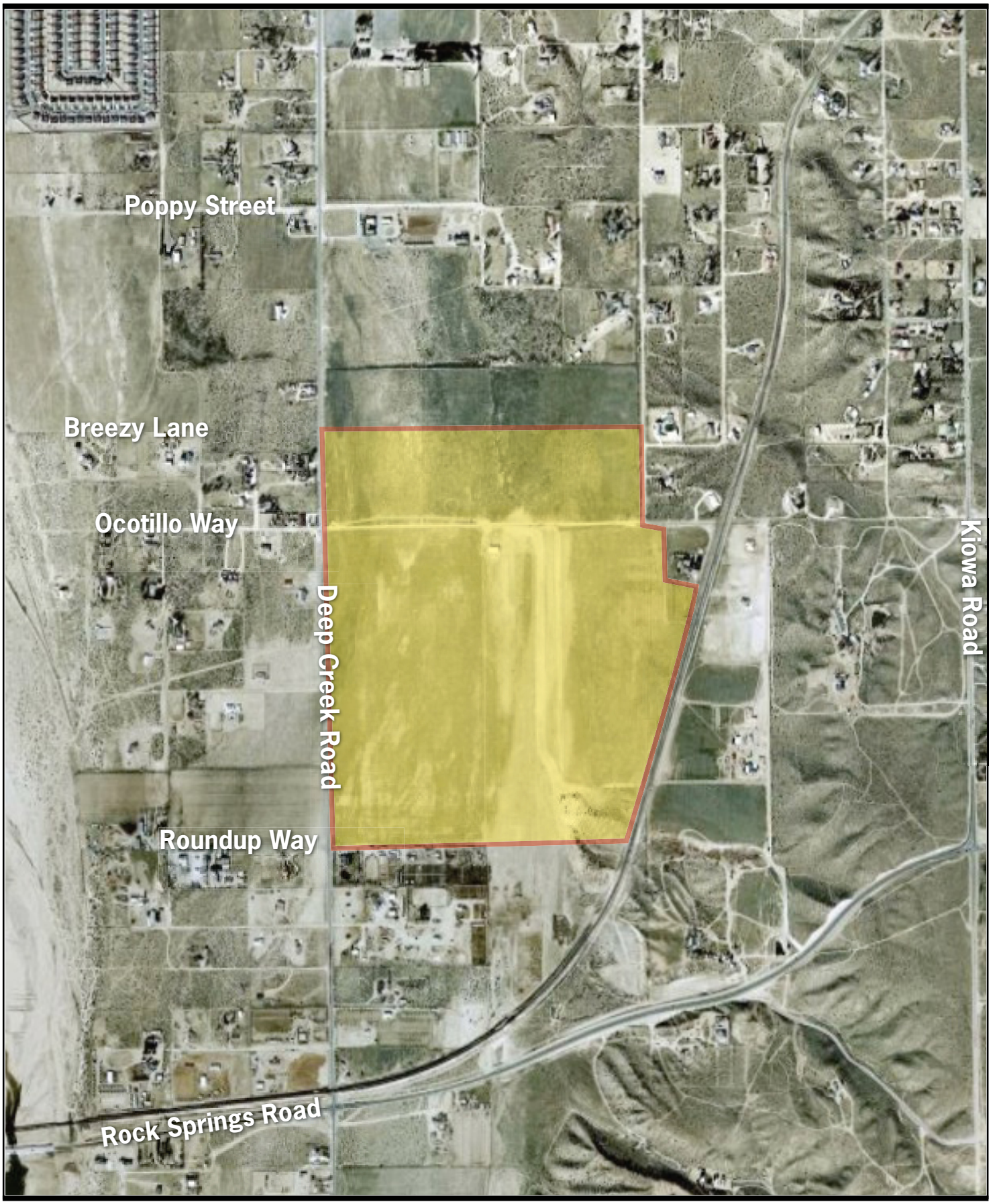

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Aerial Site Map

Deep Creek EIR

Figure 3-3

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Table 3-1
Existing Land Uses and Land Use Districts

Location	Existing Land Use	Existing Land Use District
Onsite	Metal Structure, Well	AG-SCp (Agricultural-Primary Sign Control)
North	Scattered single-family residential dwellings	AG-SCp (Agricultural-Primary Sign Control)
South	Horse Ranch	AG-SCp (Agricultural-Primary Sign Control)
East	BNSF railroad, large single family residential lots	RL-SCp (Rural Living-Primary Sign Control)
West	Large Single Family lots and vacant parcels	AG-SCp (Agricultural-Primary Sign Control)

3.3 BACKGROUND AND HISTORY

On June 9, 2003 Lewis Operating Company ("Applicant") submitted an application to the County of San Bernardino ("County") for approval of a general plan amendment, tentative tract map, and related entitlements (the "Application") to allow development of 202 residential lots on approximately 249 acres in the unincorporated area of the County and within the sphere of influence of the Town of Apple Valley (the "project"). An Initial Study/Mitigated Negative Declaration ("MND") was prepared by County staff for the project for the purpose of complying with the California Environmental Quality Act (CEQA). The MND included various technical studies and other available information. As required by CEQA, the Draft MND was circulated for public review for thirty days (from July 21, 2005, through August 19, 2005). Comments were received from members of the public, including comments regarding land use compatibility, traffic impacts, and impacts to agricultural resources. On October 6, 2005, the County Planning Commission recommended that the County Board of Supervisors adopt the MND and approve the Application. On November 22, 2005, the Board of Supervisors, by unanimous vote, voted to adopt the MND and approve the Application. The previously adopted MND, related technical studies, original Application, and information related to approval of the Application are available for review at the County Planning Department.

On December 21, 2005, Deep Creek Agricultural Association ("Deep Creek"), an unincorporated association of individuals with concerns related to the project, filed Deep Creek Agricultural Association v. County of San Bernardino (Lewis Operating Corporation et al.), in the San Bernardino County Superior Court as Case No. SCV 133 201 (the "Action"). The Action was commenced with a Petition for Writ of Mandate seeking to set aside the approval of the Application, alleging a series of substantive and procedural failures to comply with CEQA. Among the claims asserted by Deep Creek in the Action were allegations that the County had failed to identify or properly mitigate environmental effects of the Project, including those

related to land use, air quality, traffic, loss of agricultural land, water quality, sewage, biological resources, and noise.

On September 13, 2006, the Superior Court heard the arguments of the parties in Action and announced its ruling. On November 2, 2006, a judgment (the "Judgment") reflecting the previously-announced ruling was signed by the Court and subsequently entered. The Judgment was entered in favor of Deep Creek on the basis that Deep Creek had "provided substantial evidence that a fair argument exists that the project does not comply with [CEQA] because [the County] has inadequately studied the project's traffic impacts." With respect to all other allegations of Deep Creek in the Action, the Court ruled in favor of the County.

The judgment vacated all project approvals and directed that, if the County was to exercise "its lawful discretion to re-approve the project," the County must first prepare an environmental impact report ("EIR") to "address the potential traffic impacts of the project." The Judgment also stated that, pursuant to Public Resources Code § 21168.9, the only required additional analysis to be contained in the [EIR]…shall be an analysis of the potential traffic effects of the project."

Deep Creek filed a timely appeal of the Judgment to the Court of Appeal of the State of California, Fourth Appellate District (the "Court of Appeal"). Among the claims asserted by Deep Creek in the appeal were allegations that the Superior Court erred in requiring the County only to assess traffic impacts of the project, and that the County should have been order to further identify and/or properly mitigate certain environmental effects of the project. On March 24, 2008, the Court of Appeal determined that, in addition to assessing traffic impacts, the County must also provide additional analysis of the project's impacts upon biological resources.

Consistent with Section 15070 (b)(1) of the *CEQA Guidelines*, the Applicant had agreed to all revisions in the original project plans and mitigation measures reflected in the MND. The Project Description set forth below consists of the project as approved by the Board of Supervisors on November 22, 2005, and includes those revisions and mitigation measures set forth in the MND. Therefore, consistent with the Court's ruling in the Action, Section 15006 (d) of the *CEQA Guidelines*, and that Project Description, the scope of the EIR to be prepared for approval of the project has been narrowed down to an analysis of the potential traffic and biological effects of the project.

3.4 PROJECT CHARACTERISTICS AND DESIGN FEATURES

The proposed project is a request for a General Plan Amendment to change the official land use district from AG-SCp (Agricultural with a primary sign control overlay) to RS-20m (Single Residential with a 20,000-square foot minimum parcel size) and Tentative Tract 16569 for 202 single-family residential lots and 6 lettered lots to be developed in four phases on approximately 249 acres in an unincorporated area of San Bernardino County. The lot sizes

would average approximately 43,051 square feet, with the median lot size being 43,948 square feet. Of the proposed 202 lots, 68 lots located on the upper terrace of the project site would measure less than an acre in size (0.74 acre minimum).

In addition to the construction of 202 residential units and six lettered lots, the project also includes the construction of a drainage corridor trending in a north-south direction through the western half of the project site. Additionally, the project proposes the construction of approximately 25,300 linear feet of new streets and a perimeter wall surrounding the project site. Refer to Figure 3-4, *Site Plan.*

The proposed project would be developed in four phases (Phase 1, 54 lots; Phase II, 60 lots; Phase III, 46 lots; and Phase IV, 42 lots).

Characteristics unrelated to traffic and biological resources are included for informational purposes only and are not subject to further consideration by the County pursuant to the Court's judgment.

3.5 PROJECT OBJECTIVES

The objectives of the project include the following:

1. To create a balance between the existing scattered residential development in the immediate area of the project and the greater densities of the Town of Apple Valley, in whose sphere of influence the property lies.

2. To efficiently utilize the project site.

3. To avoid more intense urbanization by providing homes with significantly larger lots than found in typical new County subdivisions.

4. To develop homes which will be compatible with, though not identical to, homes in the immediate vicinity which are located on larger lots.

5. To build homes which will be adequately served by existing and enhanced infrastructure without adversely impacting the ongoing infrastructure needs of current area residents.
   Objectives unrelated to traffic and biological resources are included for informational purposes only and are not subject to further consideration by the County pursuant to the Court's judgment.

3.6 REQUIRED PERMITS AND APPROVALS

The following is a list of Lead and Responsible agencies and the associated approvals and permits that are anticipated to be required for the proposed project. Approvals regarding the project as a whole (i.e., the General Plan Amendment, the Tentative Tract Map, and the EIR certification), would be made by the Board of Supervisors. The Planning Commission would be a recommending body for the purposes of the project and EIR Certification. The following approvals and permits are anticipated as part of the proposed project:

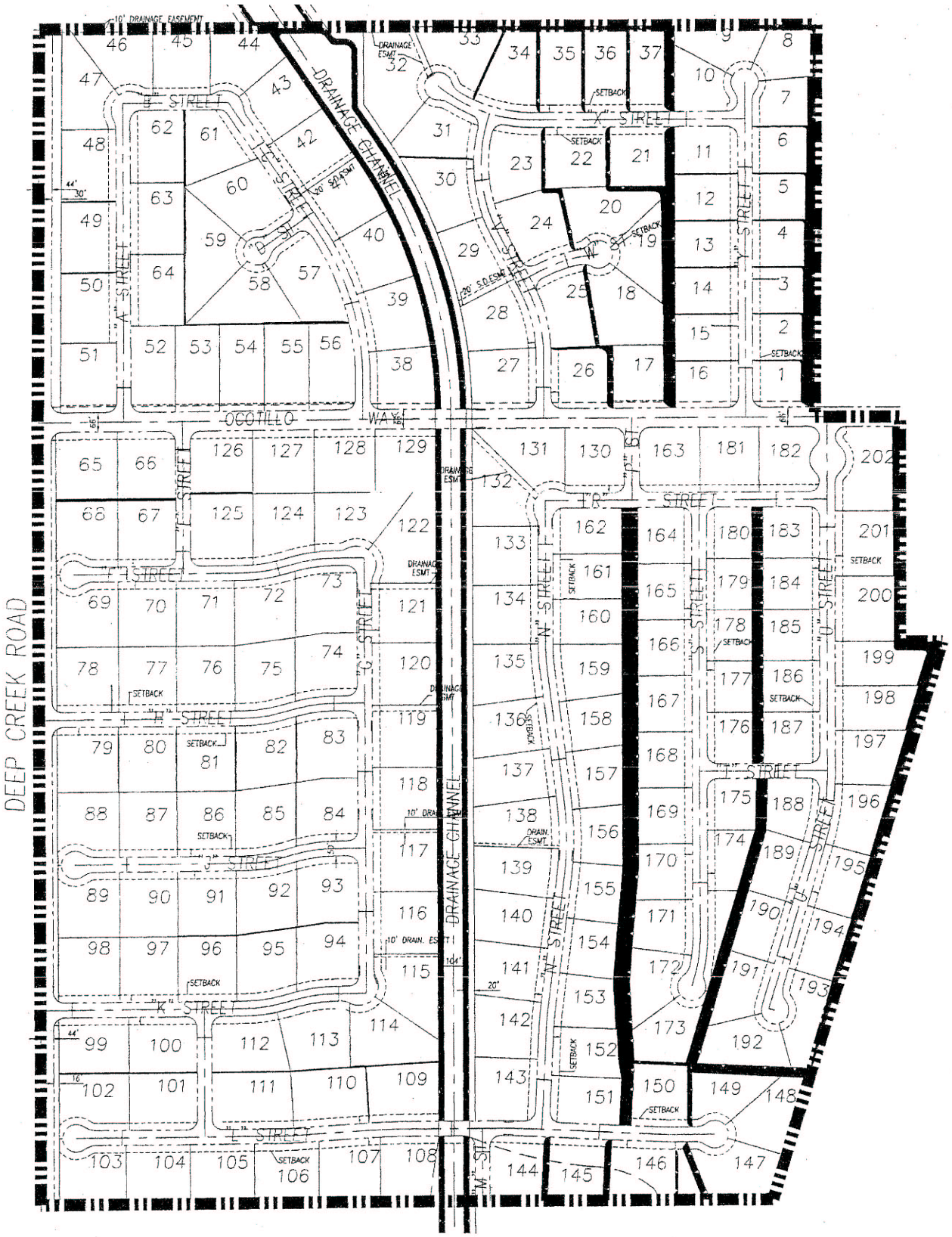
Lead Agency (San Bernardino County)

- General Plan Amendment
- Tentative Tract Map
- EIR Certification

Responsible Agency (Santa Ana Regional Water Quality Control Board)

- NPDES Permit

Required permits and approvals unrelated to traffic and biological resources are included for informational purposes only and are not subject to further consideration by the County pursuant to the Court's judgment.



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Site Plan

Deep Creek EIR

Figure 3-4

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4.0 ENVIRONMENTAL ANALYSIS

Consistent with the Court's ruling in the Action, Subsections 4.1 and 4.2 of the EIR contains a detailed environmental analysis of the existing conditions, project impacts (including direct and indirect, short-term and long-term, and cumulative), recommended mitigation measures, and unavoidable adverse impacts related to transportation and circulation and biological resources. This EIR analyzes those environmental issue areas as stated in the Notice of Preparations (Appendix A, Notice of Preparation) where potentially significant impacts have the potential to occur.

The EIR will examine the following environmental factors outlined in the *CEQA Guidelines* Appendix G, Environmental Checklist:

4.1 Transportation and Circulation
4.2 Biological Resources

Each environmental issue is addressed in a separate section of the EIR, and is organized into the following sections:

- "Existing Conditions" describes the physical conditions that exist at this time and that may influence or affect the issue under investigation.

- "Regulatory Setting" describes the pertinent policy, standards, and codes that exist at this time and that may influence or affect the regulatory environment of the proposed project.

- "Significance Criteria" provides the thresholds that are the basis of conclusions of significance, which are primarily the criteria in the *CEQA Guidelines* Appendix G, Environmental Checklist.

Major sources used in crafting criteria include the *CEQA Guidelines*; local, State, Federal, or other standards applicable to an impact category; and officially established significance thresholds. *"…An ironclad definition of significant effect is not possible because the significance of any activity may vary with the setting."* (*CEQA Guidelines* Section 15064[b]). Principally, *"…a substantial, or potentially substantial adverse change in any of the physical conditions within an area affected by the project, including land, air, water, flora, fauna, ambient noise, and objects of historic and aesthetic significance"* constitutes a significant impact (*CEQA Guidelines* Section 15382).

Impacts

- The "Level of Significance" identifies the impact significance level with implementation of the Deep Creek project. Impacts are classified as potentially significant impact, less than significant impact, or no impact.

- Project impacts are the potential environmental changes to the existing physical conditions that may occur if the proposed project is implemented.

- Evidence, based on factual and scientific data, is presented to show the cause-and-effect relationship between the proposed project and the potential changes in the environment. The exact magnitude, duration, extent, frequency, range, or other parameters of a potential impact are ascertained, to the extent possible, to determine whether impacts may be significant; potential direct and reasonably foreseeable indirect effects are considered to the extent feasible.

- Mitigation measures are those project-specific measures that would be required of the project to avoid a significant adverse impact; to minimize a significant adverse impact; to rectify a significant adverse impact by restoration; to reduce or eliminate a significant adverse impact over time by preservation and maintenance operations; or to compensate for the impact by replacing or providing substitute resources or environment.[1]

- "Cumulative Impacts and Mitigation Measures" describes potential environmental changes to the existing physical conditions that may occur with the proposed project together with all other reasonably foreseeable, planned, and approved future projects.

- "Significant Unavoidable Impacts" describes impacts that would be significant, but cannot be feasibly mitigated to less than significant; thus, they would be unavoidable. To approve a project with unavoidable significant impacts, the Lead Agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the Lead Agency is required to balance the benefits of a project against its unavoidable environmental impacts in determining whether to approve the project. If the benefits of a project are found to outweigh the unavoidable adverse environmental effects, the adverse effects may be considered "acceptable" and the project approved (*CEQA Guidelines* Section 15093[a]).

[1]The measures presented in this EIR are either "project design features" (those that would be implemented as part of project design) or mitigation measures (those that would mitigate project impacts above and beyond any reduction in impacts accomplished by project design features).

4.1 TRANSPORTATION & CIRCULATION

This section analyzes the forecast traffic impacts associated with the proposed Deep Creek project (project), consisting of 202 residential-lots, located on approximately 249 acres in the unincorporated area of the County of San Bernardino and within the sphere of influence of the Town of Apple Valley. This section is based on the *Traffic Impact Analysis*, prepared by Urban Crossroads (November 12, 2007, revised October 8, 2009), the *Congestion Management Program for San Bernardino County* (December 3, 2003); and the *2000 Highway Capacity Manual* (Transportation Research Board Special Report). The *Traffic Impact Analysis* is available in Appendix C of this EIR.

TRAFFIC STUDY METHODOLOGY & BACKGROUND

PROJECT LOCATION

The proposed project site is located in western San Bernardino County, east of the City of Hesperia, and south of the Town of Apple Valley in the southwestern Mojave Desert. The approximately 249-acre project site is located approximately 10 miles east-northeast of the interchange of Interstate 15 (I-15) and State Route 395 (SR-395). The project site is bounded by Deep Creek Road on the west, Mocking Bird Avenue on the East, Roundup Way on the north, and Burlington Northern and Santa Fe (BNSF) Railway Tracks on the south.

ROADWAY DESCRIPTIONS

The characteristics of the roadway system in the vicinity of the project site are described below:

- **Interstate 15** (I-15) provides regional access to the project site trending in a north-south direction.
- **Bear Valley Road** is a four-lane divided roadway trending in an east–west direction.
- **Main Street** varies from a two lane undivided road to a four lane divided road trending in an east-west direction.
- **Rock Springs Road** travels in an east-west direction.
- **Deep Creek Road** is a two lane undivided roadway trending in a north-south direction.
- **Kiowa Road** travels in a north-south direction.

EXISTING LEVEL OF SERVICE

Urban Crossroads conducted traffic counts during the weekday AM and PM peak hours of traffic to quantify existing conditions on January 17, 2007. The study area and the methodology used are described below:

Study Area Intersections

County of San Bernardino staff determined that the following intersections should be included for analysis in this study; refer to Figure 4.1-1, *Study Intersections and Existing Geometry*.

City of Hesperia

- "I" Avenue/Main Street (traffic signal)
- Peach Avenue/Main Street (traffic signal);
- Main Street/Rock Springs Road (cross street stop);

Town of Apple Valley

- Apple Valley Road/Bear Valley Road (traffic signal);
- Deep Creek Road/Bear Valley Road (cross street stop);
- Deep Creek Road/Tussing Ranch Road (cross street stop);
- Kiowa Road/Bear Valley Road (traffic signal);

County of San Bernardino

- Deep Creek Road/Roundup Way ((cross street stop);
- Deep Creek Road/Rock Springs Road (traffic signal); and,
- Kiowa Road/Rock Springs Road (all way stop).

Level of Service Criteria

For roadways within the City of Hesperia, D or better is the acceptable Level of Service. Therefore roadways receiving ratings of E or F are considered to be deficient. However, for roadways within the Town of Apple Valley and the County of San Bernardino, the acceptable Level of Service is C or better. Therefore roadways receiving the ratings of D, E, or F are considered deficient.

METHODOLOGY

Overall Methodology

Traffic counts were utilized to reflect existing traffic flow patterns. Other data pertaining to intersection geometrics, on-street parking restrictions, and traffic signal operations were obtained through surveys of the study locations.

Project traffic volumes for all future conditions projections were estimated using a manual approach. The trip generation calculation is based on the most recent *Institute of Transportation*

Engineers Trip Generation Rates, 7th Edition. The San Bernardino Associated Governments (SANBAG) transportation model was used to evaluate the distribution and likely travel routes of the project traffic for interim year 2015 and future year 2030 conditions.

The Comprehensive Transportation Plan (CTP) traffic model was used to evaluate the future year 2030 without and with the proposed project. This subregional demand model is currently being used for long range planning in San Bernardino County and was the only approved travel demand forecasting tool by SANBAG and Southern California Association of Governments (SCAG), at the time this study was initiated. Since the existing conditions traffic count data was collected in 2007, the overall growth model was adjusted in order to reflect future year 2030 conditions. This model included a growth factor that was applied to establish overall growth and determine the 2030 traffic volumes. The resulting trip distributions for both the interim year 2015 and future year 2030 conditions were submitted to the County of San Bernardino staff for review and approval.

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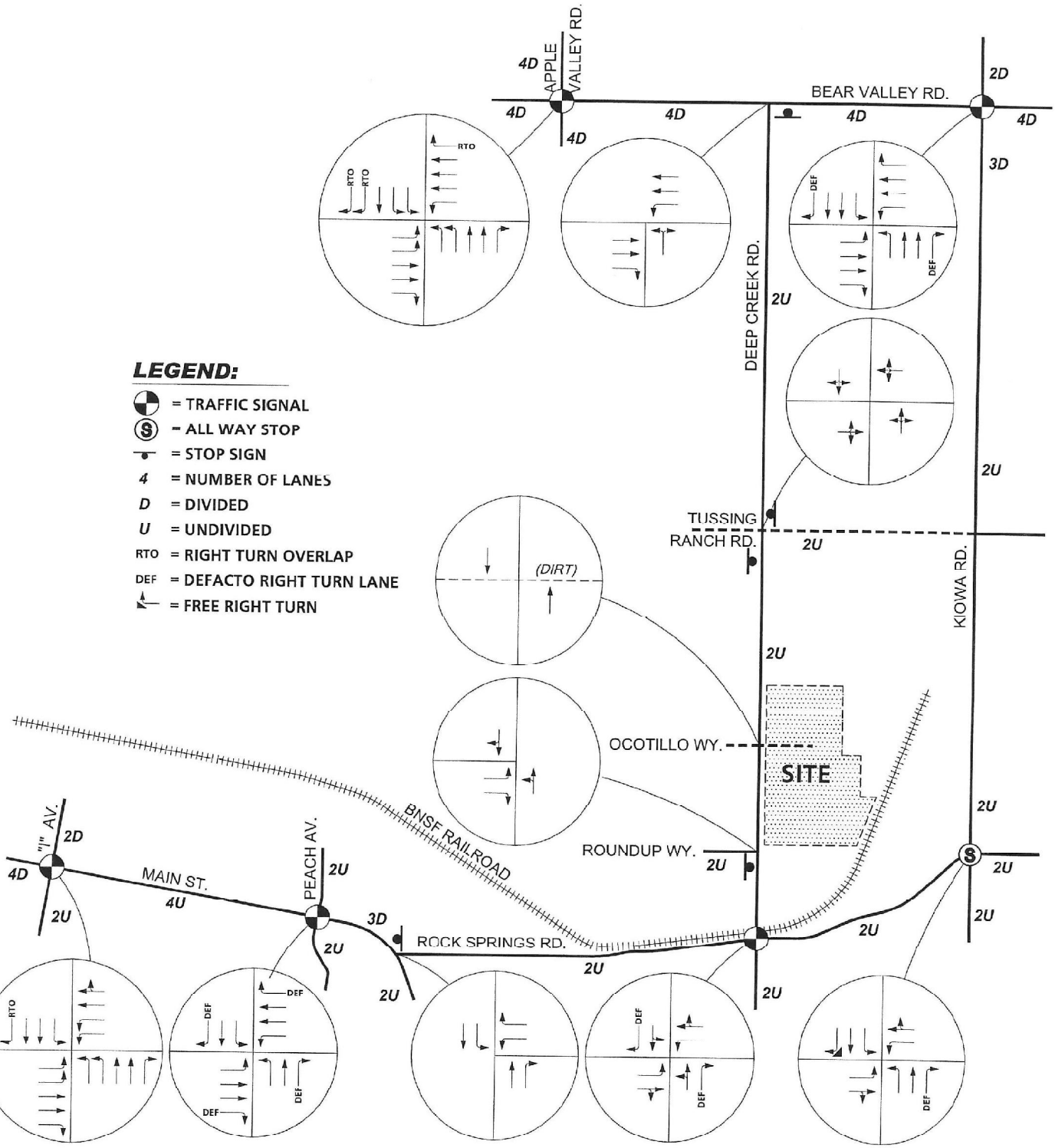

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Study Intersections and Existing Geometry

Deep Creek EIR

Figure 4.1-1

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Traffic Operations Analysis Methodology

The commonly used guidelines for grading of the operational quality of an intersection is the Level of Service (LOS), which describes various levels of traffic flow, based on the type of traffic control and delay experienced at the intersection. The *Highway Capacity Manual* (HCM) analysis methodology for signalized intersections and unsignalized intersections is utilized to determine the operating LOS of the study intersections. The LOS for all movements of signalized intersections and all-way stop-controlled intersections is based on the average stopped delay per vehicle; for one-way or two-way stop-controlled intersections, LOS is based on the worst stop-controlled movement.

LOS grades A to C operate with little to no delay. Level D grade is typically the level for which a metropolitan area street system is designed. Level E represents traffic volumes at or near the capacity of the highway at which stoppages of momentary duration and fairly unstable flow will be likely. Level F occurs when a facility is overloaded and is characterized by stop-and-go traffic and stoppages of long duration. The County of San Bernardino target for peak hour intersection operation is LOS C or better. Refer to Table 4.1-1, *LOS and Delay Ranges*.

Table 4.1-1
LOS and Delay Ranges

LOS	Delay (seconds/vehicle)	
	Signalized Intersections	Unsignalized Intersections
A	< 10.0	< 10.0
B	> 10.1 to < 20.0	> 10.1 to < 15.0
C	> 20.1 to < 35.0	> 15.1 to < 25.0
D	> 35.1 to < 55.0	> 25.1 to < 35.0
E	> 55.1 to < 80.0	> 35.1 to < 50.0
F	> 80.1	> 50.1

Source: Transportation Research Board, 2000.

Existing Conditions Peak Hour Traffic Volumes

To determine the existing operation of the study intersections, Urban Crossroads took traffic counts on weekdays, during peak traffic periods: from 7:00 to 9:00 AM and from 4:00 to 6:00 PM. The peak hour counts used in this traffic analysis are the highest hourly count within each peak period at each intersection. The AM and PM peak hour represents the time period within which the highest volume of traffic is traveling through each study intersection. Accordingly,

the AM and PM peak hours represent the time period where impacts at study intersections will be the greatest.

At County staff direction, these traffic counts were classified by the type of vehicle and number of axles. Because vehicles larger than passenger cars have a proportionately greater effect on traffic flow, their counts were given more weight by applying the following "passenger car equivalent" (PCE) factors:

- Bus/Recreational Vehicles = 1.5 PCE;
- 3-axle = 2 PCE; and
- 4-axle + = 3 PCE.

Figure 4.1-2, *Existing AM Peak Hour Intersection Volumes,* and Figure 4.1-3, *Existing PM Peak Hour Intersection Volumes*, show existing AM and PM peak hour volumes at the study intersections. Detailed peak hour traffic count data are included in Appendix C.

Existing Conditions Peak Hour Level of Service

Table 4.1-2, *Existing Conditions Intersection Analysis Summary,* summarizes existing conditions during the AM and PM peak hours, the average stopped delay per vehicle in seconds, and corresponding LOS of each study intersection, based on the existing peak hour intersection volumes shown in Figures 4.1-2 and 4.1-3. Detailed Highway Capacity Manual (HCM) analysis sheets are provided in Appendix C.

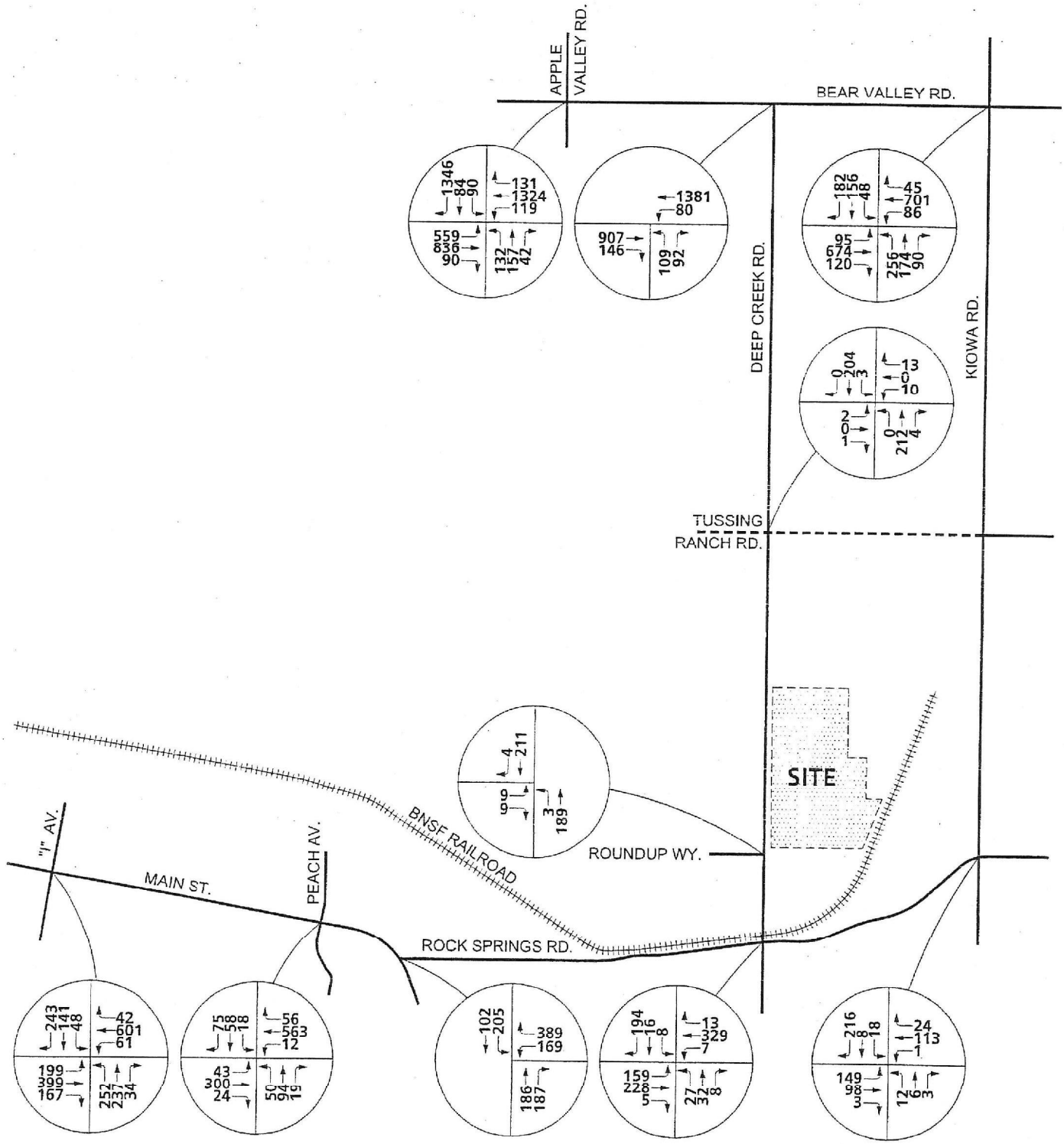
As shown in Table 4.1-2, the study intersections currently operate at acceptable levels of service during the peak hours except at the following intersections:

City of Hesperia

- Main Street/Rock Springs Road;

Town of Apple Valley

- Apple Valley Road/Bear Valley Road;
- Deep Creek Road/Bear Valley Road; and,
- Kiowa Road/Bear Valley Road.



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Existing AM Peak Hour Intersection Volumes

Deep Creek EIR

Figure 4.1-2

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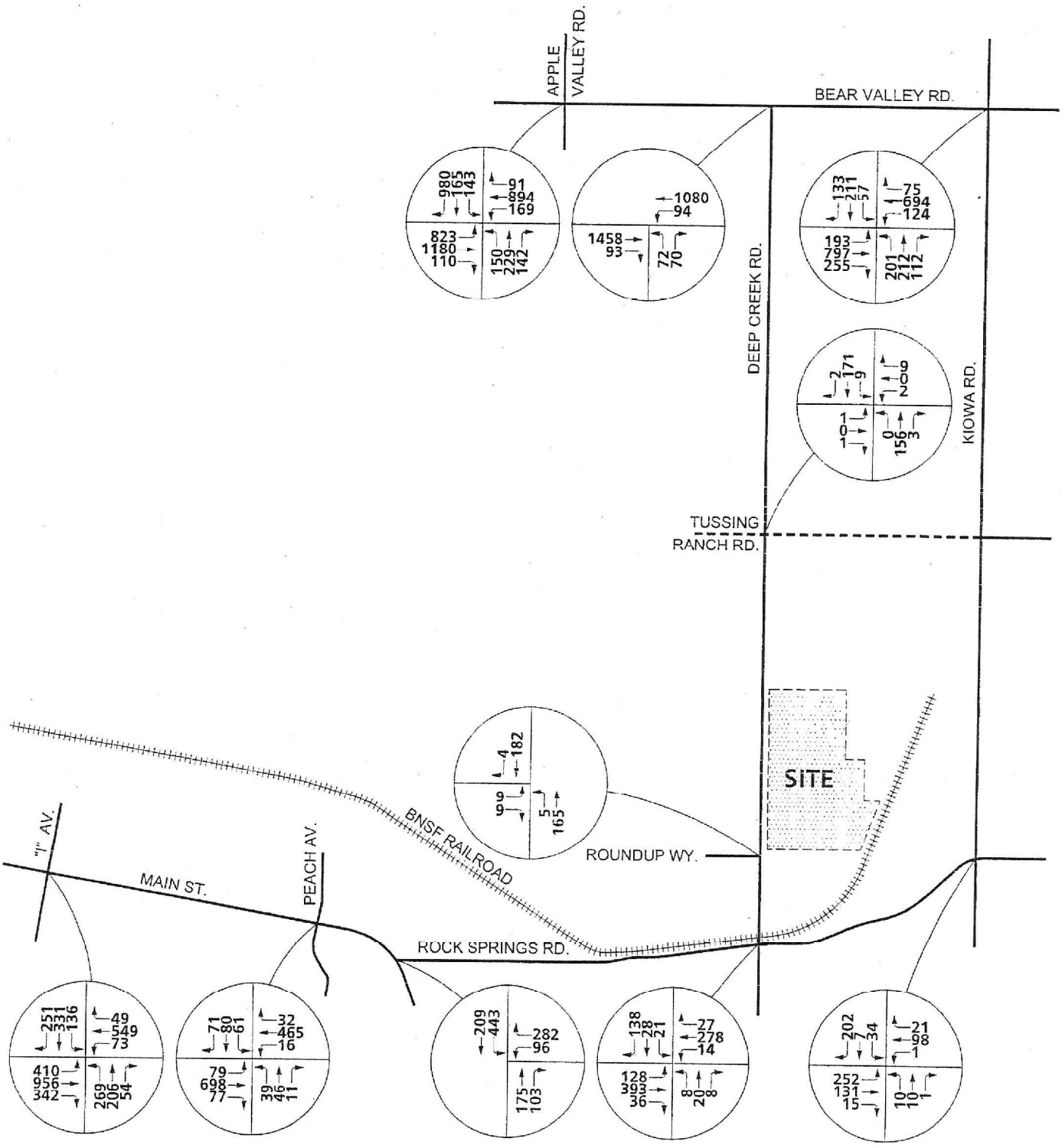

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Existing PM Peak Hour Intersection Volumes

Deep Creek EIR

Figure 4.1-3

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Table 4.1-2
Existing Conditions Intersection Analysis Summary

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
City of Hesperia																	
"I" Avenue (NS) at: • Main Street (EW)	TS	2	2	1	1	2	1>	2	2	1	2	2	0	30.8	35.3	C	D
Peach Avenue (NS) at: • Main Street (EW)	TS	1	1	1	1	1	1	1	2	1	1	2	1	21.1	19.7	C	B
Main Street (NS) at: • Rock Springs Road (EW)	CSS	0	1	1	1	1	0	0	0	0	1	0	1	45.9	--[4]	E	F
Town of Apple Valley																	
Apple Valley Road (NS) at: • Bear Valley Road (EW)	TS	2	2	1	2	1	2>	2	2	1	1	3	1>	42.3	42.3	D	D
Deep Creek Road (NS) at:																	
• Bear Valley Road (EW)	CSS	0	1	0	0	0	0	0	2	1	1	2	0	--[4]	--[4]	F	F
• Tussing Ranch Road	CSS	0	1	0	0	1	0	0	1	0	0	1	0	11.0	10.1	B	B
Kiowa Road (NS) at:																	
• Bear Valley Road (EW)	TS	1	2	1	1	2	1	1	2	1	1	2	1	37.6	36.2	D	D
County of San Bernardino																	
Deep Creek Road (NS) at:																	
• Ocotillo Way	--	DOES NOT EXIST												--	--	--	--
• South Project Access	--	DOES NOT EXIST												--	--	--	--
• Roundup Way	CSS	0	1	0	0	1	0	1	0	1	0	0	0	11.6	11.2	B	B
• Rock Springs Road (EW)	TS	0.5	0.5	1	0.5	0.5	1	1	1	0	1	1	0	25.3	19.4	C	B
Kiowa Road (NS) at:																	
• Rock Springs Road (EW)	AWS	1	1	1	1	1	1>>	1	1	0	1	1	0	9.0	10.2	A	B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right-turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right Turn Overlap Phase; >> = Free Right Turn Lane

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.8 R5 (2007). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop TS = Traffic Signal AWS = All Way Stop [4] -- = Delay High, Intersection Unstable, Level of Service "F"

Interim Year 2015 Without Project Conditions

The proposed project is planned to open in 2010. Therefore, interim year 2015 without project conditions are analyzed first, and then used as a basis of comparison with the projected interim year 2015 with project conditions. Interim year 2015 without project conditions consists of existing (2007) plus ambient growth plus future projects conditions. Traffic counts from 2007 were used in the analysis as a more conservative worst case due to the traffic depression realized in the 2009 count as a result of the current economic conditions.

Nine other projects in the vicinity of the project site have been identified by the Town of Apple Valley, City of Hesperia, and County of San Bernardino, as being in the planning stages or recently approved. Some of these projects may have been constructed after the collection of 2007 traffic count data. The cumulative projects list remained unchanged to ensure a conservative worst case analysis indicative of more typical economic conditions. While it is possible that one or more of these projects may not be approved or built, in the interests of analyzing a worst-case scenario, these nine projects will be assumed to be built and generating trips in the near future. The without project scenario includes the trips generated by these nine projects plus an ambient growth rate factor of three percent (as directed by the County of San Bernardino) to existing traffic conditions to reflect interim year 2015 conditions. Future projects trip generation and assignment data were determined using rates from the Institute of Transportation Engineers (ITE) *Trip Generation* rates. Table 4.1-3, *Future Projects Trip Generation Rates* contains the trip rates used for the nine projects. Table 4.1-4, *Future Projects Trip Generation,* contains the corresponding trip generation for the nine projects included in the cumulative analysis.

Table 4.1-3
Future Projects Trip Generation Rates

LAND USE	ITE CODE	UNITS	PEAK HOUR						DAILY
			AM			PM			
			IN	OUT	TOTAL	IN	OUT	TOTAL	
Other Development Trip Rates:									
Single Family Detached Residential	210	DU	0.19	0.56	0.75	0.65	0.36	1.01	9.57
Fast Food Restaurant W/Drive Thru	934	DU	27.09	26.02	53.11	18.01	16.63	34.64	496.12
Shopping Center	820	TSF	0.63	0.40	1.03	1.80	1.95	3.75	42.94
Movie Theatre with Matinee	444	SEATS	0.00	0.00	0.00	0.03	0.05	0.08	0.36
Health/Fitness Club	492	TSF	0.51	0.70	1.21	2.07	1.98	4.05	32.93

Sources: Tentative Tract 17252 Traffic Study dated April 2005 (prepared by LSA Associates), Tentative Tract Map NO. 17557
TIA dated June 1, 2006 (prepared by Kunzman Associates), and Sierra Bella Traffic Impact Analysis dated May 25, 2006 (prepared by Kunzman Associates).
Trip rates for the Rancho Lucerne project have been obtained from the Tentative Tract Map No. 17557 TIA dated June 1, 2006 (prepared by Kunzman Associates).
Trip rates for the Jess Ranch Marketplace project have been obtained from the Jess Ranch Marketplace TIA (prepared by RBF) provided by the Town of Apple Valley.
DU = Dwelling Units TSF = Thousand Square Feet

Table 4.1-4
Future Projects Trip Generation

NAME	LAND USE	TOTAL DEVELOPMENT	UNITS[1]	PEAK HOUR						DAILY
				AM			PM			
				IN	OUT	TOTAL	IN	OUT	TOTAL	
Tentative Tract Map No. 17252	Single Family Residential	130	DU	25	73	98	85	47	131	1,244
Tentative Tract Map No. 17557	Single Family Residential	205	DU	39	115	154	133	74	207	1,962
Rancho Lucerne[2]	--	--	--	910	2,520	3,430	3,080	1,740	4,820	45,800
Sierra Bella	Single Family Residential	280	DU	53	157	210	182	101	283	2,680
Tentative Tract Map No. 17500	Single Family Residential	97	DU	18	54	73	63	35	98	928
Tentative Tract No. 17615	Single Family Residential	44	DU	9	25	34	29	16	45	421
Jess Ranch Marketplace[3]	Fast Food Restaurant W/Drive Thru	10	TSF	271	260	531	180	166	346	4,961
	ITE Pass-by Reduction (-49% AM,- 50% PM)			-133	-127	-260	-90	-83	-173	-433
	Shopping Center	116	TSF	73	46	119	208	226	434	4,972
	ITE Pass-by Reduction (-34% PM)			N/A	N/A	N/A	-71	-77	-148	-148
	Movie Theatre With Matinee	2,000	SEATS	0	0	0	60	100	160	720
	Health / Fitness Club	42	TSF	21	29	51	87	83	170	1,383
JESS RANCH MARKETPLACE TOTAL				232	208	440	374	415	790	11,455
Skyline Residential	Single Family Residential	172	DU	33	96	129	110	64	174	1,646
Tract 15811	Single Family Residential	35	DU	7	20	26	23	13	35	335
TOTAL TRIPS				**1,326**	**3,268**	**4,594**	**4,079**	**2,505**	**6,583**	**66,471**

[1] DU = Dwelling Units
[2] Trip generation for the Rancho Lucerne project have been obtained from the Tentative Tract Map No. 17557 TIA dated June 1, 2006 (prepared by Kunzman Associates)
[3] Trip generation for the Jess Ranch Marketplace have been obtained from the Jess Ranch Marketplace TIA (prepared by RBF) provided by the Town of Apple Valley

Interim Year 2015 Without Project Conditions Peak Hour Traffic Volumes

Traffic volumes for the interim year 2015 are based on the interpolation of the interim year 2015 without project daily traffic volumes with the 2030 daily traffic forecasts. To determine interim year 2015 without project conditions peak hour traffic volumes of the study intersections, future projects-generated trips and a growth rate factor of three percent per year were added to existing conditions, AM and PM peak hour traffic volumes.

Figure 4.1-4, *Interim Year Without Project AM Peak Hour Intersection Volumes,* and Figure 4.1-5, *Interim Year Without Project PM Peak Hour Intersection Volumes,* show the corresponding peak hour volumes under without project conditions at the study intersections.

Interim Year 2015 Without Project Conditions Peak Hour Level of Service

Table 4.1-5, *Interim Year 2015 Without Project Conditions AM/PM Peak Hour Study Intersection LOS* summarizes interim year 2015 without project conditions AM and PM peak hour average stopped delay per vehicle and corresponding LOS of the study intersections based on the future year 2015 without project conditions peak hour intersection volumes shown in Figure 4.1-4, *Interim Year 2015 Without Project AM Peak Hour Intersection Volumes,* and Figure 4.1-5, *Interim Year 2015 Without Project PM Peak Hour Intersection Volumes*. Detailed analysis sheets are provided in Appendix C of the EIR.

As shown in Table 4.1-5, the following intersections are projected to operate at a deficient LOS per the significance criteria of the City of Hesperia or Town of Apple Valley for interim year 2015 without project conditions:

City of Hesperia

- Main Street/Rock Springs Road;

Town of Apple Valley

- Apple Valley Road/Bear Valley Road;
- Deep Creek Road/Bear Valley Road; and,
- Kiowa Road/Bear Valley Road.

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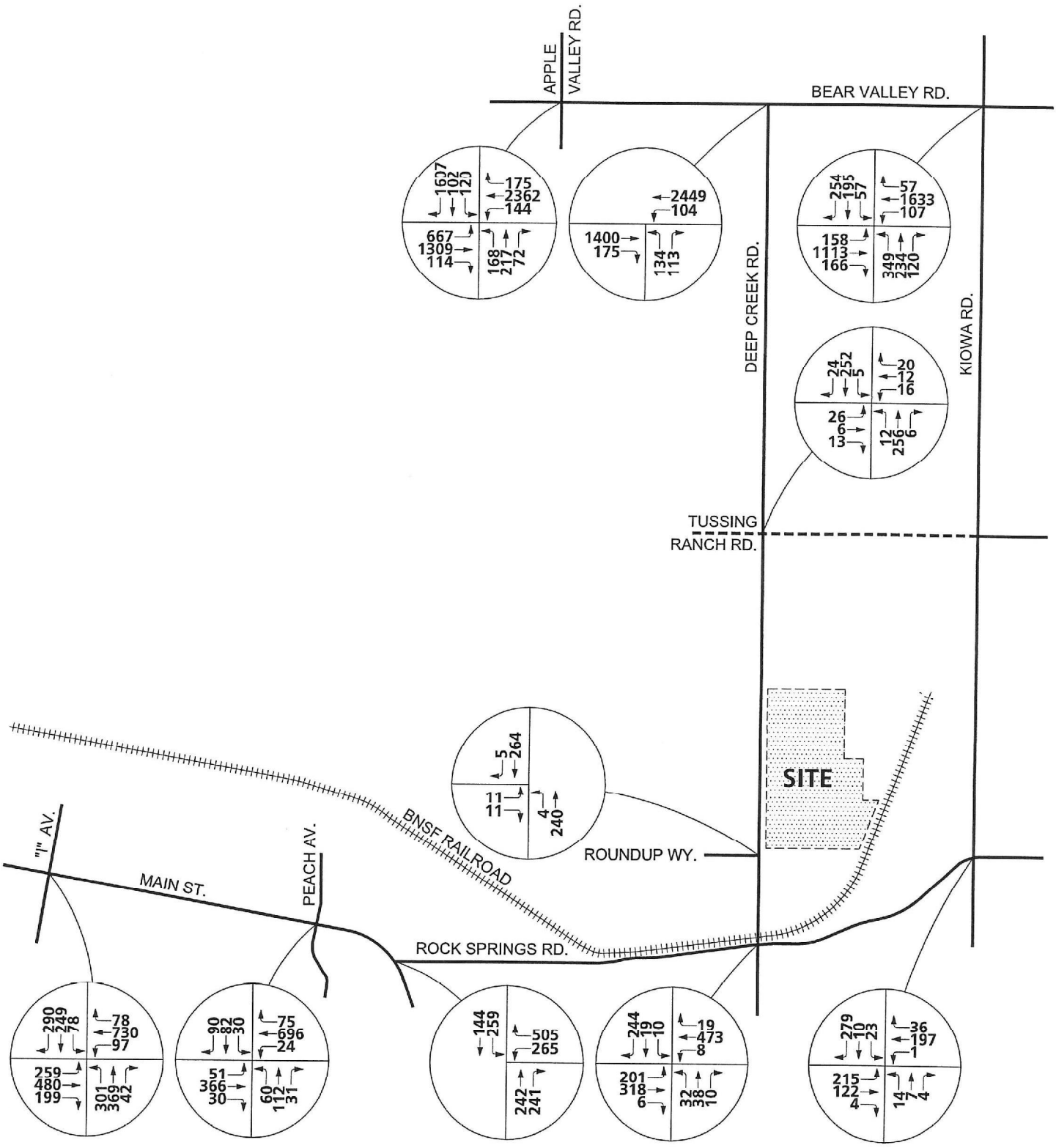

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Interim Year Without Project
AM Peak Hour Intersection Volumes

Deep Creek EIR

Figure 4.1-4

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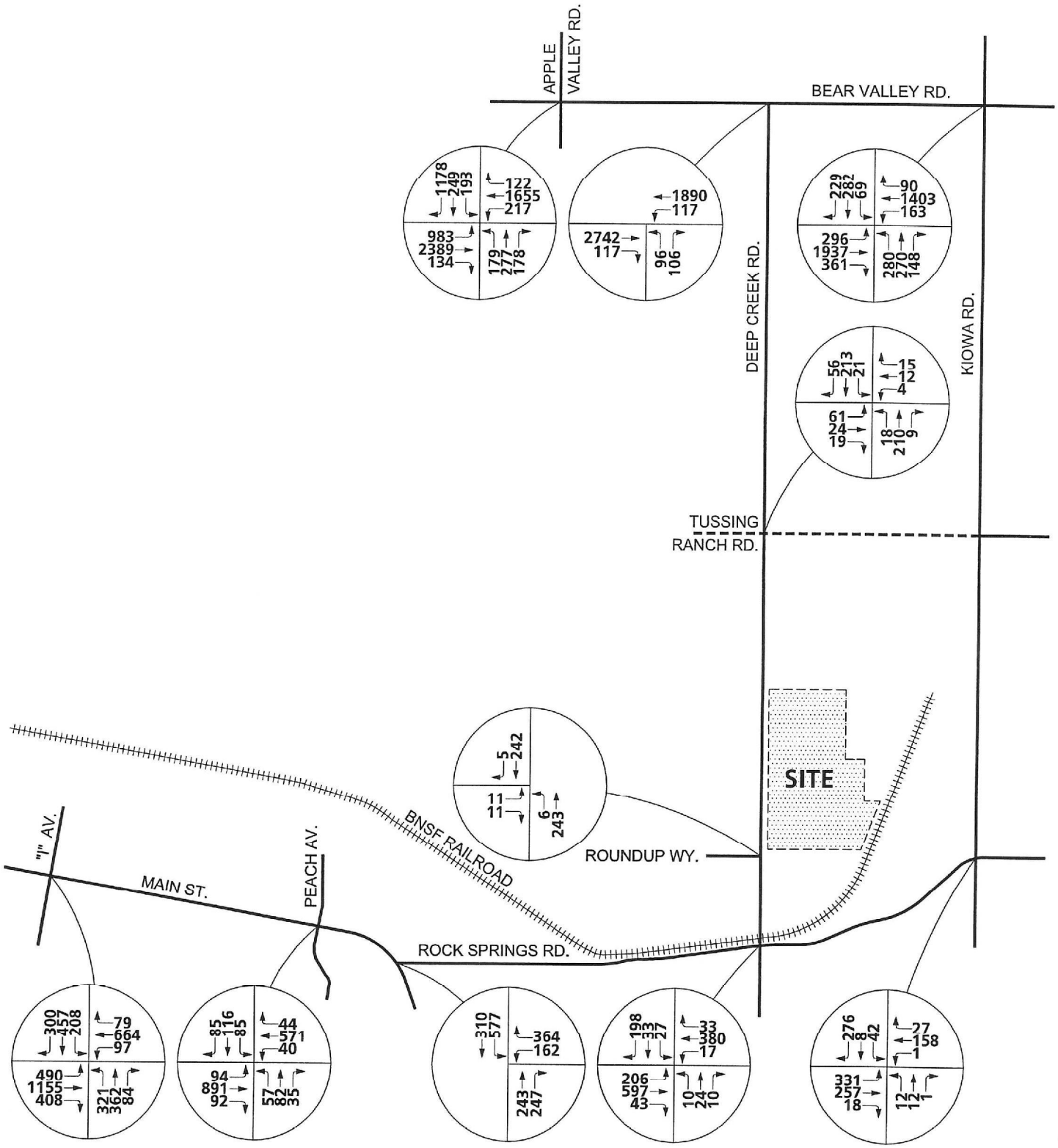

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Interim Year Without Project
PM Peak Hour Intersection Volumes

Deep Creek EIR

Figure 4.1-5

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Table 4.1-5
Interim Year 2015 Without Project Conditions AM/PM Peak Hour Study Intersection LOS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
City of Hesperia																	
"I" Avenue (NS) at: • Main Street (EW)	TS	2	2	1	1	2	1>	2	2	1	2	2	0	34.2	42.0	C	D
Peach Avenue (NS) at: • Main Street (EW)	TS	1	1	1	1	1	1	1	2	1	1	2	1	18.4	19.1	B	B
Main Street (NS) at:																	
• Rock Springs Road (EW)	CSS	0	1	1	1	1	0	0	0	0	1	0	1	--[4]	--[4]	F	F
-With Improvements	**TS**	0	1	1	1	1	0	0	0	0	1	0	1	27.9	36.0	C	D
Town of Apple Valley																	
Apple Valley Road (NS) at:																	
• Bear Valley Road (EW)	TS	2	2	1	2	1	2>	2	2	1	1	3	1>	--[4]	--[4]	F	F
-With Improvements[5,6]	TS	2	2	1	2	**2**	**1>>**	2	**4**	0	1	**4**	0	30.4	34.3	C	C
Deep Creek Road (NS) at:																	
• Bear Valley Road (EW)	CSS	0	1	0	0	0	0	0	2	1	1	2	0	--[4]	--[4]	F	F
-With Improvements	**TS**	0	1	0	0	0	0	0	**3**	1	1	**3**	0	18.2	14.2	B	B
• Tussing Ranch Road (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	13.3	14.9	B	B
Kiowa Road (NS) at:																	
• Bear Valley Road (EW)	TS	1	2	1	1	2	1	1	2	1	1	2	1	--[4]	--[4]	F	F
-With Improvements[6]	TS	**2**	2	1	1	2	1	1	**3**	1	1	**3**	0	34.1	29.1	C	C
County of San Bernardino																	
Deep Creek Road (NS) at:																	

Table 4.1-5
Interim Year 2015 Without Project Conditions AM/PM Peak Hour Study Intersection LOS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
• Ocotillo Way (EW)	--	DOES NOT EXIST															
• "H" Street Project Access (EW)	--	DOES NOT EXIST															
• South Project Access (EW)	--	DOES NOT EXIST															
• Roundup Way (EW)	CSS	0	1	0	0	1	0	1	0	1	0	0	0	12.8	12.7	B	B
• Rock Springs Road (EW)	TS	0.5	0.5	1	0.5	0.5	1	1	1	0	1	1	0	21.1	19.7	C	B
Kiowa Road (NS) at:																	
• Rock Springs Road (EW)	AWS	1	1	1	1	1	1>>	1	1	0	1	1	0	10.6	12.5	B	B
-With Improvements[7]	**TS**	1	1	1	1	1	1>>	1	1	0	1	1	0	24.8	25.1	C	C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right Turn Overlap Phase; >> = Free Right Turn

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.8 R5 (2007). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop TS = Traffic Signal AWS = All Way Stop

[4] -- = Delay High, Intersection Unstable, Level of Service "F"

[5] Identified improvements go beyond typical County of San Bernardino roadway cross-sections.

[6] Pedestrians are assumed not to occur on every cycle.

[7] Although no LOS deficiency was identified under this intersection's existing configuration, it was analyzed assuming the provision of a traffic signal because it warranted a traffic signal under Existing (2007) conditions.

Future Year 2030 Without Project Conditions

As described above, the traffic volumes for the future year 2030 without project conditions were developed using a growth increment process based on volumes predicted by the Comprehensive Traffic Plan (CTP) traffic model and included the daily traffic from the interim year 2015. The model data resulted in the confirmation that the anticipated future growth of the area, without the project, exceeds the growth represented by the cumulative interim year 2015 projects.

Future Year 2030 Without Project Conditions Peak Hour Traffic Volumes

Figure 4.1-6, *2030 Without Project AM Peak Hour Intersection Volumes,* and Figure 4.1-7, *2030 Without Project PM Peak Hour Intersection Volumes,* show without project conditions AM and PM peak hour volumes at the study intersections for future year 2030.

Future Year 2030 Without Project Conditions Peak Hour Level of Service

Table 4.1-6, *Future Year 2030 Without Project Conditions AM/PM Peak Hour Study Intersection LOS,* summarizes future year 2030 without project conditions AM and PM peak hour average stopped delay per vehicle and corresponding LOS of each study intersection. Detailed analysis sheets are provided in Appendix C of this EIR.

As shown in Table 4.1-6, the following intersections are projected to operate at a deficient LOS per the significance criteria of the City of Hesperia, Town of Apple Valley, or County of San Bernardino for future year 2030 without project conditions:

City of Hesperia

- Main Street/Rock Springs Road;

Town of Apple Valley

- Apple Valley Road/Bear Valley Road;
- Deep Creek Road/Bear Valley Road;
- Deep Creek Road/Tussing Ranch Road;
- Kiowa Road/Bear Valley Road;

County of San Bernardino

- Deep Creek Road/Rock Springs Road; and,
- Kiowa Road/Rock Springs Road.

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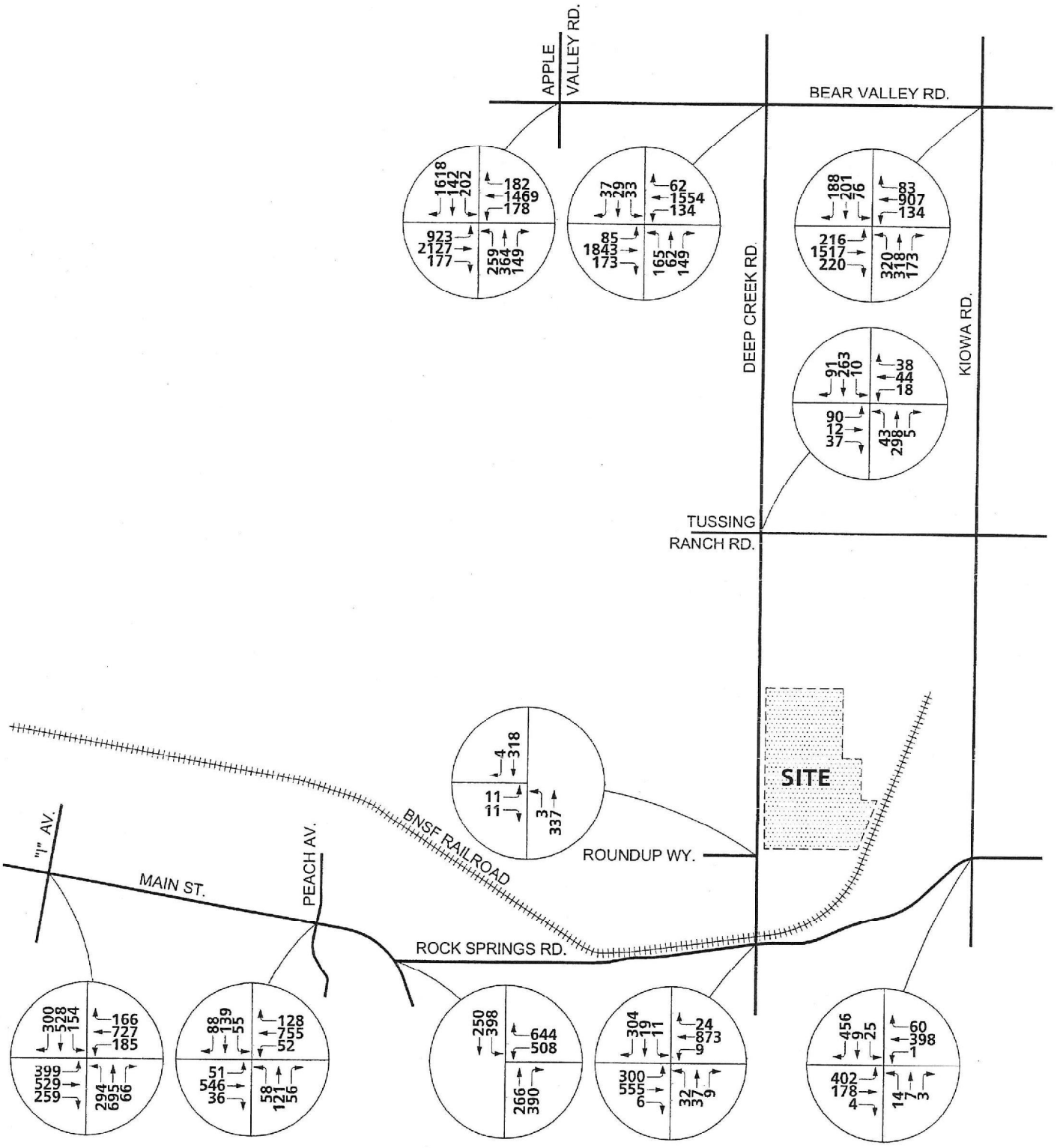

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2030 Without Project
AM Peak Hour Intersection Volumes

Deep Creek EIR

Figure 4.1-6

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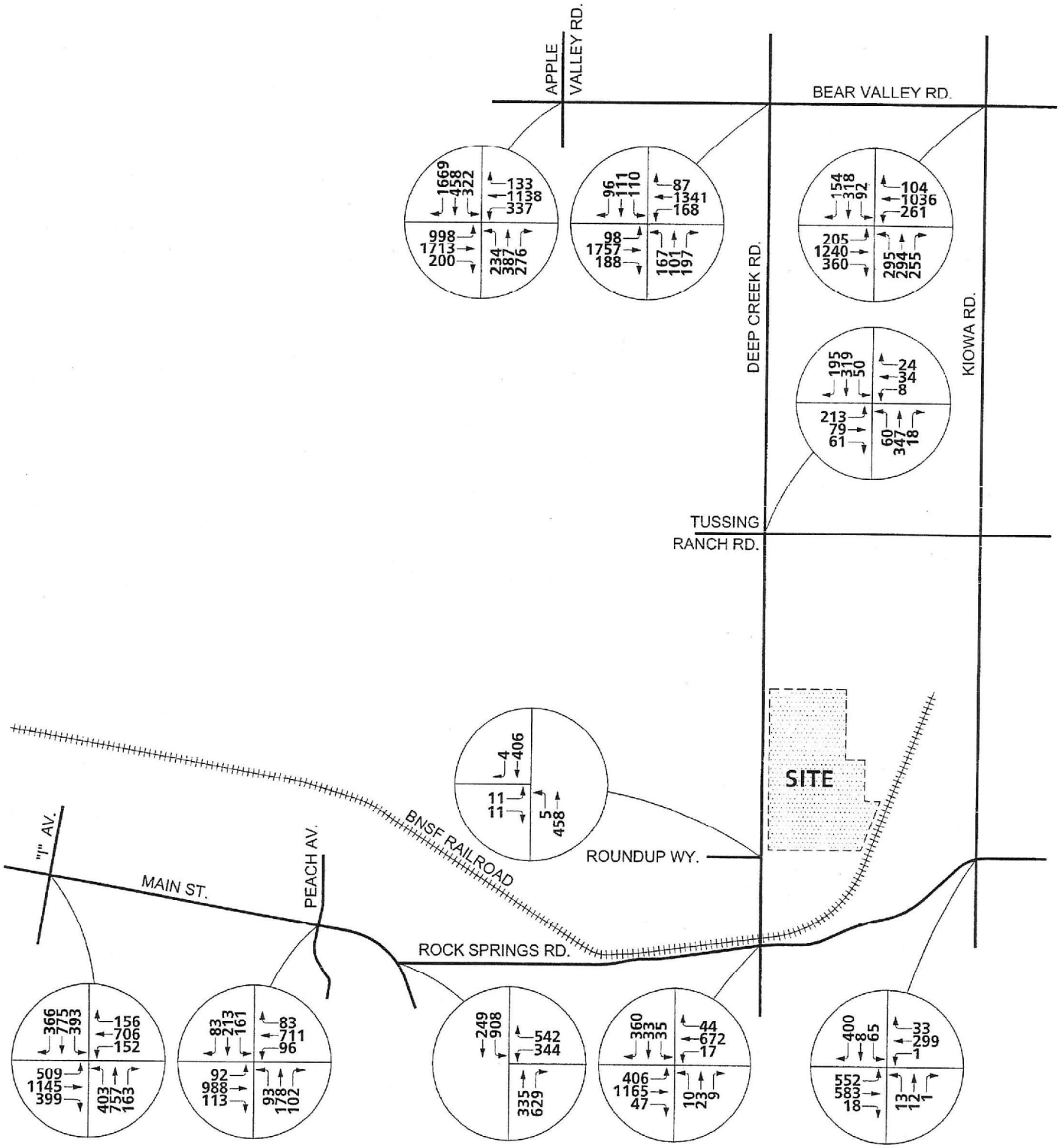

2030 Without Project
PM Peak Hour Intersection Volumes
Deep Creek EIR

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Figure 4.1-7

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Table 4.1-6
Future Year 2030 Without Project Conditions Am/Pm Peak Hour Study Intersection LOS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
City of Hesperia																	
"I" Avenue (NS) at: • Main Street (EW)	TS	2	2	1	1	2	1>	2	2	1	2	2	0	34.6	51.3	D	D
Peach Avenue (NS) at: • Main Street (EW)	TS	1	1	1	1	1	1	1	2	1	1	2	1	17.9	18.9	B	B
Main Street (NS) at:																	
• Rock Springs Road (EW)	CSS	0	1	1	1	1	0	0	0	0	1	0	1	--[4]	--[4]	F	F
-With Improvements	**TS**	0	1	**1>**	**2**	1	0	0	0	0	1	0	**1>**	19.8	23.5	B	C
Town of Apple Valley																	
Apple Valley Road (NS) at:																	
• Bear Valley Road (EW)	TS	2	2	1	2	1	2>	2	2	1	1	3	1>	94.6	--[4]	F	F
-With Improvements[5]	TS	2	2	1	2	**2**	**1>>**	2	**3**	1	**2**	3	1>	26.8	30.5	C	C
Deep Creek Road (NS) at:																	
• Bear Valley Road (EW)	CSS	0	1	0	0	1	0	1	2	1	1	2	0	--[4]	--[4]	F	F
-With Improvements[5]	**TS**	**1**	1	**1**	**1**	1	**1**	1	2	1	1	2	0	20.6	25.9	C	C
• Tussing Ranch Road (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	26.8	--[4]	D	F
-With Improvements	**TS**	**1**	1	0	**1**	1	0	**1**	1	0	**1**	1	0	21.5	27.4	C	C
Kiowa Road (NS) at:																	
• Bear Valley Road (EW)	TS	1	2	1	1	2	1	1	2	1	1	2	1	57.9	54.2	E	D
-With Improvements[5]	TS	**2**	2	1	1	2	1	1	2	1	1	**3**	1	25.7	27.3	C	C

Table 4.1-6
Future Year 2030 Without Project Conditions Am/Pm Peak Hour Study Intersection LOS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
County of San Bernardino																	
Deep Creek Road (NS) at:																	
• Ocotillo Way (EW)	--	DOES NOT EXIST												--	--	--	--
• "H" Street Project Access (EW)	--	DOES NOT EXIST												--	--	--	--
• South Project Access (EW)	--	DOES NOT EXIST												--	--	--	--
• Roundup Way (EW)	CSS	0	1	0	0	1	0	1	0	1	0	0	0	14.1	17.4	B	C
• Rock Springs Road (EW)	TS	0.5	0.5	1	0.5	0.5	1	1	1	0	1	1	0	35.6	45.0	D	D
-With Improvements	TS	0.5	0.5	1	0.5	0.5	1	1	**2**	0	1	**2**	0	20.5	20.7	C	C
Kiowa Road (NS) at:																	
• Rock Springs Road (EW)	AWS	1	1	1	1	1	1>>	1	1	0	1	1	0	17.1	37.1	C	E
-With Improvements	**TS**	1	1	1	1	1	1>>	1	1	0	1	1	0	31.7	26.6	C	C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right Turn Overlap Phase; >> = Free Right Turn

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.8 R5 (2007). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
TS = Traffic Signal
AWS = All Way Stop

[4] -- = Delay High, Intersection Unstable, Level of Service "F"

[5] Pedestrians are assumed not to occur on every cycle.

REGULATORY FRAMEWORK

Congestion Management Program

Proposition 111, approved by California voters in June 1990, provided additional transportation funding through a $.09 per gallon increase in the State gasoline tax and required each county with an urbanized area of more than 50,000 population to undertake a Congestion Management Program (CMP), by a designated Congestion Management Agency (CMA). Within San Bernardino County, the San Bernardino Associated Governments (SANBAG) was designated as the CMA by the County Board of Supervisors and by a majority of the cities representing a majority of the population in incorporated areas.

A CMP is intended to provide the analytical basis of transportation decisions through the State Transportation Improvement Program process and does so by monitoring the performance of roadways and highways that are contained in the plan. The San Bernardino County CMP establishes LOS C as the minimum performance level.

Since the proposed project is forecast to generate less than 250 two-way AM peak hour trips (152 two-way trips in the AM peak hour) and less than 250 two-way PM peak hour trips (204 two-way trips in the PM peak hour), preparation of a CMP TIA is not required for the proposed project according to CMP TIA guidelines.

South/East Apple Valley Local Area Transportation Facilities Plan

The County of San Bernardino has established the South/East Apple Valley Local Area Transportation Facilities Plan, which includes a Traffic Impact Fee Program, to fund the construction of traffic improvements to the local and regional roadway system consistent with the County's General Plan Circulation Element. The Traffic Impact Fee is assessed on new development to fund roadway improvements needed to maintain adequate levels of service and to prevent further degradation of roadway facilities that currently operate at deficient levels of service. The County's Impact Fee Program is consistent with the provisions of the California Mitigation Fee Act, Government Code, Section 66000, et seq., and all other pertinent State statutes and regulations concerning the creation, assessment and collection of Traffic Impact Fees. In compliance with the Mitigation Fee Act, after the impact fees are collected, they are deposited in a separate capital facilities account in a manner to avoid any co-mingling of the fees with other County revenues and funds. The fees, and any interest thereon, must be expended solely for the purpose for which the fees were collected. The County's Traffic Impact Fee Program thus creates a mechanism for collecting fees from new development for purposes of defraying the cost of public facilities related to such development. The County's Traffic Impact Fee Program is the result of a comprehensive analysis of the need for future roadway infrastructure improvements and it allows the County to deal logically and reasonably with the cumulative impacts of development. As shown in the preceding analysis, these impacts will not be realized until sometime after the opening year of the proposed project.

In addition to the County's Traffic Impact Fee Program, the County obtains revenue for local and regional roadway improvements through Measure I. Measure I is the half-cent sales tax

collected throughout San Bernardino County for transportation improvements. San Bernardino County voters approved the Measure in November 1989 to ensure that needed transportation projects were implemented Countywide. Pursuant to the Traffic Impact Fee Program, the County collects fees from new development to not only cover the developments fair share of needed local roadway improvements needed to maintain adequate levels of service throughout the County, but also collects fees to defray the cost of certain regional roadway improvements necessitated by the demand created by new development.

County of San Bernardino General Plan

County of San Bernardino General Plan Circulation and Infrastructure Element

The long range transportation system within the project area is expected to undergo improvement as a result of planned improvements by the County of San Bernardino. The Circulation and Infrastructure Element of the General Plan includes strategies to support the production of a circulation and infrastructure system consistent with the overall vision specified by the County. The following goals, policies, and programs are applicable to the proposed project:

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.

Policy CI 1.1 The County's comprehensive transportation system will be developed according to the Circulation Policy Map (the Circulation Element Map), which outlines the ultimate multi-modal (nonmotorized, highway, and transit) system to accommodate the County's mobility needs and provides the County's objectives to be achieved through coordination and cooperation between the County and the local municipalities in the County, adjacent counties and cities within those counties, the California Department of Transportation, and SANBAG.

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.

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.

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.

Policy CI 4.1: Ensure appropriate legal and physical access to land prior to final approval of land divisions or new development.

Policy CI 4.2: To reduce the dependence on the automobile for local trips, integrate transportation and land use planning at the community and regional levels by promoting transit-oriented development (TOD), where appropriate and feasible.

Policy CI 4.6: Ensure that applicants, subdividers, and developers dedicate and improve right-of-way per County standards and contribute to their fair share of offsite mitigation.

GOAL CI 5: The County's road standards for major thoroughfares will complement the surrounding environment appropriate to each geographic region.

Policy CI 5.1: Implement appropriate design standards for all types of highways as shown in Chapter 83.23 of the Development Code.

Policy CI 5.3: Limit, where feasible, access along all roads intersecting major and secondary highways for a distance of 600 feet from the centerline of said highways to the maximum extent possible.

Policy CI 5.4: Utilize road standards appropriate to geographic constraints and which complement the surrounding environment (see Chapter 83.23 of the Development Code).

Policy CI 5.5: Public roadways should be developed consistent with the road standards as indicated in Chapter 83.23 of the Development Code.

Policy CI 5.6: For privately maintained roads, the minimum width should be: (a) no less than a 24-foot-wide (paving, curbs and gutters) with no parking allowed; (b) 30-foot-wide (paving, curbs and gutters) with parking allowed on one side; or (c) a 36-foot-wide (paving, curbs and gutters) with parking allowed on both sides.

Policy CI 5.7: During the review of proposed General Plan amendments or the development of specific plans, ensure accessibility to the site(s) including the quality of existing or proposed roads that will provide access.

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.

Policy CI 6.1: Require safe and efficient pedestrian and bicycle facilities in residential, commercial, industrial, and institutional developments to facilitate access to public and private facilities and to reduce vehicular trips. Install bicycle lanes and sidewalks on existing and future roadways, where appropriate and as funding is available.

ANALYSIS OF PROJECT IMPACTS AND MITIGATION MEASURES

This section analyzes potential traffic and circulation impacts resulting from implementation of the project. If potentially significant impacts are identified, mitigation measures will be required to reduce such impacts to less than significant.

THRESHOLDS OF SIGNIFICANCE

To determine whether the addition of project-generated trips results in a significant impact, and thus requires mitigation, the Town of Apple Valley, the City of Hesperia, and the County of San Bernardino have established following thresholds of significance:

City of Hesperia

- A significant project-related impact would occur if the addition of project-generated trips causes an intersection operating at LOS D or better to operate at a deficient LOS (LOS E or F); or if a project adds traffic to any intersection operating at a deficient LOS (LOS E or F).

Town of Apple Valley/ County of San Bernardino

- A significant project-related impact would occur if the addition of project-generated trips causes an intersection operating at LOS C or better to operate at a deficient LOS (LOS D, E, or F); or if a project adds traffic to any intersection operating at a deficient LOS (LOS D, E, or F).

Significant impacts at study intersections must be mitigated to an acceptable LOS (LOS D or better in the City of Hesperia or LOS C or better in the Town of Apple Valley and the County of San Bernardino) with the project. The City of Hesperia target for peak hour intersection operation is LOS D or better and the Town of Apple Valley and County of San Bernardino target for peak hour intersection operation is LOS C or better.

Significance Criteria

Appendix G, Initial Study Checklist, of the *CEQA Guidelines* was used to develop significance thresholds in this analysis. As such, the project would create a significant impact if it would:

1) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to capacity ratio on roads, or congestion at intersections);
2) Exceed, either individually or cumulatively, an LOS standard established by the city, county or state agency for designated roads or highways;
3) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
4) Result in inadequate emergency access;
5) Result in inadequate parking capacity; and/or,
6) Conflict with adopted policies, plans, or programs supporting alternative transportation.

ENVIRONMENTAL IMPACTS

Traffic

Interim Year 2015 With Project Conditions

Impact 4.1-1: **Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).** ***Determination: Less than Significant with Mitigation.***

Interim Year 2015 With Project Conditions

Without any intersection improvements, the proposed project would exacerbate deficient intersection operation conditions at the Main Street/Rock Springs Road intersection; Apple Valley Road/Bear Valley Road intersection; Deep Creek Road/Bear Valley Road intersection; and, Kiowa Road/Bear Valley Road intersection. As such, mitigation measures to reduce the potentially significant impact to a level of less than significant are provided below.

Table 4.1-7, *Interim Year 2015 With Project Conditions Peak Hour Intersection LOS,* summarizes the improved intersection operation LOS that would occur with the implementation of the mitigation measures provided below. As shown in Table 4.1-7, assuming implementation of the recommended mitigation measures, the intersections are forecast to operate at an acceptable LOS according to the significance criteria provided by the County of San Bernardino.

Table 4.1-7
Interim Year 2015 With Project Conditions AM/PM Peak Hour Study Intersection LOS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
City of Hesperia																	
"I" Avenue (NS) at: • Main Street (EW)	TS	2	2	1	1	2	1>	2	2	1	2	2	0	34.7	41.9	C	D
Peach Avenue (NS) at: • Main Street (EW)	TS	1	1	1	1	1	1	1	2	1	1	2	1	18.1	19.3	B	B
Main Street (NS) at:																	
• Rock Springs Road (EW)	CSS	0	1	1	1	1	0	0	0	0	1	0	1	--[4]	--[4]	F	F
-With Improvements	**TS**	0	1	1	1	1	0	0	0	0	1	0	1	31.3	43.5	C	D
Town of Apple Valley																	
Apple Valley Road (NS) at:																	
• Bear Valley Road (EW)	TS	2	2	1	2	1	2>	2	2	1	1	3	1>	--[4]	--[4]	F	F
-With Improvements[5,6]	TS	2	2	1	2	**2**	**1>>**	2	**4**	0	1	**4**	0	30.7	34.8	C	C
Deep Creek Road (NS) at:																	
• Bear Valley Road (EW)	CSS	0	1	0	0	0	0	0	2	1	1	2	0	--[4]	--[4]	F	F
-With Improvements	**TS**	0	1	0	0	0	0	0	**3**	1	1	**3**	0	22.8	16.4	C	B
• Tussing Ranch Road (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	14.0	16.2	B	C
Kiowa Road (NS) at:																	
• Bear Valley Road (EW)	TS	1	2	1	1	2	1	1	2	1	1	2	1	--[4]	--[4]	F	F
-With Improvements[6]	**TS**	**2**	2	1	1	2	**1>**	1	**3**	1	1	**3**	0	26.5	26.2	C	C
County of San Bernardino																	

Table 4.1-7
Interim Year 2015 With Project Conditions AM/PM Peak Hour Study Intersection LOS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Deep Creek Road (NS) at:																	
• Ocotillo Way (EW)	**CSS**	0	1	0	**1**	1	0	0	0	0	0	**1**	0	11.7	11.8	B	B
• "H" Street Project Access (EW)	CSS	0	1	0	**1**	1	0	0	0	0	0	**1**	0	12.0	12.1	B	B
• South Project Access (EW)	**CSS**	0	1	0	**1**	1	0	0	0	0	0	**1**	0	13.1	13.2	B	B
• Roundup Way (EW)	CSS	0	1	0	0	1	0	1	0	1	0	0	0	14.1	14.5	B	B
• Rock Springs Road (EW)	TS	0.5	0.5	1	0.5	0.5	1	1	1	0	1	1	0	23.2	21.8	C	C
Kiowa Road (NS) at:																	
• Rock Springs Road (EW)	AWS	1	1	1	1	1	1>>	1	1	0	1	1	0	10.7	12.6	B	B
-With Improvements[7]	**TS**	1	1	1	1	1	1>>	1	1	0	1	1	0	25.0	25.2	C	C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right Turn Overlap Phase; >> = Free Right Turn

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.8 R5 (2007). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
TS = Traffic Signal
AWS = All Way Stop

[4] -- = Delay High, Intersection Unstable, Level of Service "F"

[5] Identified improvements go beyond typical City or County of San Bernardino roadway cross-sections.

[6] Pedestrians are assumed not to occur on every cycle.

[7] Although no LOS deficiency was identified under this intersection's existing configuration, it was analyzed assuming the provision of a traffic signal because it warranted a traffic signal under Existing (2007) conditions.

Project Trip Generation

Site access to the proposed project is planned at three locations along Deep Creek Road: at Ocotillo Way, at "H" Street, and at an additional south project access site, "K" Street. ITE Trip Generation rates were used to calculate forecast trips generated by the proposed project. Table 4.1-8, *Proposed Project ITE Trip Rates*, summarizes the ITE trip generation rates used for the proposed project.

Table 4.1-9, *Proposed Project Trip Generation*, summarizes the forecast trips generated by the proposed project utilizing the rates shown in Table 4.1-8.

As shown in Table 4.1-9, the proposed project is forecast to generate approximately 1,933 daily trips, which includes 152 AM peak hour trips and 204 PM peak hour trips.

Table 4.1-8:
Proposed Project ITE Trip Rates

NAME	LAND USE	ITE CODE	QUANTITY	UNITS	PEAK HOUR						DAILY
					AM			PM			
					IN	OUT	TOTAL	IN	OUT	TOTAL	
TT 16569	Single Family Residential	210	202	DU	0.19	0.56	0.75	0.64	0.37	1.01	9.57

Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 7th Edition, 2003.
DU = Dwelling Units

Table 4.1-9:
Proposed Project Trip Generation

NAME	LAND USE	QUANTITY	UNITS	PEAK HOUR						DAILY
				AM			PM			
				IN	OUT	TOTAL	IN	OUT	TOTAL	
TT 16569	Single Family Residential	202	DU	38	113	152	129	75	204	1,933
TOTAL				**38**	**113**	**152**	**129**	**75**	**204**	**1,933**

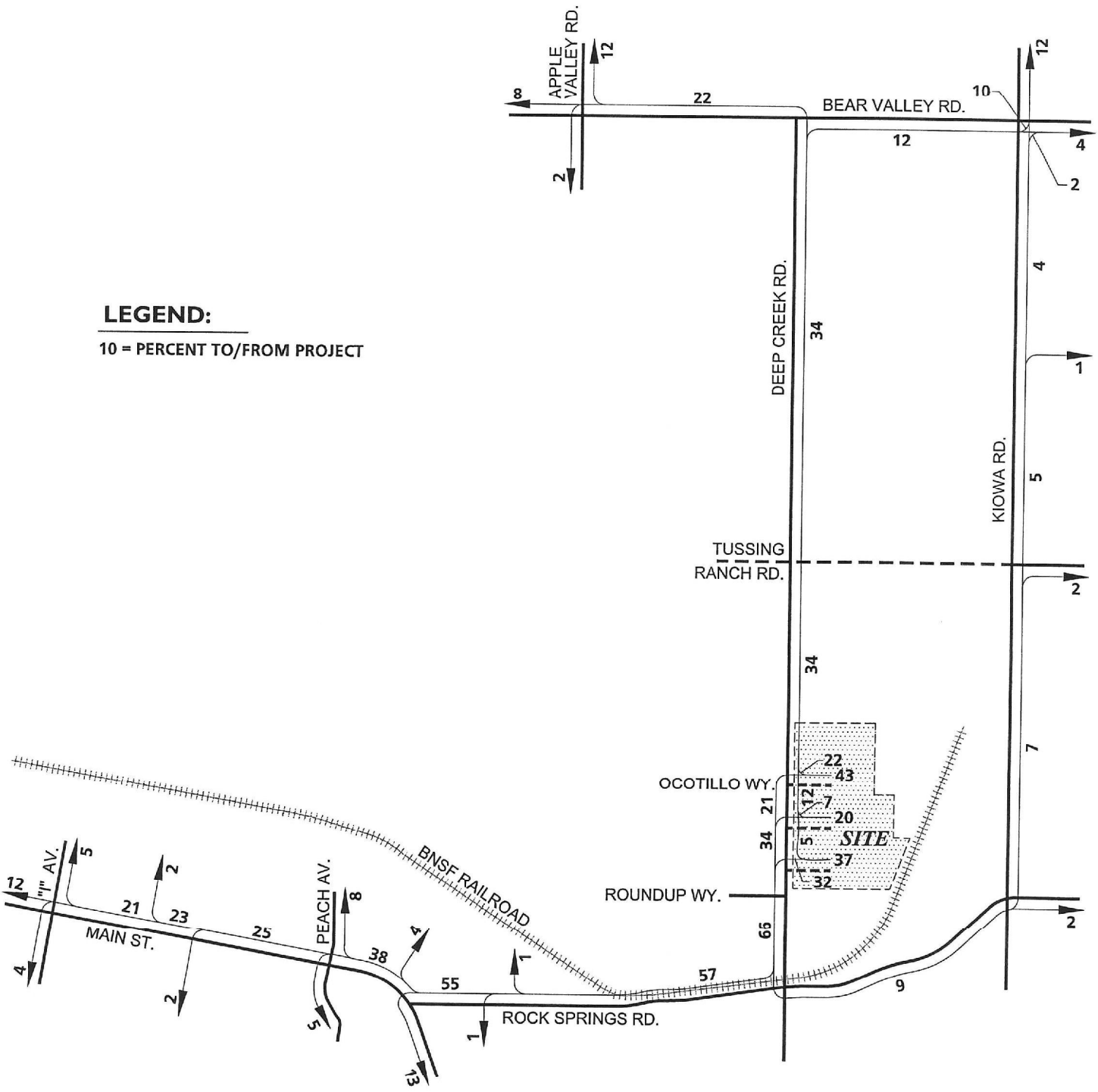
DU = Dwelling Units

Project Trip Distribution

Figure 4.1-8, *Proposed Project Trip Percent Distribution*, shows the forecast trip percent distribution of project-generated peak hour trips.

Project Trip Assignment

Figure 4.1-9, *Interim Year Project Only Average Daily Traffic (ADT)*, shows the corresponding assignment of project-generated trips assuming the trip percentage distribution shown in Figure 4.1-6.



RBF CONSULTING

N

Not to Scale

Proposed Project Trip Percent Distribution

Deep Creek EIR

Figure 4.1-8

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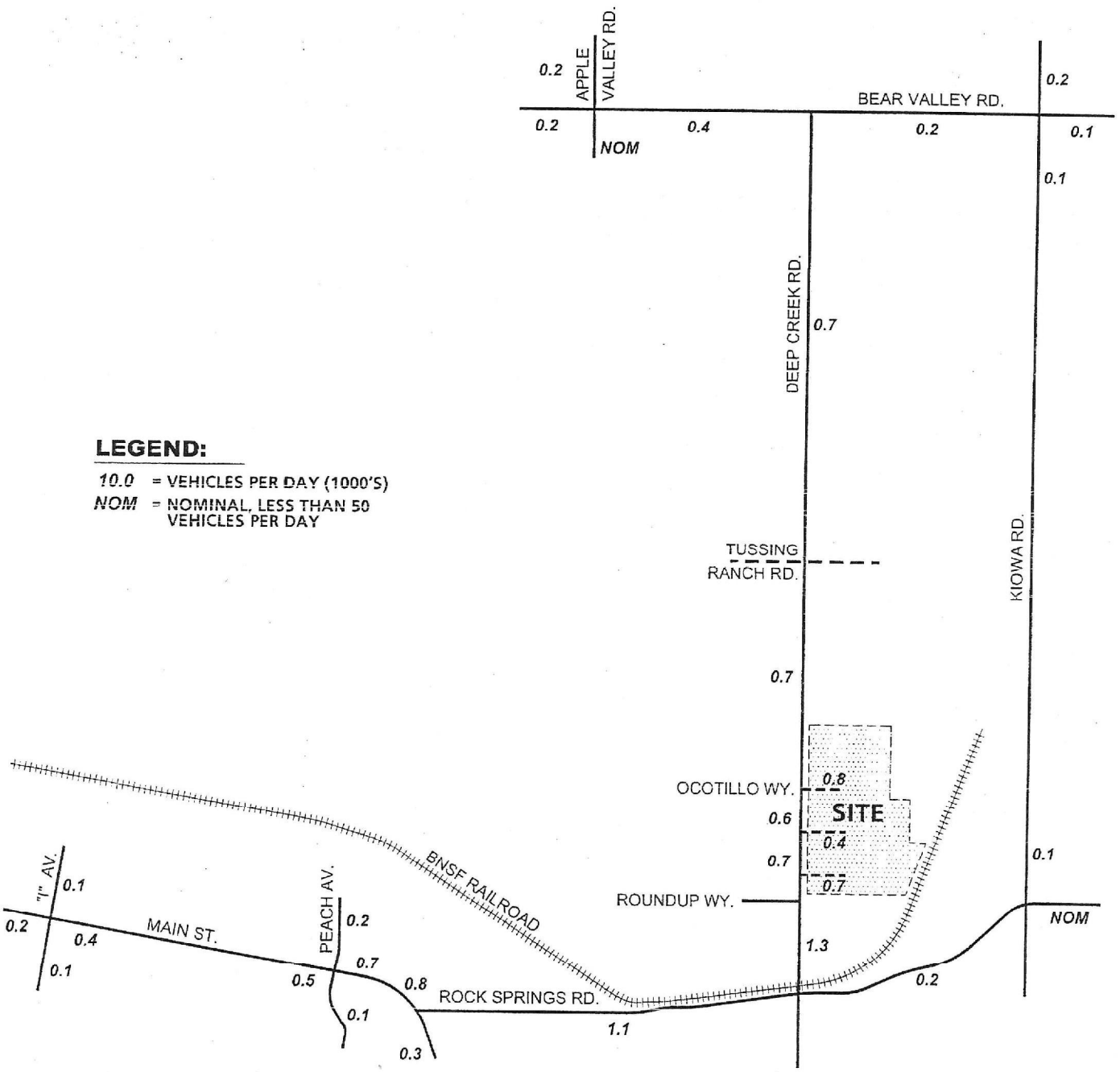

Interim Year Project Only Average Daily Traffic (ADT)

Deep Creek EIR

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Not to Scale

Figure 4.1-9

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Interim Year 2015 With Project Conditions Peak Hour Traffic Volumes

Interim year 2015 with project conditions peak hour traffic volumes were derived from adding the forecast project-generated trip assignment shown in Figure 4.1-7 to the forecast year 2015 without project conditions traffic volumes. Figure 4.1-10 shows the *Interim Year with Project AM Peak Hour Intersection Volumes* and Figure 4.1-11 shows the *Interim Year with Project PM Peak Hour Intersection Volumes* at the study intersections.

Interim Year 2015 With Project Conditions Level of Service

Table 4.1-7, *Interim Year 2015 With Project Conditions AM/PM Peak Hour Study Intersection LOS,* summarizes future year 2015 with project conditions AM and PM peak hour average stopped delay per vehicle and corresponding LOS of the study intersections, based on the future year 2015 with project conditions peak hour intersection volumes shown in Figures 4.1-9 and 4.1-10. Detailed Highway Capacity Manual (HCM) analysis sheets are provided in Appendix C.

As shown in Table 4.1-7, with the addition of project-generated trips, the same intersections as under the interim 2015 without project scenario are forecast to continue to operate at a deficient LOS per the significance criteria of the City of Hesperia or Town of Apple Valley for interim year 2015 with project conditions are Main Street/Rock Springs Road; Apple Valley Road/Bear Valley Road; Deep Creek Road/Bear Valley Road; and, Kiowa Road/Bear Valley Road.

Implementation of the project would result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system. As such, the project would not be consistent with the significance criteria and would result in potentially significant impacts to the intersections below in Impact 4.1-1a through 4.1-1d.

Impact 4.1-1a: *Main Street/Rock Springs Road*

Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Main Street/Rock Springs Road. ***Determination of Impact After Implementation of Mitigation: Less than Significant with Mitigation.***

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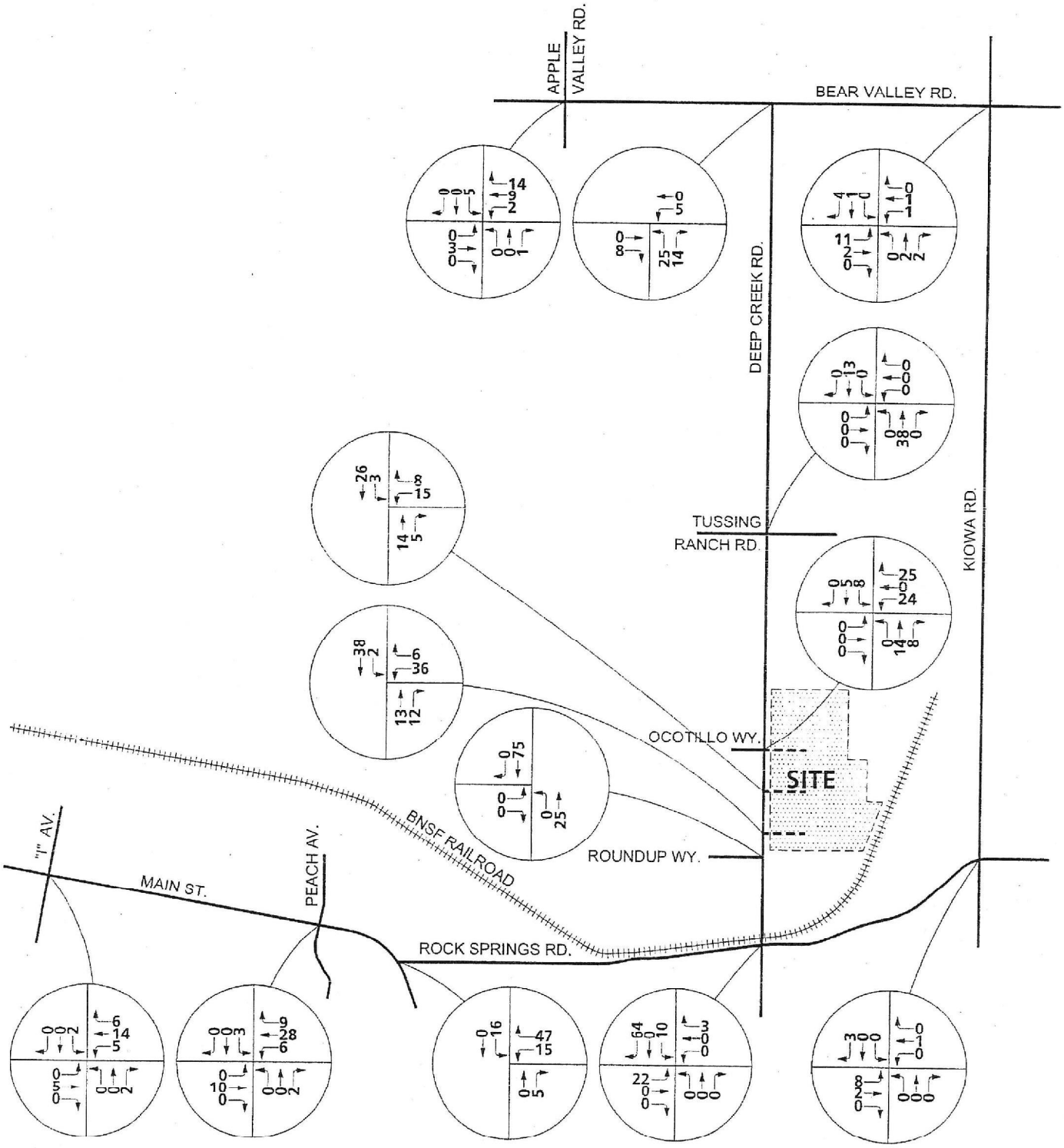

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N

Not to Scale

Interim Year Project Trip AM Peak Hour Intersection Volumes

Deep Creek EIR

Figure 4.1-10

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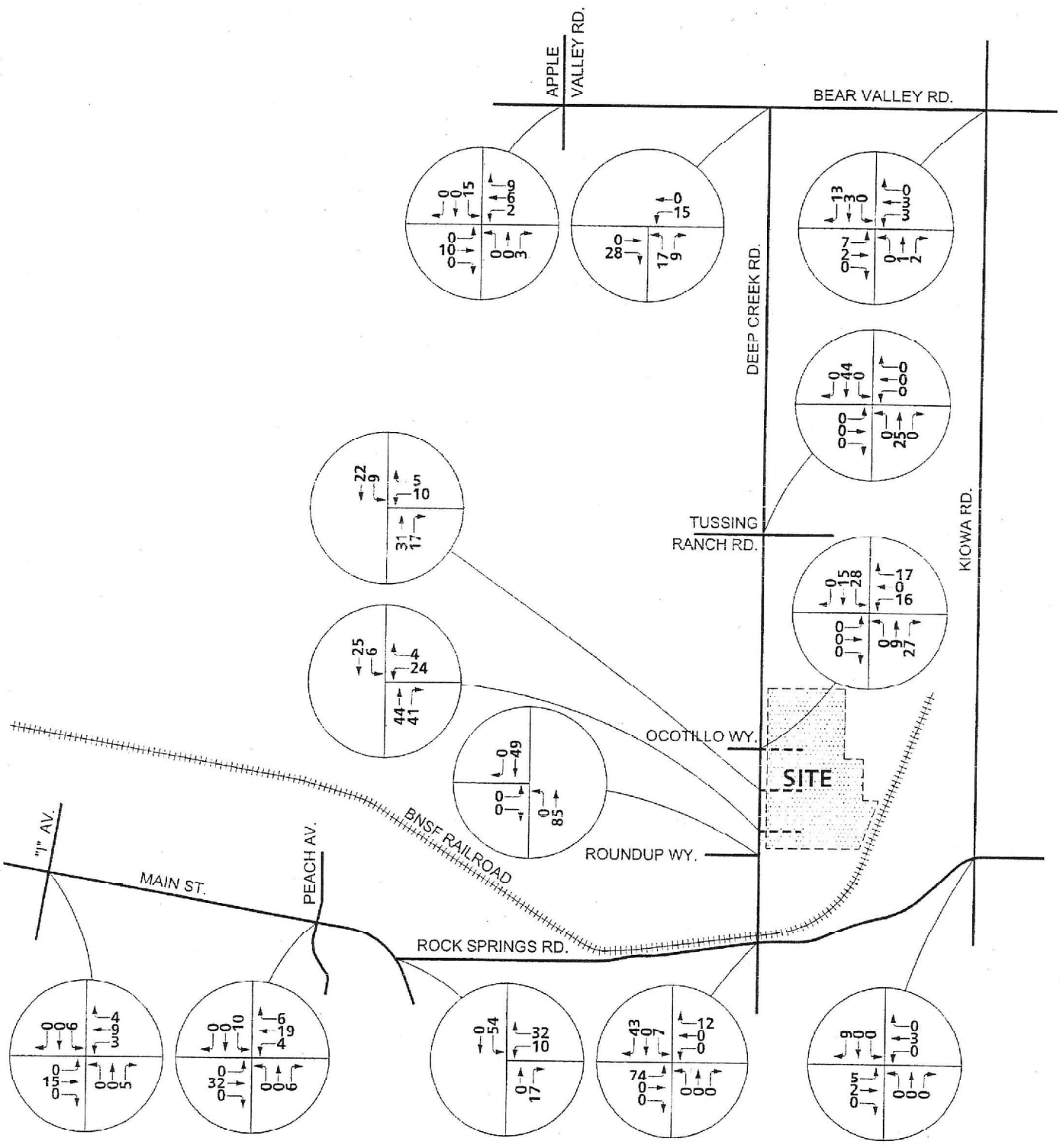

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Not to Scale

Interim Year Project Trip PM Peak Hour Intersection Volumes

Deep Creek EIR

Figure 4.1-11

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Implementation of mitigation measures TRA-1 will improve the intersection in the interim year 2015 condition from a deficient LOS F in both the AM and PM peak hours to an acceptable LOS C and D in the AM and PM peak hours, respectively. The construction of improvements at this intersection will decrease the delay times at the intersection by providing a traffic signal that will facilitate more efficient travel through the intersection. The traffic signal will result in the reduction of the existing delay times at the intersection. The fair share monetary contribution by the Project Applicant toward the physical improvements will reduce impacts to this intersection to less than significant.

Mitigation Measure TRA-1: To reduce impacts from implementation of the project to the Main Street/Rock Springs Road intersection, the Project Applicant shall pay their proportionate fair share to install a traffic signal.

Impact 4.1-1b: *Apple Valley Road/Bear Valley Road*

Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Apple Valley Road/Bear Valley Road. ***Determination of Impact After Implementation of Mitigation: Less than Significant with Mitigation.***

Implementation of mitigation measure TRA-2 will improve the intersection in the future year 2015 conditions from a deficient LOS F in both the AM and PM peak hours to an acceptable LOS C in both the AM and PM peak hours. The construction of improvements at this intersection will decrease the delay times at the intersection by providing additional through lanes and turn lanes that will facilitate more efficient travel through the intersection. The additional through lanes will result in an increase of capacity for traffic traveling through the intersection, allowing more cars to pass through the intersection during each signal cycle, thereby reducing the potential delay for vehicles approaching the intersection. The additional turn lanes will position turning vehicles out of the through lanes and thereby reduce the delay time of through traffic approaching and traveling through the intersection. The fair share monetary contribution by the Project Applicant toward the physical improvements will reduce impacts to this intersection to less than significant.

Mitigation Measure TRA-2: To reduce impacts from implementation of the project to the Apple Valley Road/Bear Valley Road intersection, the Project Applicant shall pay their proportionate fair share to construct a second southbound through lane, reconstruct dual southbound right turn lanes into a single free right turn lane, construct two additional eastbound through lanes, and construct a fourth westbound through lane.

Impact 4.1-1c: *Deep Creek Road/Bear Valley Road*

Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Deep Creek Road/Bear

Valley Road. ***Determination of Impact After Implementation of Mitigation: Less than Significant with Mitigation.***

Implementation of mitigation measure TRA-3 will improve the intersection in the interim year 2015 condition from a deficient LOS F in both the AM and PM peak hours to an acceptable LOS C in both the AM and PM peak hours. The construction of improvements at this intersection will decrease the delay times at the intersection by providing a traffic signal, additional through lanes that will facilitate more efficient travel through the intersection. The traffic signal will result in the reduction of the existing delay times at the intersection. The additional through lane will result in an increase of capacity for traffic traveling through the intersection, allowing more cars to pass through the intersection during each signal cycle, thereby reducing the potential delay for vehicles approaching the intersection. The fair share monetary contribution by the Project Applicant toward the physical improvements will reduce impacts to this intersection to less than significant.

Mitigation Measure TRA-3: To reduce impacts from implementation of the project to the Deep Creek/Bear Valley Road intersection the Project Applicant shall pay their proportionate fair share to install a traffic signal, construct an additional eastbound through lane, and an additional westbound through lane.

Impact 4.1-1d: *Kiowa Road/Bear Valley Road*

Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Deep Creek Road/Bear Valley Road. ***Determination of Impact After Implementation of Mitigation: Less than Significant with Mitigation.***

Implementation of mitigation measure TRA-4 will improve the intersection in the interim year 2015 condition from a deficient LOS F in both the AM and PM peak hours to an acceptable LOS C in both the AM and PM peak hours, respectively. The construction of improvements at this intersection will decrease the delay times at the intersection by providing additional turn lanes and through lanes that will facilitate more efficient travel through the intersection. The additional turn lanes will position turning vehicles out of the through lanes and thereby reduce the delay time of through traffic approaching and traveling through the intersection. The additional through lanes will result in an increase of capacity for traffic traveling through the intersection, allowing more cars to pass through the intersection during each signal cycle, thereby reducing the potential delay for vehicles approaching the intersection. The fair share monetary contribution by the Project Applicant toward the physical improvements will reduce impacts to this intersection to less than significant.

Mitigation Measure TRA-4: To reduce impacts from implementation of the project to the Kiowa Road/Bear Valley Road intersection the Project Applicant shall pay their proportionate fair share to construct a second northbound exclusive left turn lane, add a right turn overlap

phase, construct a third eastbound through lane, and construct a third westbound through lane.

Future Year 2030 With Project Conditions

Impact 4.1-2: **Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).** ***Determination of Impact After Implementation of Mitigation: Less than Significant with Mitigation.***

Future Year 2030 With Project Condition

Without any intersection improvements, the proposed project would exacerbate deficient and acceptable intersection operation conditions at the following seven intersections: Main Street/Rock Springs Road; Apple Valley Road/Bear Valley Road; Deep Creek Road/Bear Valley Road, Deep Creek Road/Tussing Ranch Road, Deep Creek Road/Rock Springs Road, Kiowa Road/Bear Valley Road, and Kiowa Road/Rock Springs Road. As such, mitigation measures to reduce the potentially significant impact to a level of less than significant are provided below.

Table 4.1-10 *Future Year 2030 With Project Conditions Peak Hour Intersection LOS*, summarizes the improved intersection operation LOS that would occur with the implementation of the mitigation measures provided below. As shown in Table 4.1-10, assuming implementation of the recommended mitigation measures the intersections are forecast to operate at an acceptable LOS according to the significance criteria provided by the City of Hesperia, Town of Apple Valley, and County of San Bernardino. Refer to Figure 4.1-12, *Project Trip Percent Distribution.*

Future Year 2030 With Project Conditions Peak Hour Traffic Volumes

Future year 2030 with project conditions peak hour traffic volumes were derived from adding the forecast project-generated trip assignment shown in Figure 4.1-7 to the forecast year 2030 without project conditions traffic volumes. Figure 4.1-13 shows the *2030 Project Trip AM Peak Hour Intersection Volumes* and Figure 4.1-14 shows the *2030 Project Trip PM Peak Hour Intersection Volumes* at the study intersections.

Future Year 2030 With Project Conditions Level of Service

Table 4.1-10 summarizes future year 2030 with project conditions AM and PM peak hour average stopped delay per vehicle and corresponding LOS of the study intersections, based on the future year 2030 with project conditions peak hour intersection volumes shown in Figures 4.1-13 and 4.1-14. Detailed Highway Capacity Manual (HCM) analysis sheets are provided in Appendix C.

Table 4.1-10
Future Year 2030 With Project Conditions AM/PM Peak Hour Study Intersection LOS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
City of Hesperia																	
"I" Avenue (NS) at: • Main Street (EW)	TS	2	2	1	1	2	1>	2	2	1	2	2	0	34.9	52.4	C	D
Peach Avenue (NS) at: • Main Street (EW)	TS	1	1	1	1	1	1	1	2	1	1	2	1	16.8	19.1	B	B
Main Street (NS) at:																	
• Rock Springs Road (EW)	CSS	0	1	1	1	1	0	0	0	0	1	0	1	--[4]	--[4]	F	F
-With Improvements	**TS**	0	1	**1>**	**2**	1	0	0	0	0	1	0	**1>**	20.3	24.7	C	C
Town of Apple Valley																	
Apple Valley Road (NS) at:																	
• Bear Valley Road (EW)	TS	2	2	1	2	1	2>	2	2	1	1	3	1>	94.6	--[4]	F	F
-With Improvements[5]	TS	2	2	1	2	**2**	**1>>**	2	**3**	1	**2**	3	1>	26.9	31.7	C	C
Deep Creek Road (NS) at:																	
• Bear Valley Road (EW)	CSS	0	1	0	0	**1**	0	1	2	1	1	2	0	--[4]	--[4]	F	F
-With Improvements[5]	**TS**	**1**	1	**1**	**1**	1	**1**	1	2	1	1	2	0	20.9	26.5	C	C
• Tussing Ranch Road (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	32.2	--[4]	D	F
-With Improvements	**TS**	**1**	1	0	**1**	1	0	**1**	1	0	**1**	1	0	22.0	27.8	C	C
Kiowa Road (NS) at:																	
• Bear Valley Road (EW)	TS	1	2	1	1	2	1	1	2	1	1	2	1	58.1	54.4	E	D
-With Improvements[5]	TS	**2**	2	1	1	2	1	1	2	1	1	**3**	0	25.8	27.5	C	C

Table 4.1-10
Future Year 2030 With Project Conditions AM/PM Peak Hour Study Intersection LOS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
County of San Bernardino																	
Deep Creek Road (NS) at:																	
• Ocotillo Way (EW)	CSS	0	1	0	**1**	1	0	0	0	0	0	**1**	0	13.7	16.5	B	C
• "H" Street Project Access (EW)	CSS	0	1	0	**1**	1	0	0	0	0	0	**1**	0	13.7	16.8	B	C
• South Project Access (EW)	CSS	0	1	0	**1**	1	0	0	0	0	0	**1**	0	14.3	18.0	B	C
• Roundup Way (EW)	CSS	0	1	0	0	1	0	1	0	1	0	0	0	15.4	20.0	C	C
• Rock Springs Road (EW)	TS	0.5	0.5	1	0.5	0.5	1	1	1	0	1	1	0	40.0	54.8	D	D
-With Improvements	TS	0.5	0.5	1	0.5	0.5	1	1	**2**	0	1	**2**	0	21.8	24.4	C	C
Kiowa Road (NS) at:																	
• Rock Springs Road (EW)	AWS	1	1	1	1	1	1>>	1	1	0	1	1	0	17.2	37.8	C	E
-With Improvements	**TS**	1	1	1	1	1	1>>	1	1	0	1	1	0	31.7	26.7	C	C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right Turn Overlap Phase; >> = Free Right Turn

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.8 R5 (2007). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
TS = Traffic Signal
AWS = All Way Stop

[4] -- = Delay High, Intersection Unstable, Level of Service "F"

[5] Pedestrians are assumed not to occur on every cycle.

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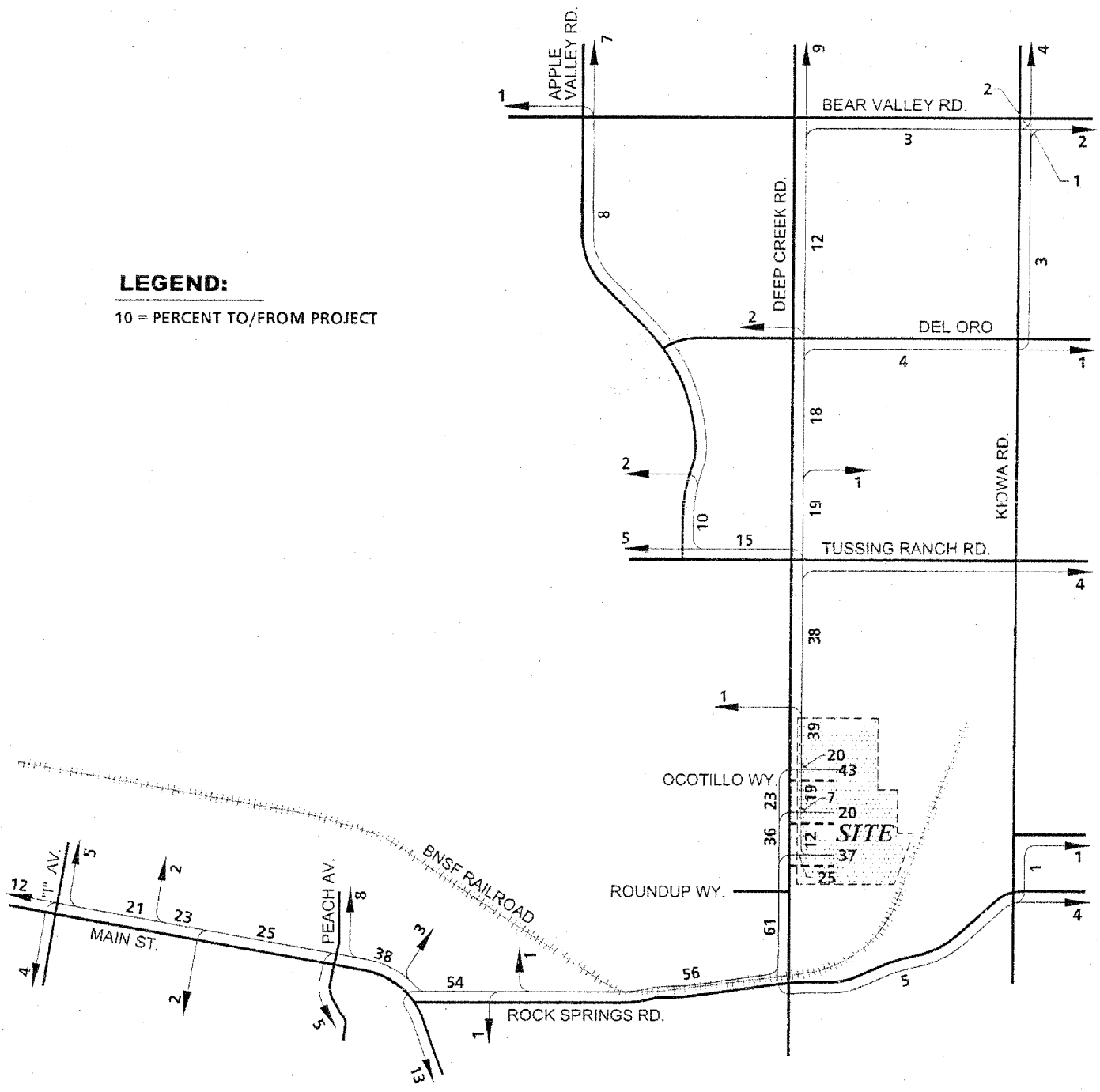

2030 Project Trip Percent Distribution

Deep Creek EIR

Not to Scale

Figure 4.1-12

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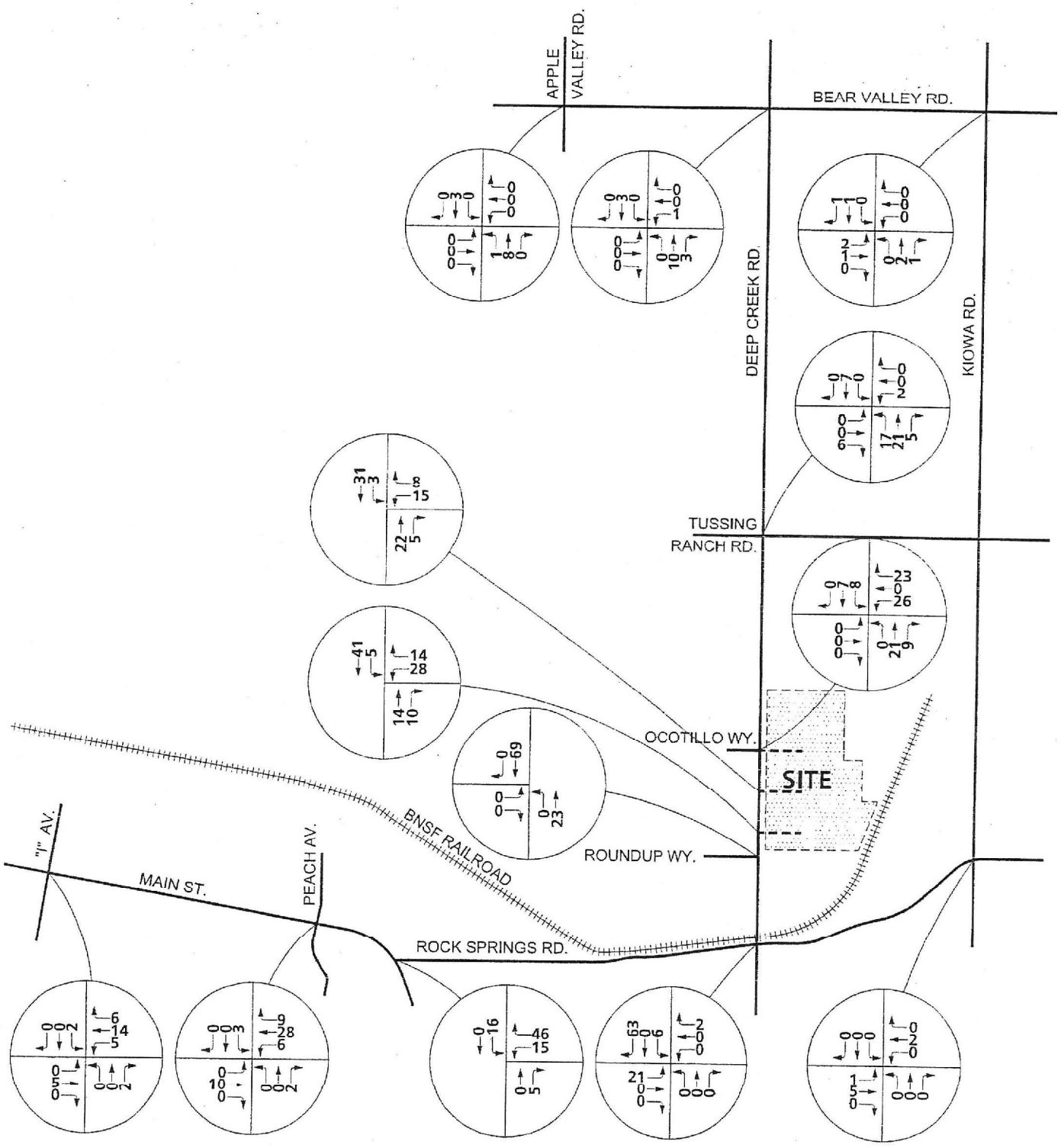

CONSULTING

Not to Scale

2030 Project Trip
AM Peak Hour Intersection Volumes

Deep Creek EIR

Figure 4.1-13

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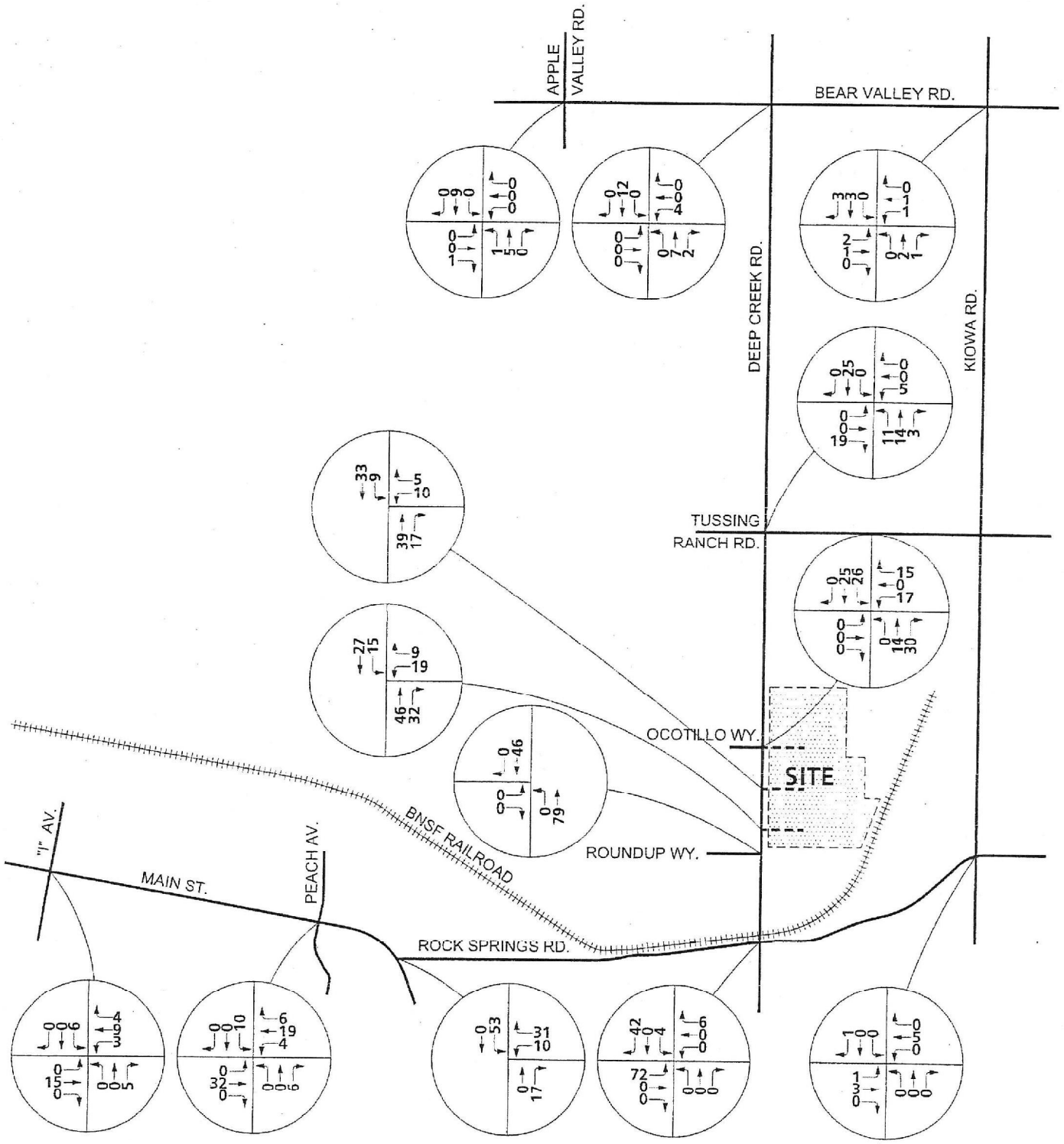

RBF CONSULTING

N

Not to Scale

2030 Project Trip
PM Peak Hour Intersection Volumes

Deep Creek EIR

Figure 4.1-14

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As shown in Table 4.1-10, with the addition of project-generated trips, the same intersections under the future 2030 without project scenario are forecast to continue to operate at a deficient LOS per the significance criteria of the City of Hesperia, Town of Apple Valley, or County of San Bernardino for future year 2030 with project conditions.

Implementation of the project would result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system. As such, the project would not be consistent with the significance criteria and would result in potentially significant impacts to the intersections below in Impact 4.1-2a through 4.1-2g.

Impact 4.1-2a: *Main Street/Rock Springs Road*

Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Main Street/Rock Springs Road. ***Determination of Impact After Implementation of Mitigation: Less than Significant with Mitigation.***

Implementation of mitigation measure TRA-5 will improve the intersection in the future year 2030 condition from a deficient LOS F in both the AM and PM peak hours to an acceptable LOS C in both the AM and PM peak hours. The construction of improvements at this intersection will decrease the delay times at the intersection by providing a traffic signal and additional turn lanes that will facilitate more efficient travel through the intersection. The traffic signal will result in the reduction of the existing delay times at the intersection. The additional turn lanes will position turning vehicles out of the through lanes and thereby reduce the delay time of through traffic approaching and traveling through the intersection. The fair share monetary contribution by the Project Applicant toward the physical improvements, as well as implementation of mitigation measure TRA-1 will reduce impacts to this intersection to less than significant.

Mitigation Measure TRA-5: To reduce impacts from implementation of the project to the Main Street/Rock Springs Road intersection, the Project Applicant shall pay their proportionate fair share to install a traffic signal, add a northbound right turn overlap phase, construct a second southbound exclusive left turn lane, and add a westbound right turn overlap phase.

Impact 4.1-2b: *Apple Valley Road/Bear Valley Road*

Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Apple Valley Road/Bear Valley Road. ***Determination of Impact After Implementation of Mitigation: Less than Significant with Mitigation.***

Implementation of mitigation measure TRA-6 will improve the intersection in future year 2030 conditions from a deficient LOS F in both the AM and PM peak hours to an acceptable LOS C in both the AM and PM peak hours. The construction of improvements at this intersection will decrease the delay times at the intersection by providing additional through lanes and turn lanes that will facilitate more efficient travel through the intersection. The additional through lane will result in an increase of capacity for traffic traveling through the intersection, allowing more cars to pass through the intersection during each signal cycle, thereby reducing the potential delay for vehicles approaching the intersection. The additional turn lanes will position turning vehicles out of the through lanes and thereby reduce the delay time of through traffic approaching and traveling through the intersection. In addition, the Project Applicant will pay a fair share contribution to the improvement of the Lemon Street Bridge across the Mojave River (four lane bridge). Construction of this bridge will help alleviate traffic on the existing bridges crossing the river. The fair share monetary contribution by the Project Applicant toward the physical improvements, as well as implementation of mitigation measure TRA-6 will reduce impacts to this intersection to less than significant.

Mitigation Measure TRA-6: To reduce impacts from implementation of the project to the Apple Valley Road/Bear Valley Road intersection, the Project Applicant shall pay their proportionate fair share to construct a second southbound through lane, a single southbound free right turn lane, a third eastbound through lane, a second westbound left turn lane and pay a fair share contribution towards the construction of the Lemon Street Bridge across the Mojave River.

Impact 4.1-2c: *Deep Creek Road/Bear Valley Road*

Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Deep Creek Road/Bear Valley Road. ***Determination of Impact After Implementation of Mitigation: Less than Significant with Mitigation.***

Implementation of mitigation measure TRA-7 will improve the intersection in the future year 2030 condition from a deficient LOS F in both the AM and PM peak hours to an acceptable LOS C in both the AM and PM peak hours. The construction of improvements at this intersection will decrease the delay times at the intersection by providing a traffic signal, and additional turn lanes that will facilitate more efficient travel through the intersection. The traffic signal will result in the reduction of the existing delay times at the intersection. The additional turn lanes will position turning vehicles out of the through lanes and thereby reduce the delay time of through traffic approaching and traveling through the intersection. The fair share monetary contribution by the Project Applicant toward the physical improvements, as well as implementation of mitigation measure TRA-7 will reduce impacts to this intersection to less than significant.

Mitigation Measure TRA-7: To reduce impacts from implementation of the project to the Deep Creek Road/Bear Valley Road intersection, the Project Applicant shall pay their proportionate fair share to install a traffic signal, construct a northbound left turn lane, construct a northbound right turn lane, construct a southbound left turn lane, and construct a southbound right turn lane.

Impact 4.1-2d: *Deep Creek Road/Tussing Ranch Road*

Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Deep Creek Road/Tussing Ranch Road. ***Determination of Impact After Implementation of Mitigation: Less than Significant with Mitigation.***

Implementation of mitigation measure TRA-8 will improve the intersection in the future year 2030 condition from a deficient LOS D in the AM and LOS F in the PM peak hours to an acceptable LOS C in both the AM and PM peak hours. The construction of improvements at this intersection will decrease the delay times at the intersection by providing a traffic signal and additional turn lanes that will facilitate more efficient travel through the intersection. The traffic signal will result in the reduction of the existing delay times at the intersection. The additional turn lanes will position turning vehicles out of the through lanes and thereby reduce the delay time of through traffic approaching and traveling through the intersection. As based on the South/East Apple Valley Local Area Transportation Facilities Plan, the payment of the developer fees by the Project Applicant, toward the physical improvements at this intersection, as well as implementation of mitigation measure TRA-8 will reduce impacts to this intersection to less than significant.

Mitigation Measure TRA-8: To reduce impacts from implementation of the project to the Deep Creek/Tussing Ranch Road intersection the Project Applicant shall pay their proportionate fair share to install a traffic signal, construct a northbound left turn lane, construct a southbound left turn lane, construct an eastbound left turn lane, and construct a westbound left turn lane.

Impact 4.1-2e: *Kiowa Road/Bear Valley Road*

Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Kiowa Road/Bear Valley Road. ***Determination of Impact After Implementation of Mitigation: Less than Significant with Mitigation.***

Implementation of mitigation measure TRA-9 will improve the intersection in future year 2030 conditions from a deficient LOS E in the AM peak hour and LOS D in the PM peak hour to an

acceptable LOS C in both the AM and PM peak hours. The construction of improvements at this intersection will decrease the delay times at the intersection by providing additional through lanes and turn lanes. Impacts would be reduced to less than significant with the implementation of mitigation measure TRA-9.

Mitigation Measure TRA-9: To reduce impacts from implementation of the project to the Kiowa Road/Bear Valley Road intersection the Project Applicant shall pay their proportionate fair share to construct a second northbound left turn lane and to construct a third westbound through lane.

Impact 4.1-2f: *Deep Creek Road/Rock Springs Road*

Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Deep Creek Road/Rock Springs Road. ***Determination of Impact After Implementation of Mitigation: Less than Significant with Mitigation.***

Implementation of mitigation measure TRA-10 will improve the intersection in the future year 2030 condition from a deficient LOS D in both the AM and PM peak hours to an acceptable LOS C in both the AM and PM peak hours. The construction of improvements at this intersection will decrease the delay times at the intersection by providing additional through lanes that will facilitate more efficient travel through the intersection. The additional through lanes will result in an increase of capacity for traffic traveling through the intersection, allowing more cars to pass through the intersection during each signal cycle, thereby reducing the potential delay for vehicles approaching the intersection. As based on the South/East Apple Valley Local Area Transportation Facilities Plan, the payment of the developer fee by the Project Applicant toward the physical improvements at this intersection will reduce impacts to this intersection to less than significant.

Mitigation Measure TRA-10: To reduce impacts from implementation of the project to the Deep Creek Road/Rock Springs Road intersection the Project Applicant shall pay their proportionate fair share to construct a second eastbound through lane and construct a second westbound through lane.

Impact 4.1-2g: *Kiowa Road/Rock Springs Road*

Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of Kiowa Road/Rock Springs Road. ***Determination of Impact After Implementation of Mitigation: Less than Significant with Mitigation.***

Implementation of mitigation measure TRA-11 will improve the intersection in the future year 2030 condition from a deficient LOS E in PM peak hour to an acceptable LOS C in PM peak hour. The construction of improvements at this intersection will decrease the delay times at the intersection by providing a traffic signal that will facilitate more efficient travel through the intersection. The traffic signal will result in the reduction of the existing delay times at the intersection. The fair share monetary contribution by the Project Applicant toward the physical improvements will reduce impacts to this intersection to less than significant.

Mitigation Measure TRA-11: To reduce impacts from implementation of the project to the Kiowa Road/Rock Springs Road intersection the Project Applicant shall pay their proportionate fair share to install a traffic signal.

Level of Service

Impact 4.1-3: **Exceed, either individually or cumulatively, an LOS standard established by the city, county, or state agency for designated roads or highways.** ***Determination of Impact After Implementation of Mitigation: Less than Significant with Mitigation.***

The Town of Apple Valley, City of Hesperia, and the County of San Bernardino were contacted in order to determine if there were any projects planned within the project area that may potentially have an impact on future traffic volumes at the intersections analyzed as part of the project. Based on this request nine projects were identified by these agencies. The without project scenario includes the trips generated by these nine projects plus an ambient growth rate factor of three percent (as directed by the County of San Bernardino) to existing traffic conditions to reflect interim year 2015 without project conditions. The project trip generation was then added to the without project interim 2015 conditions resulting in the interim 2015 with project condition. As such, the cumulative impact analysis for the project is included in both the interim 2015 *without and with* project conditions and mitigation measures to reduce potentially significant impacts to less than significant have been proposed; refer to the discussion regarding Impact 4.1-1 and associated mitigation measures above for a detailed analysis.

Since the proposed project is forecast to generate less than 250 two-way AM/ PM peak hour trips (152 AM peak hour and 204 PM peak hour two-way trips) , preparation of a Congestion Management Plan (CMP) TIA is not required for the proposed Project according to the CMP TIA guidelines.

Incompatible Design Features

Impact 4.1-4: **Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).** ***Determination of Impact: Less Than Significant Impact.***

No new public roads are proposed with the project. The drive aisles of the proposed project would be designed in accordance with the standards of the *County of San Bernardino Zoning and Development Code*. Compliance with these standards would reduce impacts to a level of less than significant.

Emergency Access

Impact 4.1-5: **Result in inadequate emergency access.** ***Determination of Impact: Less Than Significant Impact.***

The proposed project would be subject to the County of San Bernardino *Zoning and Development Code*, which would ensure that the project would provide adequate emergency access. Compliance with these standards would reduce impacts to a level of less than significant.

Parking

Impact 4.1-6: **Result in inadequate parking capacity.** ***Determination of Impact: Less Than Significant Impact.***

Section 83.11.040 of the *County of San Bernardino Development Code* requires that two onsite parking spaces be provided per single-family residential dwelling unit. As such, the project would provide a total of 404 parking spaces onsite. The number of parking spaces provided is consistent with the requirements of Section 83.11.040 of the *County of San Bernardino Development Code*. Therefore, impacts relative to parking would be less than significant.

Alternative Transportation

Impact 4.1-7: **Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).** ***Determination of Impact: No Impact.***

The project will not conflict with applicable County Standards, which support and/or facilitate alternative means of transportation; therefore, no impact associated with this issue will occur.

ANALYSIS OF CUMULATIVE IMPACTS

Cumulative Scenario

The proposed Project includes 202 residential-lots and is located on approximately 249 acres in the unincorporated area of the County of San Bernardino, within the sphere of influence of the Town of Apple Valley. The cumulative scenario impacts of this development upon traffic and circulation on and off site were analyzed by Urban Crossroads in conjunction with the County including all development envisioned through 2030. The Cumulative No Project scenario

assumes the residential units that could develop in the Project site would otherwise develop elsewhere in the County.

Assumed Cumulative Roadway Network

Cumulative Roadway Segment Improvements

The future cumulative roadway network includes certain roadway improvements, consistent with County Standards that support the level of development anticipated to be in place in 2030. Major improvements assumed under cumulative conditions are listed in Table 4.1-11, *Cumulative Roadway Improvement Summary (2030),* below.

Table 4.1-11:
Cumulative Roadway Improvement Summary (2030)

Intersection	Improvement[1]	In Fee Program[2]
Main Street (NS) at Rock Springs Road (EW)	Install Traffic Signal Add Northbound Right Turn Overlap Phase Construct 2nd Southbound Exclusive Left Turn Lane Add Westbound Right Turn Overlap Phase	
Apple Valley Road (NS) at Bear Valley Road (EW)	Construct 2nd Southbound Through Lane Reconstruct Dual Southbound Right Turn Lanes into Single Free Right Turn Lane Construct 3rd Eastbound Through Lane Construct 2nd Westbound Left Turn Lane	
Deep Creek Road (NS) at Bear Valley Road (EW)	Install Traffic Signal Construct 1st Northbound Exclusive Left Turn Lane Construct 1st Northbound Exclusive Right Turn Lane Construct 1st Southbound Exclusive Left Turn Lane Construct 1st Southbound Through Lane Construct 1st Southbound Exclusive Right Turn Lane	
Deep Creek Road (NS) at Tussing Ranch Road (EW)	Install a Traffic Signal Construct 1st Northbound Exclusive Left Turn Lane Construct 1st Southbound Exclusive Left Turn Lane	YES – 9A YES – 4 YES – 4

[1] The Construction of turn pockets and intersection endpoints are assumed to be included as widening improvements in the South/East Apple Valley Local Area Transportation Facilities Plan.
[2] If an improvement is included in the South/East Apple Valley Local Area Transportation Facilities Plan (i.e. – "Yes, In Fee Program"), the corresponding project reference number as listed in the Fee Schedule (see Appendix "L" of Traffic Impact Analysis) is also identified.

Intersection	Improvement[1]	In Fee Program[2]
	Construct 1st Eastbound Exclusive Left Turn Lane Construct 1st Westbound Exclusive Left Turn Lane	YES – 9A YES – 9A
Deep Creek Road (NS) at Ocotillo Way (EW)	Construct 1st Southbound Exclusive Left Turn Lane Construct 1st Westbound Shared Left-Right Turn Lane	
Deep Creek Road (NS) at "H" Street Project Access (EW)	Construct 1st Southbound Exclusive Left Turn Lane Construct 1st Westbound Shared Left-Right Turn Lane	
Deep Creek Road (NS) at South Project Access	Construct 1st Southbound Exclusive Left Turn Lane Construct 1st Westbound Shared Left-Right Turn Lane	
Deep Creek Road (NS) at Rock Springs Road (EW)	Construct 2nd Eastbound Through Lane Construct 2nd Westbound Through Lane	YES – 10 YES – 10
Kiowa Road (NS) at Bear Valley Road (EW)	Construct 2nd Northbound Exclusive Left Turn Lane Construct 3rd Westbound Through Lane	
Kiowa Road (NS) at Rock Springs Road (EW)	Install Traffic Signal	

Source: *Urban Crossroads, 2008.*

Existing Level of Service

Table 4.1-12, *Existing Conditions Intersection Level of Service,* outlines the impacted intersections designated by the County as discussed in the Traffic Impact Analysis.

Table 4.1-12:
Existing Conditions Intersection Level of Service

Intersection	Traffic Control	Level of Service	
		AM	PM
"I" Avenue (NS) at Main Street (EW)	TS	C	D
Peach Avenue (NS) at Main Street (EW)	TS	C	B
Main Street (NS) at Rock Springs Road (EW)	CSS	E	F
Apple Valley Road (NS) at Bear Valley Road (EW)	TS	D	D
Deep Creek Road at Bear Valley Road (EW)	CSS	F	F
Deep Creek Road (NS) at Tussing Ranch Road	CSS	B	B
Deep Creek Road (NS) at Ocotillo Way	-----DOES NOT EXIST-----		
Deep Creek Road (NS) at South Project Access	-----DOES NOT EXIST-----		
Deep Creek Road (NS) at Roundup Way	CSS	B	B
Deep Creek Road (NS) at Rock Springs Road (EW)	TS	C	B
Kiowa Road (NS) at Bear Valley Road (EW)	TS	D	D
Kiowa Road (NS) at Rock Springs Road (EW)	AWS	A	B

Source: Urban Crossroads, 2008.
TS = Traffic Signal CSS = Cross Street StopAWS = All Way Stop

Cumulative Intersection Improvements

Based on the roadway segment improvements and cumulative development identified above, specific intersection improvements need to be implemented in order for cumulative traffic to operate at acceptable conditions.

On-site Improvements

To ensure adequate circulation within the project itself, recommendations for on-site improvements provided by the Traffic Study completed by *Urban Crossroads*, 2009, include the following:

1. Construct Ocotillo Way (full-section improvements), within the project, as a collector in conjunction with development.
2. Provide Stop Sign control for all project access roads to Deep Creek Road.
3. Sight distance at the Deep Creek Road access points should be reviewed with respect to County of San Bernardino standards.
4. Construct a barricade at the easterly terminus of paved Ocotillo Way to preclude dirt road usage.

Off-site Improvements

As previously described, the necessary off-site improvements include the project contribution towards the cost of necessary study area improvements on a fair share or "pro-rata" basis by paying development impact fees and/or additional fair share contributions towards improvements not included in the adopted fee program.

Transportation System Management Actions

On-site Improvements

The on-site design should accommodate private and/or public bus access design and parking.

Off-site Improvements

As development in the area occurs, transit agencies should consider expanding service within the area.

Cumulative Levels of Service

Cumulative Without Project Intersection Operations

Table 4.1-13, *2030 Without Project Conditions Intersection Analysis Level of Service Cumulative Impacts With Existing Conditions,* below illustrates the levels of service of selected impacted intersections at their existing state and year 2030 without the project and the improvements. The table shows that the LOS at these intersections will decrease even without the project and that the improvements listed in Table 4.1-11 above would help to increase the levels of service.

Table 4.1-13:
2030 Without Project Conditions Intersection Analysis Level of Service Cumulative Impacts With Existing Conditions

Intersection	Traffic Control	Existing LOS		2030 LOS Without Project	
		AM	PM	AM	PM
"I" Avenue (NS) at Main Street (EW)	TS	C	D	D	D
Peach Avenue (NS) at Main Street (EW)	TS	C	B	B	B
Main Street (NS) at Rock Springs Road (EW)	CSS	E	F	F	F
- With Improvements	**TS**	**-**	**-**	**B**	**C**
Apple Valley Road (NS) at Bear Valley Road (EW)	TS	D	D	F	F
- With Improvements	**TS**	**-**	**-**	**C**	**C**
Deep Creek Road at Bear Valley Road (EW)	CSS	F	F	F	F
- With Improvements	**TS**	**-**	**-**	**C**	**C**
Deep Creek Road (NS) at Tussing Ranch Road (EW)	CSS	B	B	D	F
-With Improvements	**TS**	**-**	**-**	**C**	**C**
Deep Creek Road (NS) at Ocotillo Way (EW)	-	DOES NOT EXIST		-	
Deep Creek Road (NS) at "H" Street Project Access (EW)	-	DOES NOT EXIST		-	
Deep Creek Road (NS) at South Project Access (EW)	-	DOES NOT EXIST		-	
Deep Creek Road (NS) at Roundup Way (EW)	CSS	B	B	B	C
Deep Creek Road (NS) at Rock Springs Road (EW)	TS	C	B	D	D
- With Improvements	**TS**	**-**	**-**	**C**	**C**
Kiowa Road (NS) at Bear Valley Road (EW)	TS	D	D	E	D
- With Improvements	**TS**	**-**	**-**	**C**	**C**
Kiowa Road (NS) at Rock Springs Road (EW)	AWS	A	B	C	E
- With Improvements	**TS**	**-**	**-**	**C**	**C**

Source: Urban Crossroads, 2008. Gray shading indicates change from 'No Project' scenario to 'With Project' scenario.
TS = Traffic Signal CSS = Cross Street StopAWS = All Way Stop

Cumulative With Project Conditions and Intersection Operations

Table 4.1-14, *2030 With Project Conditions Intersection Analysis Level of Service Cumulative Impacts With Existing Conditions,* below depicts the declined and improved levels of service to the specified intersections with the implementation of the proposed project and the improvements to these intersections. The table shows that in some cases the LOS improved with the implementation of the project and even more LOS improvements after the implementation of the circulation improvements. The proposed project also includes three new intersections that will alleviate some of the traffic from existing roads.

Table 4.1-14:
2030 With Project Conditions Intersection Analysis Level of Service Cumulative Impacts With Existing Conditions

Intersection	Traffic Control	Existing LOS		2030 LOS With Project and Improvements	
		AM	PM	AM	PM
"I" Avenue (NS) at Main Street (EW)	TS	C	D	C	D
Peach Avenue (NS) at Main Street (EW)	TS	C	B	B	B
Main Street (NS) at Rock Springs Road (EW)	CSS	E	F	F	F
- With Improvements	**TS**	**-**	**-**	**C**	**C**
Apple Valley Road (NS) at Bear Valley Road (EW)	TS	D	D	F	F
- With Improvements	**TS**	**-**	**-**	**C**	**C**
Deep Creek Road at Bear Valley Road (EW)	CSS	F	F	F	F
- With Improvements	**TS**	**-**	**-**	**C**	**C**
Deep Creek Road (NS) at Tussing Ranch Road (EW)	CSS	B	B	D	F
-With Improvements	**TS**	**-**	**-**	**C**	**C**
Deep Creek Road (NS) at Ocotillo Way (EW)	CSS	DOES NOT EXIST		B	C
Deep Creek Road (NS) at "H" Street Project Access (EW)	CSS	DOES NOT EXIST		B	C
Deep Creek Road (NS) at South Project Access (EW)	CSS	DOES NOT EXIST		B	C
Deep Creek Road (NS) at Roundup Way (EW)	CSS	B	B	C	C
Deep Creek Road (NS) at Rock Springs Road (EW)	TS	C	B	D	D
- With Improvements	**TS**	**-**	**-**	**C**	**C**
Kiowa Road (NS) at Bear Valley Road (EW)	TS	D	D	E	D
- With Improvements	**TS**	**-**	**-**	**C**	**C**
Kiowa Road (NS) at Rock Springs Road (EW)	AWS	A	B	C	E
- With Improvements	**TS**	**-**	**-**	**C**	**C**

Source: Urban Crossroads, 2008. Gray shading indicates change from 'No Project' scenario to 'With Project' scenario.
TS = Traffic Signal CSS = Cross Street StopAWS = All Way Stop

Cumulative Mitigation

As discussed above, the proposed project would generate traffic that contributes to significant impacts on regional and local roadways. Future development projects have a responsibility to contribute their fair share toward mitigation which includes development fees. Application of the fees toward transportation measures would be the responsibility of several different agencies including the Town of Apple Valley, San Bernardino County, and the San Bernardino Association of Governments. Since the project is within the jurisdiction of San Bernardino County, all fees will be collected by the County on behalf of all jurisdictions. Fee application decisions would reflect the most cost-effective ways to address conditions. Construction of necessary offsite improvements would be the responsibility of San Bernardino County.

Construction of necessary onsite improvements would be the responsibility of the Applicant. Additionally, the congestion on these roads is an existing condition, the mitigation of which is not the sole responsibility of the Project Applicant. Finally, the necessary improvements to these roads must undergo extensive design and environmental review prior to construction. For these reasons, adequate mitigation is not available. Until the improvements are made, the impacts to the Regional and Local roadways would be significant and unavoidable.

4.2 BIOLOGICAL RESOURCES

This section evaluates the potential impacts on biological resources resulting from the implementation of the project. Mitigation measures to reduce the impacts to biological resources are also recommended to address project related impacts. Information in this section is based primarily on the *Focused Biological Survey for a 249-Acre Parcel,* prepared by Tom Dodson & Associates in May 2009, the *Botanical and Habitat Survey for Deep Creek Ranch Project*, prepared by Tom Dodson & Associates in May 2009, the *County of San Bernardino General Plan,* prepared by URS Corporation on March 13, 2007, and the *County of San Bernardino General Plan Final EIR,* prepared by URS Corporation in February 2007.

ENVIRONMENTAL SETTING

ON-SITE CONDITIONS

The proposed project site is located in western San Bernardino County, east of the City of Hesperia, and south of the Town of Apple Valley in the southwestern Mojave Desert. The approximately 249-acre project site is located approximately 10 miles east-northeast of the interchange of Interstate 15 (I-15) and State Route 395 (SR-395). The project site is bounded by Deep Creek Road on the west, Mockingbird Avenue on the East, Roundup Way on the north, and Burlington Northern and Santa Fe (BNSF) railway tracks on the south.

The project site topography is composed of two flat terraces with approximately 60 feet of escarpment between them. There is also a knoll in the southeastern corner. Elevation ranges from 2,873 feet at the northwest corner to 2,945 feet on the upper terrace.

The project site is comprised of fallow field, a bluff or eroded cliff, desert dune habitat, and a knoll with Joshua tree woodland habitat. Based on irrigation equipment and residual furrows, the majority of the property appears to have been cultivated in the past, except the southeastern knoll, which doesn't appear to have ever been tilled. More recently, the property has been heavily grazed, apparently by the adjacent cattle farm to the south. The quality of the habitat within the project area ranges from moderate to highly disturbed. The general disturbances on site have occurred from regular discing for agriculture and/or weed abatement and grazing.

Surrounding land uses include the previously mentioned cattle farm to the south and rural residential lots ranging from 2.5 to 5 acres in size to the north, west, and east.

OFF-SITE CONDITIONS

The project area is located within a rural desert community that includes agricultural, cattle farming, rural residential, open space, and railway transportation uses.

VEGETATION

Three plant communities occur on the project site (refer to Figure 4.2-1, *Vegetation and Habitat Map)*: Joshua Tree Woodland (4.5 acres), Desert Dunes (.75 acres), and fallow Agricultural Land (approximately 244 acres). A total of 52 plant species were identified on site, of which 11 (21%) were non-native species. While the amount of non-native species was low, non-native species account for the majority of cover on both the upper and lower terraces south of Ocotillo Way. The following are descriptions of the onsite plant communities:

Joshua Tree Woodland

Approximately 4.5 acres of Joshua Tree Woodland occurs on the project site. Joshua tree habitats generally occur at moderate elevations in the Mojave Desert between creosote bush scrub and pinyon-juniper woodlands. The Joshua tree is a large, erect, evergreen, arborescent monocot. Joshua tree is the largest non-riparian plant of the Mojave Desert, reaching heights of 16 to 49 feet.

Desert Dunes

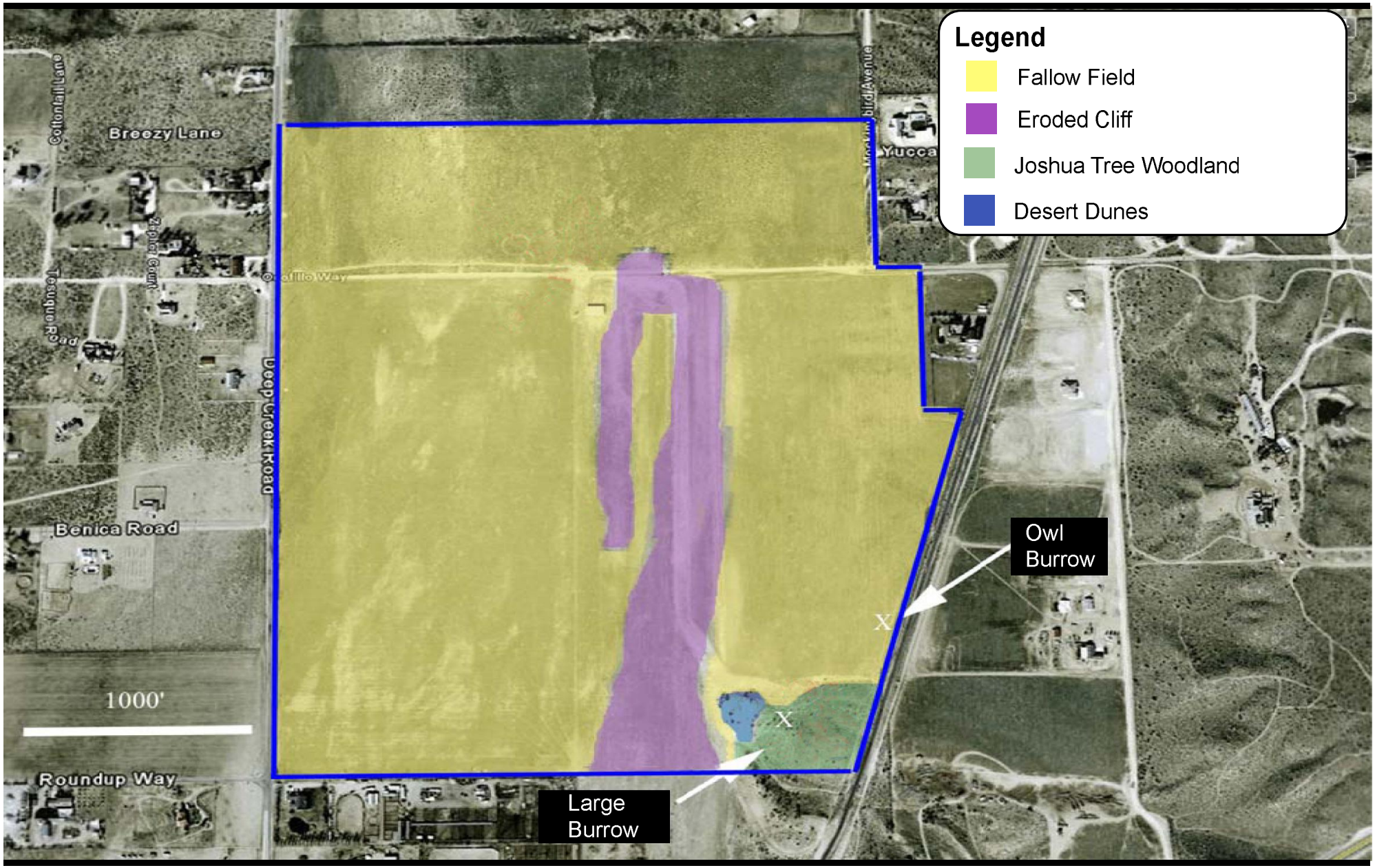
Sand Dunes occur on approximately .75 acres of the project site. Prevailing winds carry sands from dry lakes and washes to form sand dunes. At first glance, dunes appear to be barren but there are plants that can find sufficient moisture to survive.

Agricultural Land

Based on irrigation equipment and residual furrows, the majority of the property was cultivated in the past. Recently however, the property has been heavily grazed by cattle. Cattle grazing activities can result in disturbances in the form of soil compaction and deposition of animal waste.

SENSITIVE BIOLOGICAL RESOURCES

The biological resource analysis for the project area included an evaluation of sensitive biological resources. The California Department of Fish and Game's (CDFG's) California Natural Diversity Database (CNDDB) identifies plants and habitats considered to be sensitive, due to their scarcity or their potential to support State and/or Federal listed endangered or threatened plants. All records of special status species were reviewed that occur within the 7.5-minute United States Geological Survey (USGS) Apple Valley South, Apple Valley North, Victorville and Hesperia quadrangles. Within these areas, five special status plant species were identified, according to the CDFG's CNDDB. These plant species include: Booth's evening-primrose, desert cymopterus, short-joint beavertail, Sierra skullcap, and the San Bernardino aster.



RBF CONSULTING

Not to Scale

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Vegetation and Habitat Map

Deep Creek EIR

Figure 4.2-1

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However, of these five, appropriate habitat was identified on-site for Booth's evening-primrose (*Camissonia boothii ssp. boothii*), desert cymopterus (*Cymopterus deserticola*), and short-joint beavertail (*Opuntia basilaris var. brachyclada*).

Focused Surveys

Prior to visiting the site, background information was gathered to determine what species of plant communities would be expected in this area. This background check included a search of the CNDDB and a review of previously conducted biological surveys. The project site was surveyed for the presence or absence of Booth's evening-primrose (*Camissonia boothii* ssp. boothii), desert cymopterus (*Cymopterus deserticola*), and short-joint beavertail (*Opuntia basilaris* var. brachyclada). The survey was conducted on May 2, 2008, approximately 6 weeks after the last rainfall event on March 16, 2008. Rainfall was higher than normal with 9.27 inches falling between September 1, 2007 and May 2, 2008.

Booth's Evening-Primrose (*Camissonia boothii* ssp. Boothii)
Due to the presence of abundant habitat on-site and existing plant populations within 6 miles of the site along the Mojave River, there is a strong likelihood that this species may have occurred onsite. However, grazing, agricultural operations, and rural development in the area could have let to expiration of this species from the area. Booth's Evening-Primrose was not found to occur on the project sire during this or previous surveys conducted.

Desert Cymopterus (*Cymopterus deserticola*)

Appropriate habitat for the Desert Cymopterus is identified onsite, particularly in the Joshua tree woodland area and associated dune-like habitat (southeast corner of the property). However this area has been heavily impacted by recent cattle-grazing. No species wtithin the Apiaceae family was found during this survey or any previous surveys.

Short-Joint Beavertail (*Opuntia basilaris* var. brachyclada)

The Short-Joint Beavertail was not found during the May 2, 2008 site survey conducted as a part of the project. However, the CNDDB indicates that this sensitive species has been documented to occur in USGS – Apple Valley South Quadrangle, 7.5-Minute Series. While the cited elevational range for the species is between 1,400-6,000 feet in the Apple Valley/Cajon Pass area, this species has not been found to occur below 3000 feet. Surveys indicate that this species primarily occurs in the most xeric stage of chaparral and the more mesic stage of creosote scrub and Joshua tree woodland communities. Thus while there is nominal habitat at the Deep Creek site (e.g., Joshua Tree woodland) it is not within the species range of tolerance.

Table 4.2-1, *Special Status Plant Species within the Project Area,* lists the 21 sensitive plants that have been recorded within the USGS-Apple Valley South Apple Valley North, Victorville, and Hesperia Quadrangles region, and therefore, could potentially occur on the project site. As

identified in Table 4.2-1 and above, no sensitive plant species have been identified on-site during the focused surveys performed on May 2, 2008.

Table 4.2-1
Special Status Plant Species within the Project Area

Species	Status	Habitat	Presence/Description
Big Bear Valley woollypod *(Astragalus Leucolobus)*	Sensitive Species	Lower montane coniferous forest, pebble plain, pinyon and juniper woodland, upper montane coniferous forest.	There was no appropriate habitat on site and there is a zero possibility that this species would occur on this site. **Species was not found during focused surveys.**
Booth's evening primrose *(Camissonia boothii ssp. Boothii)*	Sensitive Species	Joshua tree woodland, pinyon juniper woodland.	Included in survey report. **Species was not found during focused surveys**.
Cushenbury oxytheca *(Oxytheca parishii var. goodmaniana)*	Sensitive Species	Pinyon and juniper woodland.	There was no appropriate habitat on site and there is a zero possibility that this species would occur on this site. **Species was not found during focused surveys.**
desert cymopterus *(Cymopterus deserticola)*	Sensitive Species	Joshua tree woodland, mojavean desert scrub. Most occurrences located near or in Edwards AFB.	Included in survey report. **Species was not found during focused surveys**.
Latimer's woodland gilia (Saltugilia latimeri)	Sensitive Species	Chaparral, mojavean desert scrub.	This is primarily an eastern Mojave species and the nearest collection is 13 miles to the east at >1400m elevation. **Species was not found during focused surveys.**
lemon lily (Lilium parryi)	Sensitive Species	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest.	There was no appropriate habitat on site and there is a zero possibility that this species would occur on this site. **Species was not found during focused surveys**.
Mojave tarplant (Deinandra Mohavensis)	Sensitive Species	Riparian scrub, chaparral.	The type collection was made at the confluence of Deep Creek and the Mojave river but this site has been extiperated and no other collections have been made in San Bernardino County since 1933. In addition, this is a Riparian species and no such habit found at the site. **Species was not found during focused surveys.**
Palmer's mariposa lily (Calochortus palmeri var. palmeri)	Sensitive Species	Meadows and seeps, chaparral, lower montane coniferous forest.	The Deep Creek site is much too arid and dry for this species which generally occurs along streams. There was no appropriate habitat on site and there is a zero possibility that this species would occur on this site. **No Calochortus species were found during focused surveys.**
Parish's daisy (Arabis parishii)	Sensitive Species	Pebble plain, pinyon juniper woodland, upper montane coniferous forest.	There was no appropriate habitat onsite and there is a zero possibility that this species would occur on this site. **Species was not found during focused surveys.**
Parish's desert-thorn (Lycium parishii)	Sensitive Species	Coastal scrub, sonoran desert scrub.	There is no habitat on site and this species has not been collected in San Bernardino County since 1885 and is believed extiperated from the county. There was no appropriate habitat on site and there is a zero possibility that this species would occur on this site. **Species was not found during focused surveys.**

Species	Status	Habitat	Presence/Description
Parish's rock cress (Arabis parishii)	Sensitive Species	Pebble plain, pinyon juniper woodland, upper montane coniferous forest.	Pebble Plains endemic, only found high elevation. There was no appropriate habitat onsite and there is a zero possibility that this species would occur on this site. **Species was not found during focused surveys**
pinyon rock cress (Arabis dispar)	Sensitive Species	Joshua tree woodland, pinyon-juniper woodland, mojavean desert scrub.	This occurs at a much higher elevation than the Deep Creek site. There was no appropriate habitat onsite and there is a zero possibility that this species would occur on this site. **Species was not found during focused surveys.**
Plummer's mariposa lily (Calochortus plummerae)	Sensitive Species	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest.	The project site is much too arid and dry for this species which occurs in chapparal and sage scrub. The lower elevations refer to more mesic parts of its range. There was no appropriate habitat on site and there is a zero possibility that this species would occur on this site. **No calochortus species were found during focused surveys.**
sagebrush loeflingia (Loeflingia squarrosa var. artemisiarum)	Sensitive Species	Great basin scrub, sonoran desert scrub, desert dunes.	The habitat on the deep Creek site would appear to be suitable for this species but the eastern and southern most population in San Bernardino county is >11 miles to the north west**. Species was not found during focused surveys**.
San Bernardino aster (Symphyotrichum Defoliatum)	Sensitive Species	Meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, grassland.	Included in survey report. There was no appropriate habitat on site and there is a zero possibility that this species would occur on this site. **Species was not found during focused surveys.**
San Bernardino Mountains dudleya (Dudleya abramsii ssp. Affinis)	Sensitive Species	Pebble (pavement) plain, upper montane coniferous forest, pinyon and juniper woodland.	This is only found high elevation under more mesic conditions. There was no appropriate habitat on site and there is a zero possibility that this species would occur on this site. **Species was not found during focused surveys.**
San Bernardino Mountains owl's clover (Castilleja Lasiorhyncha)	Sensitive Species	Meadows, pebble plain, upper montane coniferous forest, chaparral.	Pebble Plains endemic, only found high elevation. There was no appropriate habitat on site and there is a zero possibility that this species would occur on this site. **Species was not found during focused surveys.**
Shockley's rock cress (Arabis shockleyi)	Sensitive Species	Pinyon and juniper woodland.	It is unclear why the CNDDB lists this species as occurring at such a low elevation, all herbaria species that were viewed were collected at >1200m. The nearest population is ~13 miles east-southeast at1280m elevation. **Species was not found during focused surveys**.
short-joint beavertail (Opuntia basilaris var. Brachyclada)	Sensitive Species	Chaparral, Joshua tree woodland, mojavean desert scrub, pinyon-juniper woodland, riparian woodland.	Included in survey report. There was no appropriate habitat onsite and there is a zero possibility that this species would occur on this site. **Species was not found during focused surveys.**
silver-haired ivesia (Ivesia argyrocoma)	Sensitive Species	Meadows, pebble plains, upper montane coniferous forest.	Pebble Plains, only found high elevation. There was no appropriate habitat on site and there is a zero possibility that this species would occur on this site. **Species was not found during focused surveys.**
southern mountain buckwheat (Eriogonum kennedyi	Sensitive Species	Pebble (pavement) plain, lower montane coniferous forest.	Pebble Plains, only found high elevation. There was no appropriate habitat on site and there is a zero possibility that this species would occur on

Species	Status	Habitat	Presence/Description
var. austromontanum)			this site. **Species was not found during focused surveys.**
southern skullcap (Scutellaria bolanderi ssp. Austromontana)	Sensitive Species	Chaparral, cismontane woodland, lower montane coniferous forest.	Included in survey report. There was no appropriate habitat on site and there is a zero possibility that this species would occur on this site. **Species was not found during focused surveys.**

Sensitive Wildlife Species

The CNDDB indicates 29 sensitive wildlife species have been documented to occur in USGS-Apple Valley South Quadrangle, 7.5 Minute Series. Those species that have a potential to occur within the project vicinity include: prairie falcon (*Falco mexicanus)*, desert tortoise *(Gopherus agassizii)*, Mojave River vole (*Microtus californicus mohavensis),* Mojave ground squirrel (*Spermophilus mohavensis)*, and burrowing owl *(Athene cunicularia*).

Prairie falcon

The prairie falcon is a medium to large bird with a wingspan approaching 3.5 feet (106.7 cm). The female tends to be considerably larger than the male, in some cases a full one-third bigger. Adult prairie falcons are a pale brown to sandy brown across the top of their wings and back. The head is streaked with light areas around the face. A faint dark mustache appears on either side of the bill. Underneath the birds are creamy white with brown spotting or streaking on the breast and belly. Falcons all have slender bodies, long tails and characteristic long, pointed wings. Prairie falcons can be abundant when suitable habitats for nesting and foraging are present. They do migrate in the spring and fall, but some birds may reside in the area the entire year. Prairie falcons prefer rough broken terrain, which is where they establish nesting territories. Nesting occurs in mid-April through July, and are often found in rock crevices and sometimes in vacated stick nests left by other birds.

The prairie falcon is a locally common bird. These falcons prey chiefly on small birds and mammals, and on a variety of reptiles and insects. Prairie falcons hunt using low, rapid, searching flight, usually capturing prey on or near the ground. The prairie falcon, as do other species of falcons, swoops down upon its prey from behind. A similar species, the peregrine falcon, has been clocked at speeds of over 90 mph in their descents upon prey. Prairie falcons nest primarily on cliff ledges, but may also nest on low ridges. All birds of prey are protected by law. It is illegal to harm them or to disturb their nests. It is also against the law to have in your possession any artifacts from birds of prey, such as feathers, talons or preserved specimens. Injured hawks and owls should be reported to the CDFG or the U.S. Fish and Wildlife Service.

Desert Tortoise

The desert tortoise (*Gopherus agassizii*) is listed under both State and Federal law as a threatened species. Throughout its range it is threatened by habitat loss, domestic grazing, predation, collections, and increased mortality rates. Critical habitat for the desert tortoise was designated on February 8, 1994. The project site is not located within designated critical habitat. The desert

tortoise is typically found in creosote bush scrub. They are most often found on level ground where the substrate is firm but not too rocky. Tortoise burrows are typically found at the base of shrubs, in the sides of washes and in hillsides. Recent activity at tortoise burrows may be indicated by footprints, fresh dirt on the apron of the burrow, fresh scat, crushed vegetation or recently exposed roots in the burrow wall. Tortoise scat is very distinctive and may remain on the desert floor for many years. General estimates of the age of tortoise scat can be made based upon sun bleaching and moisture levels. Home ranges for desert tortoise vary, depending upon the size and sex of a tortoise as well as the availability of food and shelter. According to the CDFG, information on the western Mojave population of desert tortoise, home range typically varies from 5 to 38 acres. Neonatal tortoises can travel up to 3-5 km after hatching. Because a single tortoise may have many burrows distributed throughout its home range, it is not possible to predict exact numbers of individuals on a site based upon burrow numbers.

In 1992, the U.S. Bureau of Land Management issued the California Statewide Desert Tortoise Management Policy which included categorizing habitat into three levels of classification. The management goal for Category I areas is to maintain stable, viable populations and to increase the population where possible. The management goal for Category II areas is to maintain stable, viable populations. The management goal for Category III areas is to limit population declines to the extent feasible. The entire project occurs in desert tortoise habitat designated as Class II.

Mojave River Vole

Mojave River vole (*Microtus californicus mohavensis*) is a U.S. Fish and Wildlife Services (USFWS) Species of Concern and BLM Sensitive California, Species of Special Concern (CDFG 1998). The Mojave River vole, also referred to as the Mojave River meadow mouse, is one of 17 named subspecies of the California vole, *Microtus californicus*. The species is restricted to moist habitats along the Mojave River between Victorville and Helendale. Appropriate habitat may also exist upstream of Victorville towards Hesperia. The Mojave River vole measures 7.5 to 8.4 inches in total length. It has brown fur overlaid with longer black hairs above, grayish below. The tail is black above, brown below, and averages one-third of the length of the head and body. Mojave River voles construct runways in grassy habitats by clipping vegetation. These runways often lead to shallow burrows in friable soil. They forage primarily on the stems and leaves of grasses and forbs, but will switch to grass seeds during the drier parts of the year. Suitable habitat is associated with ponds and irrigation canals along with the Mojave River proper. Elevations of known localities range between 750-823 meters (2325-2700 feet).

The primary threats to the Mojave River vole are the destruction and fragmentation of habitat resulting from agriculture and urbanization. Urbanization adjacent to the Mojave River restricts the availability of upland habitat that may be critical during flood events. Agricultural development affects this subspecies by removing and modifying native habitats. Channelization of surface water and pumping of groundwater may continue to be a significant threat along the Mojave River. Introduction and spread of salt cedar (*Tamarix* sp.) displaces native plants and alters the composition and structure of native plant communities. Concentrated off-highway

vehicle use and other surface-disturbing activities also threaten the species by removing vegetation required for foraging and cover.

Mojave Ground Squirrel

The Mojave Ground Squirrel (MGS) is endemic to 2 million hectares in the western Mojave Desert. It typically inhabits sandy soils of alkali sink and creosote bush scrub habitat. MGS are listed as threatened by CDFG due to habitat loss, fragmentation, and deterioration, however, CDFG does not designate critical habitat. This species measures about 9 inches from nose to tip of tail, forages on leaves and seeds, and aestivates/hibernates for long periods of the year. Aestivation (reduction of body temperature, heart rate, and metabolism) begins usually in the early summer when vegetation begins to dry up. MGS reanimate after winter rains have produced new vegetative growth, generally in February. Males may travel up to a mile per day in search of mates after they have emerged from aestivation in the spring. Litters of six to nine young are born by the end of March; are weaned by early May; and disperse a few weeks later. Young often establish home ranges adjacent to the maternal home range; however some young will disperse up to 4 miles. When winter rains fail, MGS do not reproduce and can enter dormancy as early as April. As a result, MGS numbers decline after a low rainfall year, and two successive years of drought can lead to the extinction of local populations. Young can recolonize suitable habitat rapidly after good reproductive seasons.

In the Coso Grazing Exclosure Monitoring Study several individuals survived until 5 years of age, the maximum lifespan recorded for this species. In general, the majority of juveniles do not survive to reach one year of age. Evidence from radiotelemetery and weight gain patterns suggest that juvenile survivorship is low because of predation and the frequent failure of juveniles to accumulate sufficient fat reserves for their first season of dormancy. However, once individual ground squirrels successfully reach yearling status and become established in a home range, survivorship tends to be high.

Plants documented as forage for MGS include: fiddleneck (*Amsinckia tessellata*), wolfberry (*Lycium andersonii*), Joshua tree (*Yucca brevifolia*), winterfat (*Krascheninnikovia* (formerly *Eurotia*) *lanata*), spiny hopsage (*Grayia spinosa*), allscale (*Atriplex canescens* and *A. polycarpa*), desert holly (*Hymene lytaya*), coreopsis (*Coreopsis* sp.), Russian thistle (*Salsola tragus*), and the seeds of Joshua tree (*Y. brevifolia*). It is suspected that MGS forage on the plant species with the highest water content available at the time.

Burrowing Owl

The burrowing owl (*Athene cunicularia*) is a State and Federal Species of Special Concern. This owl is a mottled brown and sand color, dove-sized raptor, with large yellow eyes, a rounded head lacking ear tufts, white eyebrows, and long legs (compared to other owl species). It is a ground dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The burrowing owl is heavily dependent upon the presence of mammal burrows, commonly ground squirrel, in its habitat to provide shelter from predators,

inclement weather, and a nesting place. They are also known to make use of human-created structures such as cement culverts and pipes for burrows.

Burrowing owls spend a great deal of time standing on dirt mounds at the entrance to a burrow, or perched on a fence post or other low to the ground perch from which they hunt for prey. Burrowing owls frequently hunt by hovering in place above the ground and dropping on their prey from above. Burrowing owls feed primarily on insects, such as grasshoppers, June beetles and moths, but will also take small rodents, birds and reptiles. They are active during the day and night, but are considered a crepuscular owl; generally observed in the early morning hours or at twilight. The breeding season for the burrowing owl is February 1 through August 31. Up to 11, but typically 7 to 9 eggs are laid in a burrow, abandoned pipe, or other subterranean hollow where incubation is complete in 28-30 days. Young burrowing owls fledge in 44 days. The burrowing owl is considered a migratory species in portions of its range, which includes western North America from Canada to Mexico, and east to Texas and Louisiana. Burrowing owl populations in California are considered to be sedentary or locally migratory.

Throughout its range it is vulnerable to habitat loss, predation, vehicular collisions, destruction of burrow sites and poisoning of ground squirrels. Burrowing owls have disappeared from significant portions of their range in the last 15 years and overall nearly 60% of the breeding groups of owls known to have existed in California during the 1980s had disappeared by the early 1990s. The burrowing owl is not listed under the State or Federal Endangered Species Act, but is considered both a Federal and State "Species of Special Concern." The burrowing owl is a migratory bird protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California Fish and Game Code.

Focused Surveys

Prior to visiting the site, background information was gathered to determine what species would be expected in this area. This background check included a search of the CNDDB and a review of previously conducted biological surveys. The project site was surveyed for the presence or absence of prairie falcon (*Falco mexicanus*), desert tortoise (*Gopherus agassizii*), Mojave River vole (*Microtus californicus mohavensis*), Mojave ground squirrel (*Spermophilus mohavensis*), and burrowing owl *(Athene cunicularia*). The survey was conducted on August 19, 2008, August 25, 2008, and September 12, 2008.

Burrowing Owl (*Athene cunicularia*)

Evidence of burrowing owl was found on the project site in the southeastern quarter of the parcel; refer to Figure 4.2-2, *Burrowing Owl Burrow Locations.* Four burrows were found in this area, with white wash, castings, and feathers near the burrow entrances. No burrowing owl individuals were found during the surveys, but there was evidence of previous habitation. Therefore, suitable burrowing owl habitat should be assumed in the southeastern quarter of the project site.

Desert Tortoise (*Gopherus agassizii*)

The project site is not located within designated critical habitat for the desert tortoise and according to the West Mojave Conservation Plan; the project site is located in an area where desert tortoise are considered extirpated. Although desert tortoise are known to occur in the overall vicinity of the project site, no desert tortoise or signs of this species (i.e., burrows, scat, scutes, or tracks) were detected during the focused site surveys.

Mojave Ground Squirrel (*Spermophilus mohavensis*)

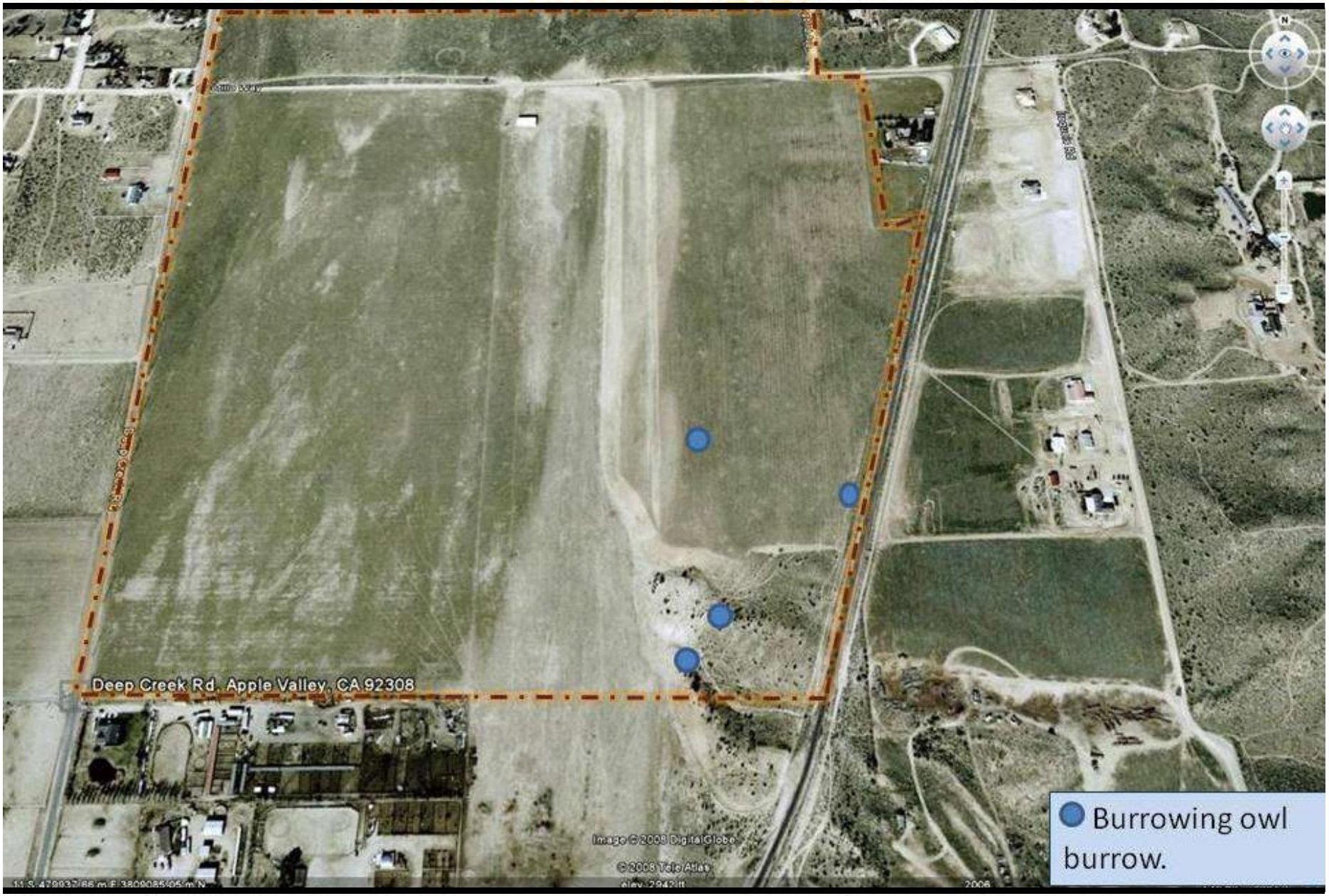
Although the site is located within the range of the Mojave ground squirrel, surveys determined that habitat onsite is not suitable for Mojave ground squirrel.

Mojave River Vole (*Microtus californicus mohavensis*)

The project site is located approximately three miles south of the nearest known occurrence of the Mojave River vole. The preferred habitat of the Mojave River vole occurs within the benches and vegetated channel of the Mojave River. This species requires dense vegetation cover with high moisture content. Since these conditions do not exist onsite, the site is not considered suitable for Mojave River vole.

Prairie Falcon (*Falco mexicanus*)

The project site provides habitat for a variety of birds, some of which are appropriate prey species of prairie falcon. There was no sign of prairie falcons onsite during the surveys, but there is moderate potential for this species to utilize the site for foraging. There is no indication that prairie falcon use the site for roosting or nesting, and appropriate habitat capable of supporting prairie falcon nesting does not exist onsite. However, it should be assumed that the project site will be used for foraging by this species.



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Burrowing Owl Burrow Locations

Deep Creek EIR

Figure 4.2-2

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Table 4.2-2, *Special Status Wildlife Species within the Project Area*, lists the sensitive wildlife species that have been recorded within the USGS-Apple Valley North, Apple Valley South, Victorville, and Hesperia Quadrangles region.

Table 4.2-2
Special Status Wildlife Species within the Project Area

Species	Status	Habitat	Presence/Description
burrowing owl (Athene cunicularia)	Sensitive Species	(Burrow sites) open, dry annual or perennial grasslands, deserts & scrublands characterized by low growing vegetation.	4 burrowing owl burrows found with white wash, castings and or feathers near burrow entrance. **Southeast 1/4 of property is suitable and considered occupied**.
California redlegged frog (*Rana aurora draytonii)*	Threatened	Lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	There are no water sources on site, and therefore no suitable habitat for this species. **The potential for this species to occur on this site is zero.** No additional surveys are required**.**
Chuckwalla (*Sauromalus ater)*	Sensitive Species	Found in a variety of desert woodland & scrub habitats; but most often in creosote communities.	No suitable habitat onsite. **The potential for his species to occur on site is zero.** No additional surveys required.
Coast (San Diego) horned lizard (Phrynosoma coronatum (blainvillii population))	Sensitive Species	Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions.	No suitable habitat onsite and the site is outside the range of this species. **The potential for his species to occur on site is zero.** No additional surveys required.
Cooper's hawk (*Accipiter cooperii)*	Species of Special Concern	(Nesting) woodland, chiefly of open, interrupted or marginal type.	No suitable nesting habitat onsite surveys. The species may utilize the site for foraging. The probability of this species occurring on site is low to moderate. **The probability of this species nesting on site is zero.** No additional surveys are required.
desert tortoise (*Gopherus agassizii)*	Threatened	Most common in desert scrub, desert wash, and joshua tree habitats; occurs in almost every desert habitat.	Some marginally suitable habitat onsite. Focused protocol surveys were conducted on site, **the result of this focused survey is that there are no desert tortoise or sign of desert tortoise found on this site**. No additional surveys are required.
gray vireo (*Vireo vicinior)*	Species of Special Concern	(Nesting) dry chaparral; west of desert, in chamise dominated habitat; mtns of Mojave Desert, assoc w/juniper-artemisia.	No suitable habitat onsite. **The potential for his species to occur on site is zero.** No additional surveys required.
Le Conte's thrasher (*Toxostoma lecontei)*	Species of Special Concern	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats.	No suitable habitat onsite. **The potential for his species to occur on site is zero.** No additional surveys required.
least Bell's vireo (*Vireo bellii pusillus)*	Endangered	(Nesting) summer resident of southern calif in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	No suitable habitat onsite. **The potential for his species to occur on site is zero.** No additional surveys required.
long-eared owl	Species of Special	(Nesting) riparian	No suitable nesting habitat onsite surveys.

Species	Status	Habitat	Presence/Description
(*Asio otus)*	Concern	bottomlands grown to tall willows & cottonwoods; also, belts of live oak paralleling stream courses.	The species may utilize the site for foraging. The probability of this species occurring on site is low to moderate. **The probability of this species nesting on site is zero.** No additional surveys are required.
Mojave ground squirrel (Spermophilus Mohavensis)	Threatened	Open desert scrub, alkali scrub & Joshua tree woodland. Also feeds in annual grasslands. Restricted to Mojave Desert.	The site is within the edge of its range. 2006 habitat assessment conducted by **O'Farrell Biological Consulting concluded the site was not suitable. CDFG concurred** and 2008 surveys confirmed the previous finding.
Mojave river vole (*Microtus californicus Mohavensis)*	Species of Special Concern	Occurs only in weedy herbaceous growth in wet areas along the Mojave river. May be found in some irrigated pastures.	Nearest known location is 3 miles to the north in the Mojave River. **No habitat elements required by this species exist on site**. This species requires very moist and densely vegetated habitat.
pallid San Diego pocket mouse (*Chaetodipus fallax Pallidus)*	Species of Special Concern	Desert border areas in eastern san diego co. In desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc.	No suitable habitat onsite. **The potential for his species to occur on site is zero.** No additional surveys required.
prairie falcon (*Falco mexicanus)*	Species of Special Concern	(Nesting) inhabits dry, open terrain, either level or hilly.	Suitable habitat for foraging. This **species likely occurs in the area and may utilize the site for foraging**
San Emigdio blue butterfly (*Plebulina emigdionis)*	Sensitive Species	Found in desert canyons and along riverbeds on the southernmost edge of the San Joaquin Valley	No suitablel habitat onsite, and the site is outside the range of this species. **The potential for this species to occur onsite is zero.** No additional surveys required.
southwestern pond turtle (*Emys (Clemmys) marmorata pallida)*	Species of Special Concern	Inhabits permanent or nearly permanent bodies of water in many habitat types; below 6000 ft elev.	There are no water sources on site, and therefore no suitable habitat for this species. **The potential for this species to occur on this site is zero**. No additional surveys are required.
southwestern willow flycatcher (Empidonax traillii extimus)	Endangered	(Nesting) riparian woodlands in southern California. State listing includes all subspecies.	No suitable habitat onsite. **The potential for his species to occur on site is zero.** No additional surveys required.
summer tanager (*Piranga rubra)*	Species of Special Concern	(Nesting) summer resident of desert riparian along lower Colorado River, and locally elsewhere in California deserts.	No suitable habitat onsite. **The potential for his species to occur on site is zero.** No additional surveys required.
Townsend's bigeared bat *(Corynorhinus Townsendii)*	Species of Special Concern	Throughout california in a wide variety of habitats. Most common in mesic sites.	No suitable habitat onsite. **The potential for his species to occur on site is zero.** No additional surveys required.
western yellowbilled cuckoo (*Coccyzus Americanus occidentalis)*	Endangered	(Nesting) riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	No suitable habitat occurs onsite. **The probability of this species occurring on site is zero.** Additional surveys are not required.
yellow warbler (*Dendroica petechia Brewsteri)*	Species of Special Concern	(Nesting) riparian plant associations. Prefers willows, cottonwoods, aspens, sycamores, and	No suitable habitat onsite. **The potential for his species to occur on site is zero.** No additional surveys required.

Species	Status	Habitat	Presence/Description
		alders for nesting and foraging.	
yellow-breasted chat (*Icteria virens)*	Species of Special Concern	(Nesting) summer resident; inhabits riparian thickets of willow & other brushy tangles near watercourses.	No suitable habitat onsite. **The potential for his species to occur on site is zero.** No additional surveys required.

Regional Connectivity/Wildlife Movement

Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. A wildlife corridor is generally represented by a linear patch of habitat that provides a connection between two core areas of the same habitat, allowing for the large-scale movement of species within their native habitats. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors for wildlife travel. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic traits between populations.

The project site is not identified within the San Bernardino County General Plan as a Wildlife Corridor or Linkage; refer to Figure 4.2-3, *San Bernardino County Corridor Locations*. The County identifies Wildlife Corridors and Areas of Critical Environmental Concern in their open space element of the General Plan.

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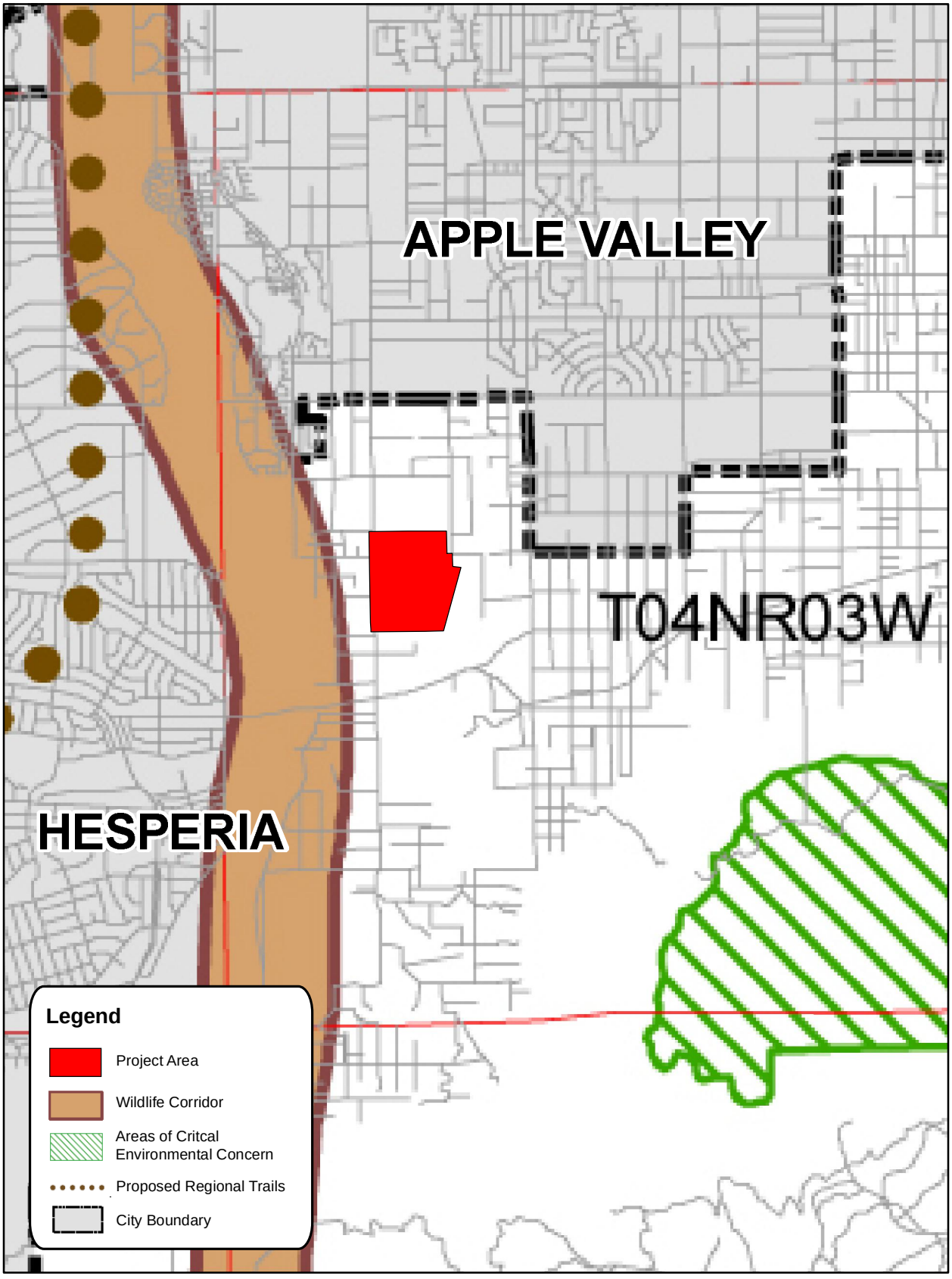

Source: San Bernardino County Land Use Plan, Open Space Element

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San Bernardino County Corridor Locations

Deep Creek EIR

Figure 4.2-3

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The site encompasses a large area of open land and although it is not within the San Bernardino County's identified wildlife corridor, it is located east of the Mojave River Wildlife Corridor.

REGULATORY FRAMEWORK

FEDERAL

Administered by the United States Fish and Wildlife Services (USFWS), the Federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a "take" under the ESA. Section 9(a) of the ESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" and "harass" are further defined in Federal regulations and case law to include actions that adversely impair or disrupt a listed species' behavioral patterns.

Sections 4(d), 7 and 10(a) of the Federal ESA regulate actions that could jeopardize endangered or threatened species. A special rule under Section 4(d) of the ESA was finalized which authorizes "take" of certain protected species under approved Natural Communities Conservation Programs (NCCPs), which are administered by the states. Section 7 describes a process of Federal interagency consultation for use when Federal actions may adversely affect listed species. A Section 7 consultation is required when there is a nexus between endangered species' use of a site and impacts to ACOE jurisdictional areas. Section 10(a) allows issuance of permits for incidental take of endangered or threatened species with preparation of a habitat conservation plan (HCP). The term "incidental" applies if the taking of a listed species is incidental to and not the purpose of an otherwise lawful activity. A HCP demonstrating how the taking would be minimized and how steps taken would ensure the species' survival must be submitted for issuance of Section 10(a) permits.

The USFWS identifies critical habitat for endangered and threatened species. Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitat so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the Federal ESA, all Federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat.

STATE OF CALIFORNIA

The California ESA is similar to the Federal ESA in that it contains a process for listing of species and regulating potential impacts to listed species. Section 2081 of the California ESA authorizes the CDFG to enter into a memorandum of agreement for take of listed species for scientific, educational, or management purposes.

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in plants that are listed. The California ESA followed the NPPA and covers both plants and animals that are determined to be endangered or threatened with extinction. Plants listed as rare under the NPPA are also designated rare under the California ESA.

The California Environmental Quality Act (CEQA) and its implementing guidelines (*CEQA Guidelines*) require discretionary projects with potentially significant effects (or impacts) on the environment to be submitted for environmental review. Mitigation for significant impacts to the environment is determined through the environmental review process, in accordance with existing laws and regulations.

Raptors (birds of prey) and active raptor nests are protected by California Fish and Game Code 3503, which states that it is "unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird" unless authorized (CDFG 1991).

In addition, all migratory bird species that are native to the U.S. or its territories are protected under the Federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127; USFWS 2004). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, USFWS places restrictions on disturbances allowed near active raptor nests.

LOCAL

West Mojave Plan

The West Mojave Plan is a Habitat Conservation Plan and California Desert Conservation Area Plan Amendment. The goal of the West Mojave Plan is to conserve and protect the desert tortoise, Mojave Ground Squirrel, and nearly 100 other sensitive plants and animals, as well as the ecosystems on which they depend. At the same time, the West Mojave Plan is intent on providing developers of public and private projects with a streamlined program for compliance with the California and Federal Endangered Species Acts that regulates consistently, reduces delays and expenses, eliminates uncertainty, and applies the costs of compensation and mitigation equitably to all agencies and parties.

The West Mojave Plan is an attempt at defining a regional strategy for conserving plant and animal species and their habitats and to define an efficient, equitable, and cost-effective process for complying with threatened and endangered species laws. In March of 2006, the Bureau of Land Management signed a Record of Decision for the Final Version of the Plan. However, in August of the same year, an alliance of conservation groups filed suit in Federal Court to overturn the Plan, charging that it does not protect land and wildlife from off-road vehicles. As a result, the Habitat Conservation Plan component of the West Mojave Plan is still considered to be a draft, and is anticipated to require at least two more years for completion. At this time, since the Plan is still considered to be in draft form, it cannot be relied upon for compliance with

Federal, State, and local laws and regulations pertaining to endangered and sensitive plant and animal species.

California Desert Native Plants Act

The *California Desert Native Plants Act* was passed in 1981 to protect non-listed California desert native plants from unlawful harvesting on both public and privately owned lands. Harvest, transport, sale, or possession of specific native desert plants is prohibited unless a person has a valid permit. The following plants are under the protection of the California Desert Native Plants Act:

- *Dalea spinosa* (smoketree)
- All species of the genus *Prosopis* (mesquites)
- All species of the family *Agavaceae* (century plants, nolinas, yuccas)
- All species of Cactus
- Creosote Rings, ten feet in diameter or greater
- All Joshua Trees

***County of San Bernardino General Plan* (2007)**

The Conservation Element of the *County of San Bernardino General Plan* identifies measures to preserve the unique environmental features and natural resources of the desert region, including native wildlife and vegetation. One role of the Conservation Element involves the identification of a community's natural resources and the adoption of policies for their preservation, development, and wise use. The following goals, policies, and programs are applicable to the proposed project:

Goal CO 1:	The County will maintain to the greatest extent possible natural resources that contribute to the quality of life within the County
Policy CO 3.1:	The County will coordinate with appropriate agencies and interested groups to develop, fund and implement programs to maintain the County's natural resources' base.
Programs:	1. The County shall coordinate with local interest groups, State, and Federal agencies, prior to the approval of land use conversion to ensure adequate protections are in place to preserve habitat for resident and migratory species that may depend on aquatic, riparian, and/or unique upland habitat within the County. The Overlay will be designed to identify the known distribution of rare, threatened and endangered species and the habitats they rely upon.

2. The County will coordinate with appropriate agencies (e.g., USFWS, California Natural Diversity Data Base, BLM, National Park Service, California Native Plant Society, and so forth) and interested groups (e.g., Audubon Society, San Bernardino County Museum) to develop, fund and implement a geographic information and web-based database system for identifying important biological resources and natural open space areas within the Valley, Mountain, and Desert Regions of the County. The implementation of the aforementioned geographic information and database system is a commitment to update and enhance the Biological and Open Space Overlays within a specific area prior to approval of any subsequent development plans. This program includes the maintenance of the web-based database with completed Biological Opinions that will contribute to the evaluation of cumulative impacts from previously approved projects. Furthermore, the County shall quarterly fund the San Bernardino County Museum (Museum) to review and update the Biological Resources and Open Space Overlays to facilitate an accurate and current spatial data based on local, State, and Federally protected species and their habitats.

Goal CO 2: The County will maintain and enhance biological diversity and healthy ecosystems throughout the County.

Policy CO 2.1: The County will coordinate with State and Federal agencies and departments to ensure that their programs to preserve rare and endangered species and protect areas of special habitat value, as well as conserve populations and habitats of commonly occurring species, are reflected in reviews and approvals of development programs.

Programs: 1. All County Land Use Map changes and discretionary land use proposals, for areas within the Biotic Resource Overlay or Open Space Mapping on the Resources Overlay, shall be accompanied by a report that identifies all biotic resources located on the site and those on adjacent parcels, which could be adversely affected by the proposal. The report shall outline mitigation measures designed to eliminate or reduce impacts to identified resources. An appropriate expert such as a qualified biologist, botanist, herpetologist or other professional "life scientist" shall prepare the report.

2. The County shall require the conditions of approval of any land use application to incorporate the County's identified mitigation measures in addition to those that may be required by State or Federal agencies to protect and preserve the habitats of the identified species. This measure is

implemented through the land use regulations of the County Development Code and compliance with the CEQA, CESA, ESA and related environmental laws and regulations.

3. The County shall coordinate with local, State, and Federal agencies to create a specific and detailed wildlife corridor map for the County of San Bernardino. The map will identify movement corridors and refuge area for large mammal, migratory species, and desert species dependent on transitory resources based on rainfall. The wildlife corridor and refuge area map will be used for preparation of biological assessments prior to permitting land use conversion within County jurisdictional areas. The mapping will be included in the Open Space and Biological Resource Overlays.

4. The County shall coordinate with State and Federal agencies and departments to ensure that their programs to preserve rare and endangered species and protect areas of special habitat value, as well as conserve populations and habitats of commonly occurring species, are reflected in reviews and approvals of development programs. This coordination shall be accomplished by notification of development applications and through distributed CEQA documents.

5. The San Bernardino County Museum (Museum) will review and update the Biological Resources Overlay and Open Space Overlay to provide accurate and current spatial data based on rare, threatened, endangered species and the habitats that they rely on. An updated database that integrates CNDDB data with other occurrence data from the Museum and other sources such as the USFWS, CDFG, USFS, BLM, National Park Service, and California Native Plant Society to identify areas where biological surveys are required. Overlay maps will identify movement corridors and refuge areas for large mammal, migratory species, and desert species dependent on transitory resources based on rainfall. South Coast Wildlands Corridor Project and other data from the resource agencies will be consulted as an information reference base. The wildlife corridor and refuge area map will be used for preparation of biological assessments prior to permitting land use conversion within County jurisdictional areas. The mapping will be included in the Open Space and Biological Resource Overlays.

Policy CO 2.2: Provide a balanced approach to resource protection and recreational use of the natural environment.

Policy CO 2.3: In addition to conditions of approval that may be required for specific future development proposals, the County shall establish long-term comprehensive plans for the County's role in the protection of native species because preservation and conservation of biological resources are statewide, Regional, and local issues that directly affect development rights. The conditions of approval of any land use application approved with the BR overlay district shall incorporate the mitigation measures identified in the report required by Section 82.13.030 (Application Requirements), to protect and preserve the habitats of the identified plants and/or animals.

Programs:

1. Prepare or participate in Habitat Conservation Plans when there is sufficient support of such plans, and adequate funding for their preparation, and a strong likelihood of success.

2. Establish a land ownership transfer program.

3. Establish a land conservation easement program.

4. The County shall work with local communities to improve trash collection, recycling programs, and reduce illegal dumping in unincorporated areas. The County shall sponsor mitigation efforts that minimize landfill growth, reduce trash haul routes that spread litter and increase predator species numbers (i.e., raven or crow in the Desert Region), and reduce illegal dumping of large bulk items (e.g., furniture, appliances, tires, batteries).

5. The County shall participate with Regional plans to improve water quality and habitat that are downstream but may be beyond County limits. The County shall coordinate with Regional plans to minimize degradation of water quality within the County that affects downstream resources and habitats.

Policy CO 2.4: All discretionary approvals requiring mitigation measures for impacts to biological resources will include the condition that the mitigation measures be monitored and modified, if necessary, unless a finding is made that such monitoring is not feasible.

Programs:

1. The monitoring program will be designed to determine whether the mitigation measures were implemented and effective.

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

3. The County shall not permit land conversion until adequate mitigation is provided to reduce impacts to less than significant in cases where a Mitigated Negative Declaration is used for CEQA compliance. Direct and growth inducing impacts determined to cause a significant adverse effect on rare, threatened or endangered desert species shall be mitigated by avoidance, habitat restoration or compensated by off-site mitigation and evaluated through a project level EIR. Mitigation will be required for adverse impacts to critical areas around residential land conversion when it can be shown that the indirect effects of pets, associate human activity and other encroachments into sensitive habitats will be significant.

4. The County shall require all new roadways, roadway expansion, and utility installation within the wildlife corridors identified in the Open Space and Biological Resource Overlays to provide suitable wildlife crossings for affected wildlife. Design will include measures to reduce or prevent habitat fragmentation and provide wildlife a means of safe egress through respective foraging and breeding habitats. A qualified biologist will assist with the design and implementation of wildife crossing including culverts, overcrossings, undercrossings, and fencing.

***County of San Bernardino Development Code* (Amended January 2009)**

The *County of San Bernardino Development Code* includes Section 88.01.060-Desert Native Plant Protection Ordinance." This Ordinance provides regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wise use of desert resources. The provisions are intended to augment and coordinate with the Desert Native Plants Act (Food and Agricultural Code Section 80001 et seq.) and the efforts of the State Department of Food and Agriculture to implement and enforce the Act.

SIGNIFICANCE THRESHOLD CRITERIA

Appendix G of the *CEQA Guidelines* contains the Initial Study Checklist form, which includes questions relating to biological resources. The issues presented in the Initial Study Checklist have been utilized as Thresholds of Significance in this Section. Accordingly, a project may create a significant environmental impact if one or more of the following occurs:

- If the project has a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS.

- If the project has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS.
- If the project has 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 the direct removal, filling, hydrological interruption, or other means.
- If the project interferes substantially with the movement of any native or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites.
- If the project conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- If the project conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

Section 15065 (a), Mandatory Findings of Significance, of the *CEQA Guidelines* states that a project may have a significant effect on the environment if "the project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, [or] reduce the number or restrict the range of an endangered, rare, or threatened species."

The significance of an impact on biological resources considers the resource itself and the importance of that resource in a regional or local context. Those impacts that diminish, or result in the loss of, an important biological resource, or those that would conflict with local, State, or Federal resource conservation plans, goals, or regulations are considered to be significant. Impacts may be locally adverse but not significant if they would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis, although they may result in an adverse alteration of existing conditions.

IMPACTS AND MITIGATION MEASURES

Sensitive Species

Impact 4.2-1: *Implementation of the proposed project may have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.* **Level of Significance: Less than Significant with Mitigation.**

Construction activities and operation of the proposed project may result in potential direct or indirect impacts to special status species or other sensitive species. Primary short-term impacts to vegetation and wildlife would result from the removal or alteration of physical habitats that can be re-vegetated and reclaimed within a 3- to 5-year period. Construction activities would involve grubbing, trenching, grading, stockpiling, and other soil-disturbing activities. The removal or alteration of native and non-native habitats within a project area could result in the temporary or permanent displacement of plants, vegetation types, small mammals, reptiles, amphibians, and other animals. Short-term construction-related impacts would also include increased noise, lessened air quality due to fugitive dust and equipment emissions, and construction traffic on local roads. These factors could disrupt the behavioral and reproductive patterns of wildlife. Additionally, construction activities would increase sedimentation and pollutant load due to fuels, oils and other hazardous materials from construction vehicles in stormwater runoff.

Development of the project area would change the current land use from undeveloped land to residential uses. Proposed development would affect the majority of the project site. As such, existing biological resources that are present on the site would largely be eliminated with project implementation, particularly with mass grading of the site in preparation for the proposed development.

Sensitive biological resources are defined as species under study for classification as threatened or endangered, or have low population densities or a highly restricted range. As identified in Tables 4.2-1 and 4.2-2, above, a total of 44 sensitive plant and wildlife species were identified as being known to exist, may exist, or have been seen in the vicinity of the project site. After a general site survey was conducted, it was determined that species specific surveys were necessary for eight species because potential suitable habitat was found on the project site. The remaining 36 species were not found to have suitable habitat onsite and therefore were not surveyed. The project site was surveyed for the presence or absence of Booth's evening-primrose (*Camissonia boothii* ssp. boothii), desert cymopterus (*Cymopterus deserticola*), short-joint beavertail (*Opuntia basilaris* var. brachyclada), prairie falcon (*Falco mexicanus*), desert tortoise (*Gopherus agassizii*), Mojave River vole (*Microtus californicus mohavensis*), Mojave ground squirrel (*Spermophilus mohavensis*), and burrowing owl *(Athene cunicularia*). A discussion of these species follows:

Booth's Evening-Primrose

There is abundant habitat at the site and populations within 6 miles both north and south along the Mojave River lead support to the likelihood of it occurring on the site and it may have historically. However grazing, agricultural, and rural development in the past could have lead to it's extiperation from the area. It was not found to occur on the Deep Creek site during this or previous surveys conducted on the project site.

Desert Cymopterus

There is appropriate habitat on the site, particularly in the Joshua tree woodland area and associated dune-like habitat in the southeast corner of the property. However, this

area has been heavily impacted by cattle-grazing recently. Neither this species, nor any species in the Apiaceae, were found in this survey or in previous surveys.

Short-Joint Beavertail

While the cited elevational range for the species is 1,400-6,000 feet in the Apple Valley/Cajon Pass area the species has not been found to occur below 3,000 feet. In reality, *O. b. brachyclada* seems to primarily occur in the ecotonal grade between the above communities, specifically it occurs in the most xeric stage of chaparral and the more mesic stage of creosote scrub and Joshua tree woodland communities. Thus while there is nominal habitat at the Deep Creek site (e.g., Joshua Tree woodland) it is not within range of tolerance for this species.

Prairie Falcon

The project site provides habitat for a variety of birds, some of which are appropriate prey species of the prairie falcon. There were no signs of prairie falcons on site during the surveys, but there is a moderate potential for this species to utilize the site for foraging. There is no indication that prairie falcon nesting exists onsite. Development of the site would result in impacts to potentially suitable foraging habitat for the prairie falcon. At this time, there are no regulatory permits required for impacts to prairie falcon foraging habitat. In the local vicinity of the project site, there are a number of areas suitable for prairie falcons to forage and the development of this parcel would not result in significant adverse impacts to the local or regional population of prairie falcons.

California Desert Tortoise

The California desert tortoise was listed by California as a threatened species on August 3, 1989 and Federally listed as a threatened species on April 2, 1990. Although, the California desert tortoise occurs in the local area, no desert tortoises were detected during the survey of the project area. However, there is still a possibility that desert tortoises could wander onto the site.

Mojave River Vole

The project site is located approximately 3 miles south of the nearest known occurrence of the Mojave River vole. The preferred habitat of the Mojave River vole occurs within the benches and vegetated channel of the Mojave River. This species requires dense vegetative cover with high moisture content. Since these conditions do not exist onsite, the site is not considered suitable for Mojave River vole. There is no potential for this species to occur onsite.

Mojave Ground Squirrel

The Mojave ground squirrel was listed by California as a threatened species on June 27, 1971. According to the West Mojave Plan Environmental Impact Report/Environmental Impact Statement and according to the Mojave ground squirrel Partnership Workshop, the subject property is located within the extreme southern periphery of the Mojave

ground squirrel range. In 2006, the project site was evaluated for the potential of Mojave ground squirrel by O'Farrell Biological Consulting, which concluded that, the habitat on the project site is not suitable for Mojave ground squirrel. CDFG concurred with this assertion and the site survey for Mojave ground squirrel conducted by Tom Dodson & Associates corroborated these findings.

Burrowing Owl

The burrowing owl is not listed under the State or Federal Endangered Species Act, but is considered both a Federal and State "Species of Concern". The proposed residential development project may disrupt the integrity or continuity of habitat suitable for, and presumably occupied by, the burrowing owl. Evidence of burrowing owl was found on the project site in the southeastern quarter of the parcel. Seven burrows were found in this area that had white wash, castings, and feathers near the burrow entrances. No burrowing owl individuals were found during the surveys, but there was evidence that they had been there previously. Therefore, the southeastern quarter of the project site should be assumed as suitable burrowing owl habitat and occupied.

As stated above, evidence suggests that the southeastern quarter of the project site is suitable burrowing owl habitat. The proposed project may disrupt the integrity or continuity of habitat suitable for and presumed occupied by burrowing owl. Implementation of mitigation measures BIO-1 through BIO-6 would reduce impacts to a level of less than significant.

Although the California desert tortoise occurs in the local area, no desert tortoise were detected during the surveys conducted for them. However, due to the potential proximity to potential desert tortoise in the project area, impacts may occur if a desert tortoise were to enter the project site prior to construction. Implementation of mitigation measures BIO-1 through BIO-6 would reduce impacts to a level of less than significant.

Mitigation Measure BIO-1

Prior to approval of grading permits or any ground-disturbing activity, preconstruction surveys shall be conducted to determine if Burrowing Owls occupy the project site. If Burrowing Owls are observed during those surveys, the following measures shall be implemented:

1) **Establish a setback of at least 250 feet from each owl burrow occupied within the past five years.**

2) **Preserve 6.5 acres of foraging habitat per burrowing owl pair, contiguous to the owl population. Configurations of foraging habitat in relation to owl burrows requires review and approval by the CDFG and USFWS.**

3) **Construction and other ground disturbances shall be prohibited within established setbacks and foraging habitat. Natural vegetation shall be maintained within the setback. The use of insecticides, herbicides, and fertilizers shall be not permitted within established setbacks.**

4) **Setbacks shall be marked by brightly colored fencing or flagging throughout the construction process. Setbacks shall be indicated on recorded maps, whenever projects involve parcel or subdivision maps.**

5) **All setbacks and foraging habitat shall be preserved in perpetuity via recordation of a conservation easement.**

Mitigation Measure BIO-2

Prior to and within 30 days of the start of any land disturbance activities, a qualified biologist shall survey the project site to determine if desert tortoise are present. If desert tortoise are encountered the following measures shall be implemented:

1) **Construction and other ground disturbances shall be prohibited within established setbacks and foraging habitat. Natural vegetation shall be maintained within the setback. The use of insecticides, herbicides, and fertilizers shall be not permitted within established setbacks.**

2) **Setbacks shall be marked by brightly colored fencing or flagging throughout the construction process. Setbacks shall be indicated on recorded maps, whenever projects involve parcel or subdivision maps.**

3) **All setbacks and foraging habitat shall be preserved in perpetuity via recordation of a conservation easement.**

4) **Construction shall halt within the setback of the desert tortoise until all desert tortoise are properly**

relocated in concurrence with protocol established by CDFG and USFWS.

Mitigation Measure BIO-3 **A qualified biologist shall be present at the project site during all land disturbance activities.**

Mitigation Measure BIO-4 **A qualified biologist shall remain on-call during construction activities. If desert tortoise or burrowing owls are encountered during construction, construction activities shall be halted in the vicinity of the encounter and the biologist shall be called to the project site. All remediation recommendations made by the biologist shall be implemented by the project applicant.**

Mitigation Measure BIO-5 **All personnel associated with the construction of the project site shall attend a worker education class. The class shall include, but not limited to, general information regarding the Mojave ground squirrel, desert tortoise, and burrowing owl; relevant Federal and State laws, and worker responsibilities when working in the Mojave Desert habitat.**

Mitigation Measure BIO-6 **All grubbing, brushing, and/or tree removal will be conducted outside of the State identified nesting season (February 15 through September 1). The site will be evaluated by a qualified biologist prior to initiation of ground disturbance to determine the presence or absence of nesting birds. Bird nests will be avoided during the nesting season.**

Wildlife Corridors

Impact 4.2-2: *Implementation of the proposed project may interfere substantially with the movement of any native or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites.* **Level of Significance: Less than Significant Impact.**

The project site is a large area of open land and although it is not identified within the San Bernardino County General Plan as a Wildlife Corridor or Linkage, it is located east of the Mojave River Wildlife Corridor. Because of its proximity to a known Wildlife Corridor, the site

was evaluated for corridor and linkage values. The result of this evaluation is that the site is not likely to serve as a linkage or corridor for wildlife.

This conclusion is based on the following:

1. Chain link fencing was installed around the portion of the property used for grazing. This fencing would impede movement across the site by coyotes, bobcats, skunks, and other common local wildlife.
2. A large bluff with steep vertical walls bisects the property and would impede the movement of wildlife across the site in an east-west direction.
3. East of the property is an active railroad.
4. The site is generally surrounded by rural residential housing in all directions. Most of the residential lots are fenced in and have dogs. High canine densities along the parcel boundaries are significant because wildlife tends to avoid encounters with dogs.
5. A cattle feed lot is located along the southwest property boundary.

Taking all these factors into consideration, along with the general lack of resources and lack of habitat to elicit migration by any local species;, the project site is not likely to serve as a corridor that facilitates wildlife movement or provide a connection to the Mojave River Wildlife Corridor. Therefore, impacts are less than significant.

Conflicts with Local Policies Protecting Biological Resources

Impact 4.2-3: *Implementation of the proposed project may result in a significant impact if the project conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.* **Level of Significance: Less than Significant Impact.**

The County of San Bernardino Development Code includes Section 88.01.060-Desert Native Plant Protection Ordinance." This Ordinance provides regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wise use of desert resources. The provisions are intended to augment and coordinate with the Desert Native Plants Act (Food and Agricultural Code Section 80001 et seq.) and the efforts of the State Department of Food and Agriculture to implement and enforce the Act.

The project site contains many types of native desert plants, including Joshua trees and Mojave yuccas, which are protected under the County of San Bernardino Development Code Desert Native Plant Protection Ordinance. The project would be required to comply with the County of San Bernardino Desert Native Plant Protection Ordinance. The removal of any trees listed under Section 88.01.060 would be required to comply with Section 88.01.050, which requires the project applicant to apply for a Tree or Plant Removal Permit prior to removal from the project site.

Development of the proposed project site would be required to be consistent with all local policies or ordinances protecting biological resources. Therefore, impacts to local ordinances or policies protecting biological resources are considered to be less than significant, and no mitigation is required.

CUMULATIVE IMPACTS

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that substantially diminish or result in the loss of an important biological resource, or those that would conflict with local, State, and/or Federal resource conservation plans, goals, or regulations. Impacts can be locally adverse but not significant because, although they would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis.

In the case of biological resources within the project site, the development of the site would not conflict with any local, State, and/or Federal resources conservation plans, goals, or regulations. However, the loss of potential habitat for burrowing owl within the project area associated with the development of the property would reduce the biological habitat within the immediate area. This reduction of potential habitat and introduction of suburban uses within the project area could be considered a cumulatively considerable impact in conjunction with the significant amount of growth that has occurred within the Victor Valley region.

The cumulative impacts associated with the proposed project and surrounding areas where similar types of development are occurring or proposed would be considered potentially significant due to a loss of biological habitat within the Victor Valley region (associated with development), and a potential threat to the threatened, endangered, and special status species that depend on these resources. In addition, the lack of an adopted comprehensive habitat mitigation plan (West Mojave Plan) further compounds the potential for habitat and species losses within the Victor Valley region. Once this Plan has been adopted by Federal, State, and local agencies, it is anticipated that cumulative impacts to biological resources within the Victor Valley would be better defined and mechanisms to reduce habitat loss would be in place, further reducing these impacts. In this regard, cumulative impacts associated with biological resources are considered adverse but not significant with implementation of the proposed project, because even though the impacts may alter existing local conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population– or region-wide basis.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

After mitigation, implementation of the proposed project would result in less than significant impacts on biological resources. Cumulative impacts related to biological resources would be adverse but less than significant.

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5.1 INTRODUCTION

This section summarizes additional environmental issues that may be affected by traffic and biological impacts generated by the proposed project. Information contained in this section is provided for the convenience of the reader, and summarizes and expands upon information contained in the previously prepared IS/MND. The discussion provided below is qualitative in nature and is included in this Draft EIR for informational purposes only. Information contained within this section is not subject to further consideration by the County pursuant to the Court's judgment.

5.2 AIR QUALITY

The Mojave Desert Air Quality Management District (MDAQMD) and the Southern California Association of Governments are responsible for formulating and implementing the *Air Quality Attainment Plan* (AQAP) for the Mojave Desert Air Basin (MDAB). The project includes a proposed amendment to the County General Plan to change the land use designation from agricultural uses to residential uses. While development of the proposed project would result in the construction and occupation of residential uses at a number and density different from existing permitted standards, the development of these residential uses is consistent with the overall increase in population and the number of dwelling units in the Victor Valley as anticipated by SCAG.

Construction emissions produced by the proposed project would not be affected by the analysis of the updated Traffic Impact Analysis (TIA) because the project description has not changed since the IS/MND was prepared. Therefore, although the TIA was updated, no additional construction related impacts would occur.

The updated TIA also analyzed long-term operational traffic. The previously prepared MND analyzed air quality impacts based on a total of 1,933 vehicle trips per day, which is the same number of trips analyzed in the updated TIA. Therefore, although the TIA was updated, no additional long-term operational impacts would occur.

5.3 NOISE

Construction related noise produced by the proposed project would not be affected by the analysis of the updated Traffic Impact Analysis (TIA) because the project description has not

changed since the IS/MND was prepared. Therefore, although the TIA was updated, no additional construction related noise impacts would occur.

The updated TIA also analyzed long-term operational traffic. The previously prepared MND analyzed noise impacts based on a total of 1,933 vehicle trips per day, which is the same number of trips analyzed in the updated TIA. Therefore, although the TIA was updated, no additional long-term operational noise impacts would occur.

5.4 FLOODING

The public raised a concern regarding potential flooding at the Rock Springs Road crossing of the Mojave River as it was closed for an extended period of time due to flooding. Flooding is expected to occur too infrequently to be considered significant to affect the roadway's capacity. Recent improvements to Rock Springs Road have been designed with improved road protection and flow capacity to eliminate the potential of the roadway being washed out and therefore impassible for significant periods of time; refer to Appendix C, *Traffic Impact Analysis*. Roadway design and traffic impact analysis both utilize the concept of a design hour (typically represented by normal weekday conditions) that is expected to occur many times (usually 30-50) per year. Flooding would be expected far less frequently. Any project impact is therefore less than significant.

5.5 DIRT ROADS

Several dirt roads currently exist within the project site; however, dirt road traffic volumes are considered insignificant. Local residents currently utilize these dirt roads. Concerns were raised related to a potential increase in dirt road usage from residents generated by the proposed project. Ocotillo Way is currently a dirt road that bisects the project site. As part of the proposed project, Ocotillo Way would be paved, thus reducing dirt road usage. The project would result in reduced dirt road use by paving a portion of Ocotillo Way and physically precluding use of this dirt road as a through route.

5.6 ALTERNATIVE TRANSPORTATION

Various forms of alternative transportation are available within the vicinity of the proposed project. A brief discussion of these facilities is listed below.

Railroads

Amtrak currently has two routes that travel through San Bernardino County. The Southwest Chief line operates daily between Los Angeles and Chicago and stops in four cities in San Bernardino County, including Victorville.

Public Transit Facilities

There are currently seven public transit agencies that operate within San Bernardino County. Victor Valley Transit Authority provides bus services within the project area. Four bus routes are located within Apple Valley and three routes within Hesperia. The nearest bus stop to the proposed project is located at the intersection of Bear Valley Road and Kiowa Road, approximately five miles from the project site.

Greyhound also offers regional and national bus service to the project area. The nearest bus station to the project site is located on D Street in Victorville.

San Bernardino County also maintains a service directory for organizations and agencies that provide specialized transportation for seniors and people with disabilities. This directory created and maintained by the Public and Specialized Transportation Advisory and Coordination Council, currently lists approximately 200 public transit operators and social service transportation providers that have been registered by the County to provide access to seniors, disabled persons, and persons of limited means.

Non-Motorized Facilities

San Bernardino County has a Non-Motorized Transportation Plan that deals primarily with bicycle and pedestrian use by residents for recreational and commuting purposes. In addition, Apple Valley and Hesperia have adopted Bicycle Plans in order to encourage the use of non-motorized facilities. The nearest bicycle facilities to the project site are on Ocotillo Way from Cholla Road to Pioneer Road in Apple Valley, and on Peach Avenue from Bear Valley Road to E Avenue in the City of Hesperia.

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6.1 GROWTH INDUCING IMPACTS

Section 15126 of the *CEQA Guidelines* requires that an EIR discuss a project's potential to foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The *CEQA Guidelines* also indicate that it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment. This section of the EIR analyzes such potential growth-inducing impacts, based on criteria suggested in the *CEQA Guidelines*.

In general terms, a project may foster spatial, economic, or population growth in a geographic area if it meets any one of the following criteria:

1. Remove an impediment to growth (e.g., establish an essential public service or provide new access to an area);
2. Foster economic expansion or growth (e.g., change revenue base, expand employment, etc.);
3. Foster population growth (e.g., construct additional housing), either directly or indirectly;
4. Establish a precedent-setting action (e.g., an innovation, a change in zoning, or a general plan amendment approval); or
5. Develop or encroach on an isolated or adjacent area of open space (distinct from an "infill" type of project).

Should a project meet any one of the above-listed criteria, it may be considered growth inducing. The potential growth-inducing impacts of the proposed project are evaluated against these five criteria in this section.

Section 15126.2(d) of the *CEQA Guidelines* requires that an EIR "discuss the ways" a project could be growth inducing and to "discuss the characteristics of some projects that may encourage…activities that could significantly affect the environment". However, the *CEQA Guidelines* do not require that an EIR predict (or speculate), specifically where such growth would occur, in what form it would occur, or when it would occur. The answers to such questions require speculation, which CEQA discourages (see *CEQA Guidelines* §15145).

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Removal of a Barrier To Growth

The proposed project would include the development of 202 residential lots and 6 lettered lots. In addition, the project proposes to construct a drainage corridor trending in a north-south direction through the western half of the project site. As stated in the previously prepared IS/MND (refer to Appendix B), the following infrastructure would be utilized with implementation of the proposed project:

Development of the proposed project would require the extension of a waterline onto the site from the Jess Ranch development located approximately 1.5 miles north of the project site. While the proposed extension of the waterline would facilitate the development of the project site, it would also accommodate existing residential development in the area by providing an alternative and secure supply of water. While the extension of the proposed waterline and the availability of water may facilitate construction of currently undeveloped properties located along the waterline alignment, such growth would represent a continuation of the present pattern of development. The extension of the waterline would facilitate growth through an increase in onsite residential density. The intended water purveyor (Apple Valley Ranchos Water Company) has stated that it is able to provide water to the project site without adversely impacting existing service commitments. Each residential lot would utilize individual septic tanks for wastewater disposal, and therefore the proposed project would not increase the flow of wastewater to any existing wastewater treatment system.

In addition to waterline extensions, the proposed project would require transportation infrastructure improvements. These improvements, including additional lanes and traffic signals, would remove barriers to growth within the proposed project area.

Economic Expansion

Economic activity on the project site is nonexistent, as the proposed project site is currently vacant land that was previously used for agricultural purposes. Implementation of the project would result in new investment in the community, as realized by new homebuyers and new tax revenues. It is reasonable to assume that future residents would result in increased economic activity within the surrounding communities of Hesperia and Apple Valley. The project is also consistent with the continuing growth trends identified in the Victor Valley region.

Population Growth

As of 2009, the California Department of Finance estimated the population of unincorporated San Bernardino County to be 295,398 persons.

As stated in the previously prepared IS/MND for the project, based on California Department of Finance 2005 population estimates, unincorporated San Bernardino County has a household average of 3.359 persons. According to California Department of Finance 2009 estimates, unincorporated San Bernardino County has a household average of 3.089 persons. The proposed project includes the development of 202 single-family residential lots. Therefore, implementation of the proposed project would result in a direct population increase of 679. Using the Department of Finance population estimate of 295,398 persons, the proposed project would increase the population of unincorporated San Bernardino County by.023%. This population growth is not large enough to be considered significant.

Establishment of a Precedent Setting Action

The proposed project consists of 202 residential units that would be built on land designated by the County of San Bernardino General Plan as Agricultural with a primary sign control overlay (AG-SCp). The proposed project would include a request for a General Plan Amendment to change the official land use district from AG-SCp to Single Residential with a 20,000-square foot minimum parcel size (RS-20m). Although the proposed project is inconsistent with the County General Plan, the adoption of a General Plan Amendment would rectify this inconsistency.

Encroach on Open Space

The project site is 249 acres of vacant land in a rural residential area. While the proposed project would result in a change in land use designation from agricultural to residential uses, the change in land use is consistent with the ongoing pattern of development that is occurring in the project area.

6.2 CONCLUSION

Based on these findings, implementation of the proposed project would result in less than significant growth inducing impacts, since it would remove only a few obstacles to growth in the form of a drainage corridor, water line, and traffic infrastructure improvements. Implementation of the proposed project would also only marginally increase the population and would marginally increase economic expansion. Therefore, implementation of the proposed project would create less than significant growth-inducing impacts.

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6.1 GROWTH INDUCING IMPACTS

Section 15126 of the *CEQA Guidelines* requires that an EIR discuss a project's potential to foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The *CEQA Guidelines* also indicate that it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment. This section of the EIR analyzes such potential growth-inducing impacts, based on criteria suggested in the *CEQA Guidelines*.

In general terms, a project may foster spatial, economic, or population growth in a geographic area if it meets any one of the following criteria:

1. Remove an impediment to growth (e.g., establish an essential public service or provide new access to an area);
2. Foster economic expansion or growth (e.g., change revenue base, expand employment, etc.);
3. Foster population growth (e.g., construct additional housing), either directly or indirectly;
4. Establish a precedent-setting action (e.g., an innovation, a change in zoning, or a general plan amendment approval); or
5. Develop or encroach on an isolated or adjacent area of open space (distinct from an "infill" type of project).

Should a project meet any one of the above-listed criteria, it may be considered growth inducing. The potential growth-inducing impacts of the proposed project are evaluated against these five criteria in this section.

Section 15126.2(d) of the *CEQA Guidelines* requires that an EIR "discuss the ways" a project could be growth inducing and to "discuss the characteristics of some projects that may encourage…activities that could significantly affect the environment". However, the *CEQA Guidelines* do not require that an EIR predict (or speculate), specifically where such growth would occur, in what form it would occur, or when it would occur. The answers to such questions require speculation, which CEQA discourages (see *CEQA Guidelines* §15145).

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The proposed project would include the development of 202 residential lots and 6 lettered lots. In addition, the project proposes to construct a drainage corridor trending in a north-south direction through the western half of the project site. As stated in the previously prepared IS/MND (refer to Appendix B), the following infrastructure would be utilized with implementation of the proposed project:

Development of the proposed project would require the extension of a waterline onto the site from the Jess Ranch development located approximately 1.5 miles north of the project site. While the proposed extension of the waterline would facilitate the development of the project site, it would also accommodate existing residential development in the area by providing an alternative and secure supply of water. While the extension of the proposed waterline and the availability of water may facilitate construction of currently undeveloped properties located along the waterline alignment, such growth would represent a continuation of the present pattern of development. The extension of the waterline would facilitate growth through an increase in onsite residential density. The intended water purveyor (Apple Valley Ranchos Water Company) has stated that it is able to provide water to the project site without adversely impacting existing service commitments. Each residential lot would utilize individual septic tanks for wastewater disposal, and therefore the proposed project would not increase the flow of wastewater to any existing wastewater treatment system.

In addition to waterline extensions, the proposed project would require transportation infrastructure improvements. These improvements, including additional lanes and traffic signals, would remove barriers to growth within the proposed project area.

Economic Expansion

Economic activity on the project site is nonexistent, as the proposed project site is currently vacant land that was previously used for agricultural purposes. Implementation of the project would result in new investment in the community, as realized by new homebuyers and new tax revenues. It is reasonable to assume that future residents would result in increased economic activity within the surrounding communities of Hesperia and Apple Valley. The project is also consistent with the continuing growth trends identified in the Victor Valley region.

Population Growth

As of 2009, the California Department of Finance estimated the population of unincorporated San Bernardino County to be 295,398 persons.

As stated in the previously prepared IS/MND for the project, based on California Department of Finance 2005 population estimates, unincorporated San Bernardino County has a household average of 3.359 persons. According to California Department of Finance 2009 estimates, unincorporated San Bernardino County has a household average of 3.089 persons. The proposed project includes the development of 202 single-family residential lots. Therefore, implementation of the proposed project would result in a direct population increase of 679. Using the Department of Finance population estimate of 295,398 persons, the proposed project would increase the population of unincorporated San Bernardino County by.023%. This population growth is not large enough to be considered significant.

Establishment of a Precedent Setting Action

The proposed project consists of 202 residential units that would be built on land designated by the County of San Bernardino General Plan as Agricultural with a primary sign control overlay (AG-SCp). The proposed project would include a request for a General Plan Amendment to change the official land use district from AG-SCp to Single Residential with a 20,000-square foot minimum parcel size (RS-20m). Although the proposed project is inconsistent with the County General Plan, the adoption of a General Plan Amendment would rectify this inconsistency.

Encroach on Open Space

The project site is 249 acres of vacant land in a rural residential area. While the proposed project would result in a change in land use designation from agricultural to residential uses, the change in land use is consistent with the ongoing pattern of development that is occurring in the project area.

6.2 CONCLUSION

Based on these findings, implementation of the proposed project would result in less than significant growth inducing impacts, since it would remove only a few obstacles to growth in the form of a drainage corridor, water line, and traffic infrastructure improvements. Implementation of the proposed project would also only marginally increase the population and would marginally increase economic expansion. Therefore, implementation of the proposed project would create less than significant growth-inducing impacts.

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7.1 INTRODUCTION

Section 15126.6(a) of the *CEQA Guidelines* requires that an EIR describe a range of reasonable alternatives to the project, or a range of reasonable alternatives to the location of the project, that could feasibly attain the basic objectives of the project. An EIR does not need to consider every conceivable alternative project, but it does have to consider a range of potentially feasible alternatives that will facilitate informed decision making and public participation.

Per Section 15126.6(a) of the *CEQA Guidelines*, the discussion of alternatives must include several different issues. The discussion of alternatives must focus on alternatives to the project, or to the project location, which will avoid or substantially reduce any significant effects of the project, even if the alternatives would be more costly or hinder to some degree the attainment of the project objectives. The "no project" alternative must be evaluated. The "no project" analysis must discuss the existing conditions and what would reasonably be expected to occur in the foreseeable future if the project was not approved. The range of alternatives required is governed by a "rule of reason." Thus, the EIR must only evaluate those alternatives necessary to permit a reasoned choice. The alternatives must be limited to only ones that would avoid or substantially lessen any of the significant effects of the project. Additionally, an EIR should not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative. The *CEQA Guidelines* also require an EIR to state why an alternative is being rejected. If the County ultimately rejects any, or all alternatives, the rationale for rejection will be presented in the findings that are required before the County certifies the EIR and takes action on the project. According to Section 15126.6(f)(1) of the *CEQA Guidelines*, among the factors that may be taken into account when addressing feasibility of alternatives are environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the applicant could reasonably acquire, control, or otherwise have access to the alternate site.

The project alternatives are evaluated to determine the extent to which they attain the basic project objectives of the applicant and County, while significantly lessening or avoiding any significant effects of the project. The project objectives are outlined in Section 3.5, *Project Objectives*.

Objectives unrelated to traffic and biological resources are included for informational purposes only and are not subject to further consideration by the County pursuant to the Court's judgment.

The objectives of the project include the following:

1. To create a balance between the existing scattered residential development in the immediate area of the project and the greater densities of the Town of Apple Valley, in whose sphere of influence the property lies.

2. To efficiently utilize the project site while maintaining a minimum lot size of approximately three-quarters of an acre, with an average lot size approaching one acre.

3. To avoid more intense urbanization by providing homes with significantly larger lots than found in typical new County subdivisions.

4. To develop homes which will be compatible with, though not identical to, homes in the immediate vicinity which are located on larger lots.

5. To build homes which will be adequately served by existing and enhanced infrastructure without adversely impacting the ongoing infrastructure needs of current area residents.

As noted in Sections 4.1 and 4.2, all impacts of the proposed project can be mitigated to a level of less than significant with the implementation of mitigation measures with the exception of cumulative traffic related impacts.

7.2 ALTERNATIVES TO THE PROPOSED PROJECT

As noted previously, the *CEQA Guidelines* (Section 15126.6(e)(2)) require that the alternatives discussion include an analysis of the "No Project Alternative." Pursuant to CEQA, the No Project Alternative refers to the analysis of existing conditions (i.e., implementation of current plans) and what would reasonably be expected to occur in the foreseeable future if the project was not approved. Potential environmental impacts associated with three alternatives are compared below to assess impacts from the project. These alternatives include: 1) No Project Alternative; 2) Reduced Density Alternative; and 3) Open Space/Passive Recreational Facilities Alternative. Refer to Table 7-1, *Comparison of Alternatives*, for an impact matrix that compares the Alternatives to the proposed Project. The Environmentally Superior Alternative is identified as Alternative 2, Reduced Density Alternative (refer to Section 7.3 below).

Table 7-1
Comparison of Alternatives

Topic	Alternative 1: No Project Alternative	Alternative 2: Reduced Density Alternative	Alternative 3: Open Space/Passive Recreational Facilities Alternative
Traffic and Circulation	<	<	<

Topic	Alternative 1: No Project Alternative	Alternative 2: Reduced Density Alternative	Alternative 3: Open Space/Passive Recreational Facilities Alternative
Biological Resources	<	<	<
Achieves Project Objectives			

= Impact is equivalent to impact of proposed project (neither environmentally superior nor inferior).
< Impact is less than impact of proposed project (environmentally superior).
> Impact is greater than impact of proposed project (environmentally inferior).

Table 7-2, *Project Objectives Consistency Analysis*, identifies objectives consistency for each of the proposed alternatives.

Table 7-2
Project Objectives Consistency Analysis

Project Objective	Alternative 1: No Project Alternative	Alternative 2: Reduced Density Alternative	Alternative 3: Open Space/Passive Recreational Facilities Alternative
Create a balance between the existing scattered residential development in the immediate area of the project and the greater densities of the Town of Apple Valley, in whose sphere of influence the property lies.	**Consistent:** Alternative 1 could result in the development of up to 24 single-family units, which would maintain the semi – rural character of the area.	**Consistent:** Alternative 2 would result in the development of up to 94 residential units, which would maintain the semi-rural character of the area.	**Inconsistent:** Alternative 3 would result in the development of parks and/or passive recreational space and would not provide housing.
To efficiently utilize the project site while maintaining a minimum lot size of approximately ¾ of an acre, with an average lot size approaching one acre.	**Inconsistent:** Alternative 1 would maintain a minimum lot size of ten acres, which is much larger than what is identified in the project objectives.	**Inconsistent:** Alternative 2 would maintain an average lot size of 2.5 acres, which is larger than what is identified in the project objectives.	**Inconsistent:** Alternative 3 not provide housing on the project site.
To avoid more intense urbanization by providing homes with significantly larger lots than found in typical County subdivisions.	**Consistent:** Alternative 1 could result in the development of up to 24 single-family units, which would maintain the semi – rural character of the area. The average lot size would be ten acres, which would avoid intense urbanization.	**Consistent:** Alternative 2 would include larger lots than found in typical County subdivisions.	**Inconsistent:** Alternative 3 not provide housing on the project site.
To develop homes which	**Inconsistent:** Alternative	**Inconsistent:** Alternative	**Inconsistent:** Alternative

will be compatible with, though not identical to, homes in the immediate vicinity which are located on larger lots.	1 could result in the development of homes similar in nature to those in the immediate vicinity of the project on larger lots.	2 could result in the development of homes similar in nature to those in the immediate vicinity of the project on larger lots.	3 not provide housing on the project site.
To build homes which will be adequately served by existing and enhanced infrastructure without adversely impacting the ongoing infrastructure needs of current area residents.	**Inconsistent:** Alternative 1 does not provide enhanced infrastructure for the project area.	**Inconsistent:** Alternative 2 would not provide enhanced infrastructure for the project area.	**Consistent:** Alternative 3 would not provide enhanced infrastructure for the project area nor would Alternative 3 provide housing.

ALTERNATIVE 1: NO PROJECT ALTERNATIVE

DESCRIPTION OF ALTERNATIVE

The No Project Alternative (Alternative 1) assumes that the proposed Deep Creek project would not occur. The project site would remain designated as Agricultural-Primary Sign Control Overlay, which would allow for the development of up to one unit per ten acres. Therefore, under the No Project Alternative, approximately 24 residences have the potential to be constructed on the project site in the future (249 acres divided by one residential unit per acre, as identified under the Agricultural-Primary Sign Control Overlay designation). The project site currently consists of vacant land that is covered mostly by grasslands and scattered with Joshua trees. Livestock occasionally graze on the project site.

IMPACT COMPARISON TO THE PROPOSED PROJECT

Traffic and Circulation

Alternative 1 would not involve the development of land uses proposed by the project. However, the potential remains that the project site could be developed per the development standards of the Agricultural-Primary Sign Control Overlay, which would allow for the development of up to one residential unit per ten acres. Should the project site be developed in the future under the Agricultural-Primary Sign Control Overlay, new vehicle trips would be generated. Approximately 24 residences have the potential to be developed under this Alternative. Using the established ITE Trip Generation Rate of 9.57 daily trips per single family residence, it can be assumed that approximately 230 daily trips would be generated. When compared to the proposed project, the No Project Alternative would reduce the amount of trips generated from the project site. However, the No Project Alternative would not necessarily completely eliminate traffic. Future projects would further exacerbate deficient Levels of Service at key intersections. Similarly, the No Project Alternative would not include the on and

offsite roadway improvements that are proposed as part of the project, thus further degrading the existing roadway system. The No Project Alternative could require the preparation of a tract map upon which traffic mitigation and/or conditions could be transposed. Therefore, with the implementation of the No Project Alternative, future improvements to key intersections would need to occur in order to adequately service an increase in daily trips.

Biological Resources

Alternative 1 would not involve any construction activities or the development of the proposed project. However, the potential remains that the project site could be developed per the development standards of the Agricultural-Primary Sign Control Overlay, which would allow for the development of up to one residential unit per ten acres. Any potential biological resources located on the project site may be disturbed by the implementation of development, even at a lower density than what is proposed as part of the project. Should development occur under the existing land use designation, mitigation measures would need to be implemented similar to what is proposed for the project to reduce or eliminate any potential impacts to biological resources.

Ability to Meet Project Objectives

Implementation of the No Project Alternative would fulfill one of the project's objectives: avoiding more intense urbanization with larger lots than typical new subdivisions within the county. The No Project Alternative would potentially provide 24 additional housing units in the project area. The No Project Alternative would maintain a minimum lot size of 10 acres instead of the proposed project minimum lot sizes of approximately three-quarters of an acre. The No Project Alternative would not provide enhanced infrastructure for the project site.

Conclusion

The No Project Alternative would result in impacts to traffic and circulation, as roadway improvements proposed as part of the project would not occur. Should development occur under the existing General Plan land use designation, some impacts would occur relative to traffic and circulation and biological resources. However, it is anticipated that impacts to biological resources would be reduced when compared to the proposed project due to the reduced density of housing. However, this Alternative does not fulfill many of the project objectives. For this reason, this alternative is being rejected.

ALTERNATIVE 2: REDUCED DENSITY ALTERNATIVE

Description of Alternative

The Reduced Density Alternative (Alternative 2) would include the development of up to 94 single-family residential units on the project site. This Alternative is based on the Town of Apple Valley's pre-zoning for the project site, which requires a 2.5 acre minimum parcel size.

The acreage for this alternative has been calculated as follows: 249 acres minus 12 (5% of total acreage to be used for roads, infrastructure, etc) divided by 2.5 acres per residential unit.

Impact Comparison to the Proposed Project

Traffic and Circulation

Alternative 2 would include the development of up to 94 single-family residential units. Using the established ITE Trip Generation Rate of 9.57 daily trips per single family residence, it can be assumed that approximately 900 daily trips would be generated. When compared to the proposed project, the Reduced Density Alternative would reduce the amount of trips generated from the project site. However, the Reduced Density Alternative would still cumulatively impact traffic both regionally and locally. Therefore, with the implementation of the Reduced Density Alternative, future improvements to key intersections would need to occur in order to adequately service an increase in daily trips.

Biological Resources

Alternative 2 would include the development of up to 94 single-family residential units. Any potential biological resources located on the project site may be disturbed by the implementation of development, even at a lower density than what is proposed as part of the project. When compared to the proposed project, impacts to biological resources would be reduced because lot sizes would be required to be larger and therefore, more open space would be preserved. However, mitigation measures would need to be implemented similar to what is proposed for the project to further reduce or eliminate any potential impacts to biological resources.

Ability to Meet Project Objectives

Implementation of the Reduced Density Alternative would not fulfill some of the project's objectives. The Reduced Density Alternative would not maintain a minimum lot size of approximately three-quarters of an acre. The Reduced Density Alternative would also not provide enhanced infrastructure for the project site.

Conclusion

The Reduced Density Alternative would result in reduced impacts to traffic and circulation and biological resources, because fewer residential units would be developed, thus decreasing the amount of traffic generated. In addition, fewer residences would be developed, thus increasing the amount of open space maintained on the project site. However, this Alternative does not fulfill the majority of the project objectives. For this reason, this alternative is being rejected.

ALTERNATIVE 3: OPEN SPACE/PASSIVE RECREATIONAL FACILITIES ALTERNATIVE

Description of Alternative

Under Alternative 3, the project site would either remain in natural open space or be utilized for park and/or passive recreational activities. This alternative does not anticipate large athletic fields, sport complexes, etc. Rather, this alternative assumes more passive recreational and open space uses such as parks, open fields, playgrounds, tot lots, etc. Additionally, portions of the project site could also remain in natural open space in an effort to further reduce potential impacts to biological resources.

Impact Comparison to the Proposed Project

Traffic and Circulation

According to trip generation rates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (8th Edition), a city park would generate approximately 1.59 ADT per acre. Accordingly, this alternative is projected to generate a total of approximately 396 ADT (249 acre-project site x 1.59 ADT). Traffic impacts associated with this alternative would be less than with the proposed project, as traffic volumes associated with park facilities would not exceed volumes associated with the project's proposed residential units.

Biological Resources

Much of the site would remain in a predominantly vacant and undeveloped state with this alternative. As a result, much less construction-related impacts to potential special status vegetation types, and plant and wildlife species would occur with this alternative. As noted in Section 4.2, *Biological Resources*, the proposed project would result in less than significant impacts to plant and wildlife species following Code compliance and implementation of the recommended mitigation.

Ability to Meet Project Objectives

The Open Space/Passive Recreation Alternative would not meet the basic project objectives. The Open Space/Passive Recreation Alternative would not include the construction of residential units that are compatible with existing development. The Open Space/Passive Recreation Alternative would also not include enhanced infrastructure improvements on or offsite. This Alternative would also not maintain a minimum lot size of three-quarters of an acre or more for residential units.

CONCLUSION

The Open Space/Passive Recreation Alternative would result in reduced impacts to traffic and circulation and biological resources, because no residential units would be developed, thus decreasing the amount of traffic generated. In addition, since no residences would be developed, an increase in the amount of open space maintained on the project site would occur.

7.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines requires that an Environmentally Superior Alternative be identified; that is, an alternative that would result in the fewest or least significant environmental impacts. If the No-Project Alternative is the environmentally superior alternative, State *CEQA Guidelines* Section 15126.6 (e)(2) requires that another alternative that could feasibly attain most of the basic Project's basic objectives be chosen as the environmentally superior alternative.

Alternative 1, No Project Alternative, would result in the fewest significant impacts to traffic and biological resources. Implementation of Alternative 1 would reduce traffic trips and biological impacts, but still meet the majority of the project objectives, including implementing housing on the project site.

Per *CEQA Guidelines* Section 15126.6 (e) (2), should the No Project Alternative be selected as the environmentally superior alternative, then another alternative must be selected. Therefore, the Reduced Density Alternative would result in the fewest significant impacts to traffic and biological resources, while still meeting the basic project objectives. The Reduced Density Alternative would provide housing at a reduced rate, consistent with the Town of Apple Valley General Plan, and incorporate more open space than what is proposed as part of the project.

8.1 LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT

CEQA REQUIREMENTS

Section 15126.2 (b) of the State *CEQA Guidelines* requires that the EIR discuss any significant impacts associated with the project. Cumulative impacts to regional and local roadways would be significant and unavoidable until required improvements are made.

Section 15126.2(c) of the State *CEQA Guidelines* requires that an EIR discuss "any significant irreversible environmental changes which would be involved in the proposed action should it be implemented." An impact would fall into this category if:

- The project involves a large commitment of nonrenewable resources;
- The primary and secondary impacts of the project generally commit future generations to similar uses;
- The project involves uses in which irreversible damage could result from any potential environmental incidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy).

8.1.1 PROJECT IMPACTS

Implementation of the proposed project would require the long-term commitment of natural resources and land, and would result in significant irreversible environmental changes both onsite and offsite. Numerous long-term physical environmental changes would occur, including changes in land uses and conversion of agricultural land. These significant irreversible environmental changes are summarized as follows:

- Commitment of land that would be physically altered from the existing agricultural uses to create residential uses, along with associated human influences;
- Development of vacant land that would be physically altered to create a residential development, which can be considered an irreversible environmental change and a permanent investment in new infrastructure, as well as a long-term increase in demand for energy, water, and other natural resources;
- Vegetation would be removed from the site and existing topographic features would be modified, which would visually alter the site from rural to an urban condition;
- Construction of the proposed project would require the use of water, timber, steel, sand, gravel, and other minerals and natural resources. Although these uses are not

considered an unusual demand for these resources during construction, they nonetheless represent an incremental increase n demand for nonrenewable resources.

- Nonrenewable energy sources such as oil would be used during construction and subsequent operations of the project;
- Vehicular traffic would increase, resulting in proportionate air emissions and noise levels; and
- A loss of rural land.

Once the average 50-to-100 year life span of the project is reached, it is probable that the site would continue to support urban uses because of the large investment of capital resources that would be expended on the project site, including infrastructure. Consequently, the project would largely commit the project site to similar uses in the future.

Construction and implementation of the proposed project would commit energy, labor, and building materials. This commitment would be commensurate with that of other projects of similar nature and magnitude. Energy, labor, and building materials would also be committed to the construction of buildings and infrastructure necessary to support the new development. Ongoing maintenance of the project site would entail a long-term commitment of energy resources in the form of natural gas and electricity. This commitment of energy, labor, and building materials would be a long-term obligation because once the project site has been developed, it is highly unlikely that the land could be returned to its original condition. However, as discussed in the previously prepared IS/MND, impacts resulting from increased energy usage would be considered less than significant; refer to Appendix B of this document.

Impacts unrelated to traffic and biological resources are included for informational purposes only and are not subject to further consideration by the County pursuant to the Court's judgment.

The following section provides a brief description of effects found not to be significant, less than significant, or less than significant with mitigation based on information contained in the MND previously prepared for the proposed project. The analysis of the following impacts has been determined to be adequate per the judgment on San Bernardino County Superior Court Case No. SCVSS 133201 for the project. Because the judgment stated that the analysis contained in the MND sufficiently addressed all CEQA issues with the exception of traffic and biological resources, all environmental impacts outside of traffic and biological resources are addressed in this Section. Refer to Appendix B, Mitigated Negative Declaration. This Draft EIR analyzes a project that incorporates all agreed upon project revisions and mitigation measures reflected below, per court judgment. The following presents a summary of each potential environmental impact.

9.1 AESTHETICS, LIGHT, AND GLARE

All four potential aesthetics, light, and glare impacts associated with the proposed project were determined to be less than significant after mitigation. The following three of the four impacts analyzed did not require mitigation since the projects would not:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway; and
- Substantially degrade the existing visual character or quality of the site and its surroundings.

The following impact analyzed required mitigation to reduce impacts to a level of less than significant since the project will:

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

The following mitigation measure has been incorporated into the project, as previously required in the MND:

I-1 *All lighting on-site shall adhere to the Glare and Outdoor Lighting-Mountain and Desert Areas Performance Standards contained in the County's Development Code, Section 83.07.040. In accordance with the ordinance, the lighting shall be positioned and shielded to prevent any light pollution or light trespass.*

With the implementation of Mitigation Measure I-1, all impacts associated with aesthetics, light, and glare would be reduced to a level of less than significant.

9.2 AGRICULTURE RESOURCES

All three potential impacts associated with agricultural resources were determined to be less than significant, as stated in the MND. The potential impacts analyzed whether the project would:

- 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;
- Conflict with existing zoning for agricultural use, or a Williamson Act Contract; and
- Involve other changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural use.

No mitigation measures or project design features were implemented to reduce the level of significance, as they were not necessary.

9.3 AIR QUALITY

All five potential impacts associated with Air Quality were determined to be less than significant after mitigation. The following two of the five impacts analyzed did not require mitigation since the project would not:

- Conflict with or obstruct implementation of the applicable air quality plan; and
- Expose sensitive receptors to substantial pollutant concentrations.

The following three impacts analyzed required mitigation to be reduced to a level of less than significant since the project would:

- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); and
- Create objectionable odors affecting a substantial number of people.

The following mitigation measures have been incorporated into the project, as previously required in the MND:

III-1 The construction and grading documents prepared for the proposed project shall state that Tier 1 equipment will be utilized during all on-site construction and grading activities.

III-2 Prior to the issuance of grading permits, the developer shall submit to the County for review and approval, a Fugitive Dust Control Plan. This Plan shall incorporate the fugitive dust control measures identified in MDAQMD Rule 403.2 as well as any other applicable measures identified by the County. The Plan will indicate methods of temporary and long-term dust control. Such measures shall include, but not be limited to:

-The project proponents shall ensure that construction equipment is properly maintained and serviced to minimize exhaust emissions.

-The project proponents shall ensure that existing power sources are utilized where feasible via temporary power lines to avoid on-site generation.

-The project proponents shall ensure that construction employees be informed of ride sharing and transit opportunities.

-The project proponent shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.

-The project proponent shall ensure that watering of the site or other soil stabilization methods shall be employed on an ongoing basis after the initiation of any on-site grading activity. Portions of the site that are actively being graded shall be watered regularly to ensure that a crust is formed on the ground surface, and shall be watered at the end of each workday.

- The project proponent shall ensure that all disturbed areas are treated to prevent erosion until the site is constructed upon.

-To reduce the potential for wind erosion, the project proponent shall ensure that landscaped areas are installed upon completion of grading operations.

-The project proponent shall ensure the cleanup of construction-related dirt on any paved approach routes to the project site.

-The project proponent shall ensure that all grading activities are suspended when wind speeds exceed 25 miles per hour.

In lieu of preparation of a Fugitive Dust Control Plan, the developer may submit evidence to the County that an Alternative PM_{10} Control Plan (ACP) prepared pursuant to Rule 403.2 (Section G), has been reviewed and approved by the MDAQMD.

III-3 Prospective property owners to the project area will be made aware in writing, via a Disclosure Statement and CC&Rs that animals are present in the area, and of the common nuisances associated with these agricultural uses.

With the implementation of Mitigation Measures III-1, III-2, and III-3 all impacts associated with air quality would be reduced to a level of less than significant.

9.4 CULTURAL RESOURCES

All four potential impacts associated with the cultural resources were determined to be less than significant after mitigation. The following three of the four impacts analyzed did not require mitigation since the project would not:

- Cause a substantial adverse change in the significance of a historic resource as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; and
- Disturb any human remains, including those interred outside of formal cemeteries.

The following impact required mitigation to reduce impacts to a level of less than significant since the project would:

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

The following mitigation measure has been incorporated into the project, as previously required by the MND:

V-1 The project proponent shall develop a Paleontological Resource Impact Program (PRIMP) prior to the initiation of ground disturbing activities. The PRIMP shall be designed to conform to the County's guidelines for the administration of the California Environmental Quality Act (CEQA) and those of the Society of Vertebrate Paleontology. The PRIMP shall include the following conditions:

- *A trained paleontological monitor shall be present during ground disturbing activities within the project area in sediments determined likely to contain paleontological resources. The monitoring for paleontological resources shall be conducted on a full time basis. The monitor shall be empowered to temporarily halt or redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. The monitor shall be equipped to rapidly remove any large or small fossil specimens encountered during excavation. During monitoring, samples shall be collected and processed to recover microvertebrate fossils.*

Processing shall include wet screen washing and microscopic examination of the residual materials to identify small vertebrate remains.

- *Upon encountering a large deposit of bone, salvage of all fossils in the area shall be conducted with additional field staff and in accordance with modern paleontological techniques. If small fossils are encountered, a standard 6,000-pound bulk matrix sample shall be collected from each locality.*

- *All fossils collected during the project shall be prepared to a reasonable point of identification. Excess sediment or matrix shall be removed from the specimens to reduce volume and the storage cost for the developer. Processing includes screen washing of sediment to recover small vertebrate remains. The fossils from the project shall be housed in a museum repository for permanent curation and storage. Charges of a one-time curation and storage fee for paleontological materials are based on cubic footage.*

- *A report documenting the results of the monitoring and salvage activities and the significance of the fossils shall be prepared and submitted to the County Museum for review and approval. All fossils collected during this work, along with the itemized inventory of these specimens, shall be deposited in a museum repository for permanent curation and storage.*

- *The report and inventory, when submitted to the lead agency, signifies the completion of the program to mitigate impacts to paleontological resources. The fossils from the project shall be housed in a museum repository for permanent curation and storage.*

With the implementation of Mitigation Measure V-1, all impacts associated with cultural resources would be reduced to a level of less than significant.

9.5 GEOLOGY AND SOILS

All eight potential geology and soils impacts associated with the proposed project were determined to be less than significant after mitigation. The following seven of the eight impacts analyzed did not require mitigation since the project would not:

- Expose people of structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued nby 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;

    - Strong seismic ground shaking;

- Seismic-related ground failure, including liquefaction;
- Landslides;

- Result in substantial soil erosion or the loss of topsoil;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risk of life or property; and
- Have soils incapable of adequately supporting the sure of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

The following impact required mitigation to reduce impacts to a level of less than significant since the project would:

- 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.

The following mitigation measure has been incorporated into the project, as previously required by the MND:

VI-1 Supplemental liquefaction investigation shall be conducted that includes Standard Penetration Testing (SPT) and Cone Pentrometer Testing (CPT) of the subsurface soils to better indicate the area of potential liquefaction and designate which lots will require structural mitigation.

VI-2 Mitigated building practices such as post-tensioned foundation systems shall be used as required on lots identified with liquefaction potential in VI-1.

VI-3 During grading soils shall be overexcavated and recompacted to result in construction of an engineered fill at a minimum of 24 inches below the base of the proposed footings.

VI-4 Based upon the liquefaction potential, the recommended structural mitigation and the overexcavation requirement, this project will not be suitable as a "lot sales project." The lots shall be mass graded and sold as a developer build-out.

With the implementation of Mitigation Measures VI-1 through VI-4, all impacts associated with geology and soils would be reduced to a level of less than significant.

9.6 HAZARDS AND HAZARDOUS MATERIALS

All eight potential impacts associated with hazards and hazardous materials were determined to be less than significant, as stated in the MND. The potential impacts analyzed whether the project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous material;

- Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project results in a safety hazard for people residing or working near the project area;

- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and

- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residents are intermixed with wildlands.

No mitigation measures or project design features were implemented to reduce the level of significance, as they were not necessary.

9.7 HYDROLOGY AND WATER QUALITY

All ten potential hydrology and water quality impacts associated with the proposed project were determined to be less than significant after mitigation. The following nine of the ten impacts analyzed did not require mitigation since the project would not:

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

- Substantially alter the existing drainage pattern of the site or area, including throughout the alteration of the course of a stream or river, in a manner which would result in substantial erosion or silation on or off site;

- 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;

- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;

- Otherwise substantially degrade water quality;

- 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;

- 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; and

- Expose people or structures to inundation by seiche, tsunami, or mudflow.

The following impact was analyzed and required mitigation to reduce impacts to a level of less than significant since the project would:

- Violate any water quality standards or waste discharge requirements.

Although no mitigation measure is stated, the discussion of impact "*a*" of the Initial Study mentions that the impacts related would be less than significant with implementation of Best Management Practices as specified by the NPDES permit and SWPPP during construction.

9.8 LAND USE AND PLANNING

All three potential impacts associated with land use and planning were determined to be less than significant, as stated in the MND. The potential impacts analyzed whether the project would:

- Physically divide an established community;

- 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; and

- Conflict with any applicable habitat conservation plan or natural community conservation plan.

No mitigation measures or project design features were implemented to reduce the level of significance, as they were not necessary.

9.9 MINERAL RESOURCES

Both potential impacts associated with mineral resources were determined to be less than significant, as stated in the MND. The potential impacts analyzed whether the project would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State; and

- Result in the loss of availability of a local important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

No mitigation measures or project design features were implemented to reduce the level of significance, as they were not necessary.

9.10 NOISE

All six potential impacts associated with noise were determined to be less than significant after mitigation. The following three of the six impacts did not require mitigation since the project would not:

- Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;

- For a project located within an airport land use plan or, where such a plan has not been adopted within two miles of a public airport, the project would expose people residing or working in the project area to excessive noise levels; and

- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

The following three impacts were analyzed and required mitigation to be reduced to a level of less than significant since the project would result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; and

- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

The following mitigation measures have been incorporated into the project, as previously required in the MND:

XI-1 *Construction will be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday in accordance with the County of San Bernardino's standards. No construction activities are permitted outside of these hours or on Sundays and Federal Holidays.*

XI-2 *During all site excavation and grading, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.*

XI-3 *The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.*

XI-4 *The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.*

With the implementation of Mitigation Measures XI-1 through XI-4, all impacts associated with noise would be reduced to a level of less than significant.

9.11 POPULATION AND HOUSING

All three potential population and housing impacts associated with the proposed project were determined to be less than significant after mitigation. The following two of the three impacts analyzed did not require mitigation since the project would not:

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and

- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

The following impact was analyzed and required mitigation to reduce impacts to a level of less than significant since the project would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

The discussion of impact "*a*" of the initial study identifies that potential impacts associated with substantial population growth would be reduced to less than significant through the adherence

to established public service requirements and implementation of the mitigation measures identified throughout the Mitigated Negative Declaration.

9.12 PUBLIC SERVICES

All five potential public services impacts associated with the proposed project were determined to be less than significant after mitigation. The following four of the five impacts analyzed did not require mitigation since the project would not:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental need for new facilities, 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 or any of the public services:
    - Fire protection;
    - Police protection;
    - Schools; and
    - Other public facilities.

The following impact required mitigation to reduce impacts to a level of less than significant since the project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental need for new facilities, 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 or any of the public services:
    - Parks.

The discussion of impact "*a*" of the initial study identifies that potential impacts associated with parks would be reduced to less than significant through the adherence to General Plan Policy OR-46a, which requires new residential development to provide local park and recreation facilities at a rate of not less than 3.0 acres per thousand population. Because the project is located within the Town of Apple Valley's park district, project proponents would be required to pay Quimby fees to the park district to reduce the impact on parks to a level below significance.

9.13 RECREATION

Both potential recreation impacts associated with the proposed project were determined to be less than significant after mitigation. The following impact analyzed did not require mitigation since the project would not:

- Include recreational facilities or require the construction or expansion or recreational facilities, which might have an adverse physical effect on the environment.

The following impact was analyzed and required mitigation to reduce impacts to a level of less than significant since the project 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.

The following mitigation measure has been incorporated into the project, as previously required by the MND:

XIV-1 Prior to issuance of building permits for each unit, the developer will submit proof of payment to the Apple Valley Recreation and Park District of a park mitigation fee. The fee value will be determined by County Planning in consultation with Apple Valley Recreation and Park District and shall be reevaluated every two years to be increased in accordance with consumer price index for the region. The fee will be of a sufficient amount to mitigate park-related impacts of the project (est. pop.+679), utilizing the formula specified by San Bernardino County Code Section 89.02.030(f) and fulfilling the County General Plan guideline of 3 acres of developed park per 1,000 projected project population.

With the implementation of Mitigation Measure XIV-1, all impacts associated with recreation would be reduced to a level of less than significant.

9.14 UTILITIES AND SERVICE SYSTEMS

All seven potential impacts associated with utilities and service systems were determined to be less than significant, as stated in the MND. The potential impacts analyzed whether the project would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects;

- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;

- Result in a determination by the wastewater treatment provider which serves or may serve the project that is has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

- Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs; and

- Comply with Federal, State, and local statutes and regulations related to solid waste.

No mitigation measures or project design features were implemented to reduce the level of significance, as they were not necessary.

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